

BIOINQUIRER JOURNAL



**TRANSLATIONAL SCIENCE
OPPORTUNITIES
FOR HUMANITY**

BioInquirer' 22
Global Incubator



The Journal of the International Institute of Health Sciences, Research Studies
ISSN 2465-6232, Volume VIII, Issue I, November 2022



BioInquirer
Global Incubator



BioInquirer Journal

*The official publication of the International Institute of
Health Sciences, Sri Lanka*

ISSN 2465-6232, Volume 8, Issue I, November 2022 (IIHS
Academic Sessions 2022: Conference Proceedings)

Editor in Chief	-	Dr. E. A. K. K. Edirisinghe
Co - Editors	-	Dr. Sajana Jayasanka
	-	Mr. Gayan Gunatilake



BioInquirer Journal

The official publication of the International Institute of Health Sciences,
Sri Lanka

November 2022, Volume 8, Issue I

Editor in Chief - Dr. E. A. K. K. Edirisinghe

Co-Editors - Dr. Sajana Jayasanka
- Mr. Gayan Gunatilake

Copyrights ©



International Institute of Health Sciences

No 704, Negombo Road, Welisara, Sri Lanka

Tel : +94 114 651144

Fax : +94 112 951292

<http://iihsciences.edu.lk/>

From the Editor in Chief

A warm welcome to the Proceedings of IIHS, 22nd BioInquirer – Annual Academic Sessions, 2022, themed “**Translational Science, Opportunities for Humanity**”. It has been an immense pride being the Managing Editor of this astounding conference.

With an ambitious target for a more secure future, the world has united behind 17 Sustainable Development Goals (SDGs) in order to represent a fresh approach to development, connecting economic, social, and environmental dimensions. The SDGs are integrated with one another and replace the Millennium Development Goals (MDGs) and aim at completing what they did not achieve. We are far from reaching sustainable development goals (SDGs) for the betterment of the community despite a wealth of novel insights into the roots of problems and possible solutions due to the failure in knowledge translation and implementation. Hence, this year's forum will provide an opportunity for everyone's innovative ideas while conveying insight into the research, highlighting current debates and perspectives on a variety of important topics. It will aim to publish Translational research centered on this year's theme.

The 22nd BioInquirer Annual Research Forum aligns with five elements: Basic science research, Translation to humans, Translation to patients, Translation to practice, and Translation to the community. The 22nd BioInquirer, which coincides with the areas of SDGs and translational research, with the overall goal of providing opportunities to humanity, will be a prime example of Sri Lanka consenting with the long-term goals of the 17 SDGs.

A keynote speech, as well as seven plenary speeches by globally renowned professionals and researchers from the United Kingdom, Australia, and Sri Lanka, will enlighten this event.

The 22nd BioInquirer flourished amongst society and received more than 1000 abstracts over 10 years. We would like to convey our utmost gratitude for the wonderful contribution of the advisory board, organizing committee, scientific committee, editorial committee, institutions, and volunteers who have all contributed directly as well as indirectly to the success of this forum. We would also like to express our heartfelt gratitude to the authors for whom the technical assistance is featured in these proceedings.

We anticipate a phenomenal conference full of invigorating presentations and knowledge-sharing so that we can all await a future of trailblazing research, innovation, and reflection.

Dr. Kithsiri Edirisinghe
Editor in Chief
BioInquirer Journal

Editorial Committee – 2022

Editor in Chief - Dr. E. A. K. Kithsiri Edirisinghe

Co-Editor - Dr. Sajana Jayasanka

Co-Editor - Mr. Gayan Gunatilake

Committee Member - Dr. Nihal De Silva

Committee Member - Dr. Dinusha Kanatiwela Niriella

Committee Member - Prof. Sujatha Salgado

Committee Member - Dr. George Perera

Committee Member – Mr. Nuwan Weerakoon

Committee Member – Mr. Nadun Rathnayake

Committee Member - Ms. Rashmika Kaldera

Committee Member - Ms. Thushini Maheepala

Coordinated by Scientific Committee of International Institute of Health Sciences (2021/22)

Table of Contents

Reference Number	Topic
Keynote	The art of recovery in Mental Health
Oral Presentations	
OP 01	Contemporary challenges in Healthcare Management
OP 02	A review on patient satisfaction with hospital services of Type 2 Diabetes Mellitus complications in Colombo East Teaching Hospital, Sri Lanka
OP 03	Cost analysis of Cardio-Thoracic Interventions in Sri Lanka: In search of a framework for funding
OP 04	Identifying the factors affecting service quality of Telehealth in a private sector health service provider in Sri Lanka
OP 05	An assessment of factors for human resource optimization from the internal stakeholders' perspective in a private healthcare facility in a Public Hospital
OP 06	Evaluating the impact of hospital service marketing strategy from the patient's perspective on the hospital performance of a Private Hospital in Colombo, Sri Lanka
OP 07	A study on patient satisfaction on Telepsychiatry Video Consultation during the Covid-19 pandemic, Sri Lanka
OP 08	A study on patient satisfaction with service delivery among Elderly Patients at Family Medical Clinic, District General Hospital Negombo, Sri Lanka
OP 09	Employee job satisfaction in public and private sector Healthcare Industries
OP 10	The use of Artificial Intelligence in the utilization of healthcare in dementia
OP 11	Public awareness regarding the role of a Physiotherapists in Western Province, Sri Lanka
OP 12	Physical Activity (PA) and associated factors among Pregnant Women during the Covid-19 pandemic in Kotawehera Divisional Secretariat

OP 13	The knowledge and attitude towards Palliative Care (PC) among physiotherapy and nursing students in the Western Province, Sri Lanka: A cross-sectional study
OP 14	Evaluation of the risk of falls among Elderly Patients
OP 15	Impact of E-learning (online learning) on Lower Back Pain (LBP) prevalence and associated risk factors among healthcare students in Western Province, Sri Lanka: A study during Covid-19 pandemic 2021
OP 16	The effect of the Covid-19 pandemic on the level of Physical Activity (PA) among school-going adolescents in postal code Colombo 07, Sri Lanka
OP 17	Teacher Learning, Mobility, and Contextual Responsiveness
OP 18	Perceptions of International School Teachers on their Continuous Professional Development (CPD) at two selected International schools in Western Province, Sri Lanka
OP 19	The perception of the teacher-student relationship to the academic performance of the students: Study on GCE Ordinary Level Students in the government schools of Sri Lanka
OP 20	A comparative analysis of the factors affecting the job satisfaction of Upper Secondary Teachers in the selected private and public sector Schools in Beruwala
OP 21	Educators' perception of their role as a Clinical Preceptors within the Sri Lankan Healthcare Educational System
OP 22	A study on Student perceptions of student-led clinical presentations at the International Institute of Health Sciences, Sri Lanka: Educational outcomes
OP 23	A study on Teachers' perceptions towards educational technology integration in post-pandemic classrooms
OP 24	Self-Esteem and Students' adjustment to the College: A cross-sectional study among Nursing Students at the College of Nursing, Anuradhapura
OP 25	Telomere length in predicting CLL outcomes

OP 26	Environmental isolate to industrial workhorse
OP 27	Novel-Transgenic zebrafish based heavy metal biosensor for specific detection of Cadmium and Zinc
OP 28	Determination of initial cloning and expression conditions for multiple novel Amine Oxidases from Metagenomic Sequences with enzyme activity analysis
OP 29	Investigation of chemical constituents of <i>Morinda citrifolia</i> (Noni) leaf and fruit growing in Sri Lanka
OP 30	Investigation of antioxidant properties of <i>Morinda citrifolia</i> (Noni) leaf and fruit extracts in Sri Lanka
OP 31	Antibacterial activity of selected Soaps and Hand wash (Antiseptic and Herbal) against potential pathogens
OP 32	Investigating the presence of Antimicrobial-Resistant (AMR) bacteria in retail pork products in Rathnapura District, Sri Lanka
OP 33	Evaluation of a cost-effective method for extracting RNA from human blood samples
OP 34	Testing the antimicrobial properties of water extract of Aerial roots of <i>Ficus benghalensis</i> against <i>Staphylococcus aureus</i> and <i>Escherichia coli</i>
OP 35	Evaluation of photocatalytic activity and antioxidant properties of green synthesized Silver Nanoparticles from <i>Carica papaya</i> leaves
OP 36	Nursing - looking forward and remembering the past
OP 37	Psychological well-being and resilience: A cross-sectional study among Nursing Students at College of Nursing, Anuradhapura, Sri Lanka
OP 38	Attitudes toward seeking help for depression among Nursing Undergraduate (ug) Students in a private institute
OP 39	Evaluating the effectiveness of treating Psychiatric Patients using Virtual Reality (VR) technology: Systematic review
OP 40	A study on the willingness for professional adjustment in Nursing among third-year Nursing Students of the Nursing Training School of Kalutara

OP 41	Perception and satisfaction on Clinical Learning Environment (CLE) among Nursing Students in Sri Lanka: For the optimal outcome of Nursing Education
OP 42	Knowledge and self-efficacy on palliative care among Nursing Students in Nurses Training School, Anuradhapura
OP 43	A study on knowledge, attitude and practices regarding Pressure Ulcer (PU) prevention among nursing officers in Teaching Hospital, Ragama, Sri Lanka
OP 44	Perception of the OSCE Exam among third-year Nursing Students at the School of Nursing, Kalutara
OP 45	Knowledge and attitude toward nutrition among Mothers in De Soysa Maternity Hospital for Women, Sri Lanka
OP 46	A study on challenges faced by Nursing Students when providing Nursing care for critically ill patients among students at the School of Nursing Kalutara, Sri Lanka
OP 47	Prevalence of stress related to working in night shifts among Nurses in selected Private Hospitals in the Gampaha District, Sri Lanka: A cross-sectional study
OP 48	Attitude toward mental illness among Staff Nurses of Teaching Hospital, Karapitiya
OP 49	Attitudes and perceptions towards body image among Students at a selected educational institute in Gampaha District, Sri Lanka
OP 50	Health Services and their provision in the Digital Age
OP 51	Use of digital technology to streamline the medical oxygen supply process in a low resource setting hospital in Sri Lanka during the Covid-19 pandemic: a frugal approach
OP 52	The social and economic impact of Dengue: A Case Study of the National Hospital, Colombo, Sri Lanka
OP 53	Factors affecting academic performance among third year Nursing Students in School of Nursing, Kalutara
OP 54	Analysis of selected non-pharmacological therapy used in traditional medicines for Mental Disorders

OP 55	Knowledge and attitudes of legal abortions among reproductive-aged Females in the Gampaha District
OP 56	Knowledge and attitude regarding Human Papillomavirus (HPV) and HPV-vaccine among secondary-school teachers in schools of Gampaha district, Sri Lanka
OP 57	Public awareness and utilization of telehealth services during the Covid-19 pandemic among the residents of Gampaha district, Sri Lanka
OP 58	Biopsychosocial approach to address social dynamics of contemporary health issues
OP 59	A study on analysis of Mental Health Problems derived from Fuel Crisis in Sri Lanka
OP 60	A sociological study on Sri Lankan slums and shanty Children's education
OP 61	Impact of Covid-19 on Homeless Adults in the Gampaha District, Sri Lanka
OP 62	Eating habits and lifestyle changes during Covid-19 lockdown among Students in a Healthcare Institute in Gampaha District, Sri Lanka
OP 63	The impact of social media exposure on the Covid-19 vaccination acceptance in the Western Province, Sri Lanka
OP 64	Acknowledgment of the challenges and changes in the construction field caused by unemployment due to Covid-19 in Galle Face Green, Colombo district, Sri Lanka, 2021
OP 65	Evaluating the issues in public transportation in Colombo District, Sri Lanka
Poster Presentations	
PP 001	Evaluation of an RNA extraction method for formalin-fixed paraffin-embedded samples
PP 002	Investigating the anti-candidal activity of the bark of <i>Mimusop elengi</i> (<i>Sapotaceus</i>) and its effect on germ tube production of <i>Candida albicans</i> (<i>Saccharomycetaceae</i>)

PP 003	Assessing the ergonomics and impact on back pain among Tailors in Gampaha District, Sri Lanka
PP 004	Nutrition and Dietary habits among Preschool Children in Badulla West, Sri Lanka
PP 005	Renal complications in Thalassemia; A changing paradigm
PP 006	The impact of work-life balance on the job satisfaction of the employees: A study from the public sector, Sri Lanka
PP 007	Nursing Students' level of satisfaction with their clinical learning environment: A cross-sectional study at Schools of Nursing Kandy, Kurunegala, Anuradhapura in Sri Lanka
PP 008	Prevalence of Low Back Pain (LBP) among Undergraduate Physiotherapy Students in Western Province, Sri Lanka
PP 009	Knowledge of Non-Communicable Diseases (NCDS) and implementation of healthy lifestyle behaviours among Advanced Level students from the Colombo district in Sri Lanka
PP 010	The impact of current Economic crisis on College Students
PP 011	Prevalence of Post-traumatic Stress Disorder (PTSD) and other Psychological issues on Disabled Soldiers in Abimansala, Sri Lanka
PP 012	Prevalence and Socio-Demographic correlates of Psychological problems among Adolescents in Gampaha during Covid-19
PP 013	Assessing the awareness on preventing dengue among the general public in Gampaha District, Sri Lanka, 2021
PP 014	A test on antibacterial properties of bee honey in several bacterial species found in the wound microbiome
PP 015	Perception of Depression among Young Adults in Gampaha District, Sri Lanka
PP 016	A study on stress among Undergraduates of the International Institute of Health Sciences, Sri Lanka
PP 017	Depression among Older Adults in a residential aged care facility in Welisara, Sri Lanka

PP 018	Quality of Life (QoL) among elderly people in a selected Elderly Care home in Welisara, Sri Lanka: A cross-sectional study
PP 019	Analysis and impact of financial inclusion on poverty reduction in Households
PP 020	Assessment of health promoting lifestyle behavior among Student Nurses in Nursing Colleges, Sri Lanka
PP 021	Assessment of relationship between emotional intelligence and academic achievement among Nursing Students in School of Nursing, Kurunegala
PP 022	The impact of Covid-19 on the personal and professional lives of Nurses in a Leading Private Educational Institute in Sri Lanka
PP 023	The psychological impact of Covid-19 and its contributing factors on Nurses working attached to Maternity Wards in selected Hospitals in Western Province, Sri Lanka
PP 024	The prevalence and factors associated with unmet need of modern family planning among Women and barriers faced by Nursing Managers in Negombo MOH
PP 025	Factors affecting discrimination of Male Nursing Students in their clinical practices in the Western Province: Perception of Male Nursing Students
PP 026	Study on the knowledge, perception, and practice of standard Objectively Structured Clinical Examination (OSCE) for summative assessment of Students Nurses; Sri Lanka, 2021: Stakeholders perception
PP 027	Knowledge, attitude, and practices of Nursing Officers regarding Covid-19 prevention at Teaching Hospital, Kuliyaipitiya
PP 028	Quality of Life (QoL) among patients undergoing Hemodialysis at the Teaching Hospital, Anuradhapura, Sri Lanka
PP 029	A study on knowledge and practices of nursing professionals toward infection control measures
PP 030	Perception of labor pain and its associated factors among Multiparous Mothers in selected hospitals in Ratnapura District, Sri Lanka

PP 031	Perceived stress and coping strategies among Nursing Students at two selected Nursing Schools in the Western Province, Sri Lanka
PP 032	Online distance learning practices among Nurses enrolled in post and undergraduate studies during the Covid-19 pandemic in Sri Lanka
PP 033	A study on the perception of reflective practices among Graduate Nurses in Sri Lanka
PP 034	Evaluating glycemic index of <i>Caryota Urens</i> (kithul) based products
PP 035	Assessing the Nurses' Knowledge of identifying, preventing, and managing Delirium among Patients in the Colombo District
PP 036	Knowledge and practice regarding intake of Folic Acid Supplements (FAS) among Pregnant Women who are attending the Antenatal clinic, De-Soysa Hospital for Women (DMH), Colombo 08
PP 037	Knowledge and attitudes of School Teachers towards substance use among Adolescents in Kegalle, Sri Lanka
PP 038	Assessing the knowledge of clinical features, causes, and risk factors of Anemia in Pregnant Mothers in the Maharagama MOH area
PP 039	Assessment of knowledge and description of attitudes and practices on control of Rabies among G.C.E O/L students in Regional Director of Health Service, Batticaloa
PP 040	Assessment of hospitalized patients' trust and satisfaction with hospital care at Base Hospital, Tellippalia
PP 041	Knowledge and practices regarding fast food habits among Teenagers in Welimada Central College, Badulla, Sri Lanka
PP 042	Factors affecting weight and obesity among Adolescents in Bamunakotuwa MOH area
PP 043	Nurses' satisfaction with their work environment at Base Hospital, Bibile
PP 044	Determining the prevalence and patterns of alcohol consumption and usage of drugs among the Adolescents of the Wathogala G.N Division in the Galle District

PP 045	Assessing the knowledge and practice on preventing Catheter-Associated Urinary Tract Infection (CAUTI) among Nurses in General Hospital, Trincomalee
PP 046	A study on knowledge, attitude, practice, and risk factors for Non-Communicable Diseases (NCD) among the Adult population between 20-30 years old in Medamulana area in Hambantota District, Sri Lanka
PP 047	Awareness of self-care practices for Diabetic Mellitus (DM) patients who attend the Medical Clinic in Base Hospital, Mahiyangana
PP 048	Evaluating patients' knowledge, attitudes, and practice about Diabetic wound care among Diabetic Patients in the surgical ward, Provincial General Hospital, Badulla
PP 049	Perception of Nursing care and patient satisfaction in Trincomalee Hospital
PP 050	Knowledge and practices towards Exclusive Breast-Feeding (EBF) among Lactating Mothers
PP 051	Assessing the impact of Traumatic Head Injury on the patient and family
PP 052	A study to assess the knowledge on breastfeeding practices of Postnatal Mothers in District General Hospital, Monaragala
PP 053	Sleep pattern disturbances and associated factors among post Covid-19 Hospital Staff Members in National Cancer Institute, Maharagama, Sri Lanka
PP 054	A study of knowledge and practice among Tuberculosis Patients in Central Chest Clinic, Borella
PP 055	Identifying the risk factors for Non-Communicable Diseases (NCDs) among patients who have been attending an NCD clinic in Thanamalwila Divisional area, Sri Lanka
PP 056	Assessing the knowledge, attitudes, and practices regarding Exclusive Breastfeeding (EBF) among the Postnatal Mothers in the Postnatal Ward, District General Hospital, Kegalle
PP 057	Cervical Cancer knowledge and attitudes among Antenatal clinic attendees at the District General Hospital in Hambanthota, Sri Lanka

PP 058	Determining the prevalence and patterns of alcohol consumption and usage of drugs among the Youth of the Wathogala G.N division in Galle District
PP 059	Knowledge, attitudes, and practices related to cancerous food consumption among Adolescents in rural areas, Kurunegala, Sri Lanka
PP 060	Awareness of the Non-Pharmacological methods of management for Diabetes Mellitus (DM) among patients who attend the Medical Ward of Galauda Divisional Hospital, Badulla, Sri Lanka
PP 061	Implications of knowledge towards Tuberculosis (TB) among non-medical staff and other frequent stakeholders of National Hospital for Respiratory Diseases, Welisara, Sri Lanka
PP 062	Knowledge, attitudes, and practices among drivers on First-Aid and Pre-Hospital care in the Boralesgamuwa Police Area
PP 063	Evaluating the impact of knowledge and practices on Diabetes Mellitus among Family Medical Clinics: A Case Study in Base Hospital Kiribathgoda, Sri Lanka
PP 064	The relationship between employee job satisfaction and their work performance as nurses, assistants, and minor staff in the National Institute of Mental Health (NIMH), Mulleriyawa
PP 065	Knowledge, attitudes, and practices on complementary feeding among Mothers of Children aged 6-24 months in Hali Ela MOH
PP 066	Assessing the knowledge about preventive practices on Bronchial Asthma among the Garment Factory Workers in Panadura
PP 067	Study on knowledge level regarding Type-II Diabetes Mellitus (DM) and the screening tests among Police Officers in Colombo Crime Division, Colombo 09, Sri Lanka
PP 068	Impact of parenting on students' academic performance
PP 069	Knowledge and practice regarding Non-Communicable Diseases

PP 070	Assessment of contributing factors towards stress among Nurses in the General Hospital in Colombo District, Sri Lanka
PP 071	Knowledge, attitudes, and practices on hand hygiene among Intensive Care Unit (ICU) Nursing staff in a Government Hospital in Sri Lanka
PP 072	The basic First-Aid knowledge among the parents of Preschool Children in Rathgama Divisional Secretariat of Galle District
PP 073	Prevalence of risk factors for treatment default among Tuberculosis (TB) patients of Chest Clinic in National Hospital for Respiratory Diseases, Welisara, Sri Lanka
PP 074	Knowledge and practices regarding the usage of Personal Protective Equipment (PPE) in the prevention of Covid-19 infection among Nurses in Base Hospital, Gampola, Sri Lanka
PP 075	Critical care Nurses' knowledge and practices regarding Total Parenteral Nutrition (TPN) of critically ill patients in Teaching Hospital Anuradhapura
PP 076	Drug compliance among Diabetic Mellitus and Hypertension patients
PP 077	Assessing the knowledge, attitude, and practice of breastfeeding among Postnatal Mothers in Bibile Base Hospital, Sri Lanka
PP 078	The pattern of smoking, alcohol consumption, and drug use among Ordinary Level Students in Kegalle District, Sri Lanka
PP 079	Knowledge and practice regarding Self-Breast Examination (SBE) among Adult Women in the Ella area in the Badulla District, Sri Lanka
PP 080	Assessing the factors contributing towards job satisfaction of Nurses in Base Hospital Bibile, Sri Lanka
PP 081	Knowledge, practice, and attitudes on Diabetes care management among Diabetes Mellitus Patients attending the Medical Clinics of divisional hospital Hopton, Badulla
PP 082	Knowledge and practices regarding usage of Personal Protective Equipment (PPE) in the prevention of Covid-19 Infection among Nurses
PP 083	Prevalence and the associated factors of occupational Low Back Pain (LBP) among Nurses in District General Hospital, Nuwara Eliya, Sri Lanka

PP 084	A study to examine the knowledge about disease conditions of Diabetic Foot Ulcer patients who are treated at Base Hospital, Tellippalai, Sri Lanka
PP 085	Challenges in E-Learning among Nursing Students during the Covid-19 pandemic in Nurses Training School, Matara
PP 086	A study on the awareness of Depression among College Students in a private Educational Institute in Sri Lanka
PP 087	Attitudes and awareness on eating disorders among students in an educational institute, Gampaha District, Sri Lanka
PP 088	Psychological and Physical impact on Nurses due to Covid-19 in Sri Lanka
PP 089	Parental knowledge and attitudes towards Youth's Mental Disorders in Gampaha District, Sri Lanka
PP 090	Impact of social media on social relationships among Parents, University and College Students at a selected Private Educational Institute, Gampaha District, Sri Lanka
PP 091	Social media addiction among Students in a Healthcare Institute in Gampaha district, Sri Lanka
PP 092	Study on awareness and challenges associated with online learning in Healthcare Sector Students during Covid-19 at the International Institute of Health Sciences, Sri Lanka
PP 093	Impact of Covid-19 on Mental Health among Parents with Children under 10 years in Wennappuwa Divisional Secretariat area, Sri Lanka
PP 094	Perception on work life balance among Married Female Nurses at the National Hospital of Sri Lanka
PP 095	The association between the information needs and sociodemographic factors of Pregnant Women at the Antenatal Wards at Teaching Hospital Mahamodara, Galle
PP 096	A study on skills, knowledge, and attitudes toward Telenursing among Nursing Officers in Sri Lanka

PP 097	Determining the water quality parameters in selected brands of bottled water in the Gampaha District, Sri Lanka
PP 098	A study on the knowledge and complications of teenage pregnancy among Pregnant Mothers in the Point Pedro area, Sri Lanka
PP 099	Factors associated with the choice of Postpartum Contraceptive methods among Mothers waiting for delivery at Polpithigama MOH, Sri Lanka
PP 100	Knowledge and practices regarding Surgical Site Infections (SSI) and among Nurses working in Surgical and Gynecology wards in District General Hospital, Monaragala, Sri Lanka
PP 101	Awareness and practice towards Oral Cancer prevention and its association among Bus Drivers and Conductors in Jaffna Bus Station
PP 102	Knowledge, attitudes, and practices in Dengue prevention and control among Student Nurses in Nurses Training School, Kurunegala
PP 103	Assessing the knowledge and risk factors associated with lower Urinary Tract Infections (UTI) among Pregnant Mothers in Udugama Hospital, Galle
PP 104	Knowledge, attitudes, and practice regarding Rabies among people at the Outpatient Department in teaching hospital, Anuradhapura District, Sri Lanka
PP 105	A study to assess factors associated with Sleep Apnea (SA) among snoring patients who are referred to the ENT Clinic of National Hospital, Sri Lanka
PP 106	Social media usage by Advanced Level (A/L) students in Getaheththa, Rathnapura District, Sri Lanka
PP 107	Assessing the knowledge regarding breastfeeding practices among Mothers in the Padukka MOH Area
PP 108	Knowledge and attitudes on Diabetic Retinopathy (DR) among patients with Diabetes Mellitus (DM) in Kuliyaipitiya, Kurunegala District, Sri Lanka
PP 109	A study on the knowledge, attitudes and practices regarding wound care and its associated factors among patients with chronic wounds at Teaching Hospital Anuradhapura (THA) District, Sri Lanka
PP 110	Knowledge and attitudes regarding Sexually Transmitted Diseases (STD) among Young Adolescents in Wennappuwa Educational Division

PP 111	Knowledge, attitudes and practices regarding Catheter-Associated Urinary Tract Infection (CAUTI) among Nurses, at a selected Hospital in Central Province, Sri Lanka
PP 112	A study on prevalence and associated factors of occupational Lower Back Pain (LBP) among Nurses in District General Hospital, Nuwara Eliya, Sri Lanka
PP 113	Critical assessment of knowledge and attitudes about maternal nutrition among Pregnant Mothers in Rural Area, Galle, Sri Lanka
PP 114	Assessing the knowledge regarding Adult Advanced Life Support (ALS) among Nurses in General Hospital, Trincomalee, Sri Lanka
PP 115	Knowledge, attitude, and practices about Biomedical waste management among Nurses of Base Hospital, Bibile
PP 116	Knowledge and attitudes of Parents regarding unhealthy food habits of School-Age Children in the Hanwella Sub-Urban Area, Sri Lanka
PP 117	Psychological and behavioral changes in response to the Covid-19 pandemic of the Nursing Staff in selected wards at Teaching Hospital, Karapitiya
PP 118	Awareness of Lung Cancer among Students of the National Institute of Health Sciences, Kalutara, Sri Lanka
PP 119	Effectiveness of online learning on Nursing Students of the School of Nursing, Kalutara
PP 120	A study on Nursing Students' perspective regarding the issues in clinical practice
PP 121	A study on the available facilities in boarding houses among Student Nurses of the School of Nursing, Kalutara
PP 122	The student perception of teaching-learning strategies in classrooms of the School of Nursing, Kalutara
PP 123	Study on the habits of chewing betel among workers in Kalutara Depot
PP 124	Study on the usage of mobile phones among Student Nurses at the School of Nursing, Kalutara
PP 125	Knowledge, practices, and attitudes regarding Self-Breast Examination among Women in Kalutara MOH area, Sri Lanka

PP 126	Study on the issues related to home gardening among Nursing Students at the School of Nursing Kalutara, Sri Lanka
PP 127	Study on the nutritional-related problems among Student Nurses of Nurses Training School, Kalutara
PP 128	Study of the knowledge and practice of Self-Breast Examination among Female School Teachers in the Mathugama MOH area
PP 129	A study on the perception of the Nursing profession among Advanced Level Students in Kalutara Balika National School
PP 130	Study on the effect of smartphone usage among Nursing Students on their education in the School of Nursing, Kalutara
PP 131	A study on secondary complications following the Covid-19 vaccine among the students at the National Institute of Health Science, Nurses Training School, Kalutara
PP 132	A study on the impact of using social media on their studies and day-to-day life among students at the School of Nursing, Kalutara
PP 133	Study on the practices of temperature checking procedures among Student Nurses in the School of Nursing, Kalutara
PP 134	Study on the influence of mobile phones on Mental Health, among Student Nurses in the School of Nursing, Kalutara
PP 135	A study on the factors affecting Nursing Students in the Clinical Learning Environment
PP 136	A study on factors affecting academic performance among Nursing Students at Nurses Training School, Kalutara, Sri Lanka
PP 137	Factors affecting Nursing Students' performance in theory examination at the Nurses Training School, Kalutara
PP 138	A study on the personal factors affecting Student Nurse's successful achievement of a Diploma in General Nursing Certificate
PP 139	A study on the satisfaction regarding the inventory management system of Student Nurses at Teaching Hospital, Kalutara
PP 140	Factors influencing student satisfaction with hostel facilities among Students in the National Institute of Health Sciences, Kalutara

PP 141	A study on perception of morning assembly among the students at the School of Nursing Kalutara: A cross-sectional study
PP 142	A study on the effects of Senior Students' support towards the progression of Nursing Education among Junior Students in SON, Kalutara
PP 143	Research on the stressors and management methods during the quarantine period of Covid-19 among Nursing Students in Nurses Training School, Kalutara, Sri Lanka
PP 144	A study on satisfaction factors among final-year Nursing Students at the School of Nursing Kalutara on their Diploma program
PP 145	Nursing Student's perception of Unit Ending Test in School of Nursing, Kalutara
PP 146	The knowledge and perception of enteral feeding of a paralyzed patient among Nursing Students
PP 147	A cross-sectional study on the Self-Study methods among students at Nurses Training School, Kalutara
PP 148	The perception of drug usage among School-Age Children
PP 149	The knowledge and practice on the over usage of Junk Food (JF) among Grade 12 Students in Gnanodaya Maha Vidyalaya (M.V.), Kalutara
PP 150	Study on the methods of solving educational problems among Advanced Level Students in a public school in Kalutara
PP 151	Study on the effect of clinical workload on Nurses' personal life in Base Hospital Horana, Sri Lanka
PP 152	Factors affecting the self-directed learning of Student Nurses at clinical practice in the School of Nursing, Kalutara
PP 153	Communication skills and attitudes among Nursing Students at the College of Nursing, Anuradhapura
PP 154	Student Nurses' perception of nurse-patient relationship in Nurses Training School, Kalutara
PP 155	Perceived stress and sleep quality among Nursing Students at the College of Nursing, Anuradhapura

PP 156	Student Nurses' satisfaction regarding skill lab facilities in the School of Nursing, Kalutara
PP 157	The effects of usage of mobile phones among School Children in Kalutara District, Sri Lanka
PP 158	Nursing students' satisfaction with infrastructure of the Nurses Training School, Kalutara, Sri Lanka
PP 159	Study of the factors affecting overweight among Adolescents of Thissa Central College, Kalutara, Sri Lanka
PP 160	Study on the satisfaction level of clinical placement of special units in Teaching Hospital Kalutara, Sri Lanka
PP 161	An investigation into the factors influencing customer satisfaction among students of Business Management; Survey on Private Institutes of Higher Education in Colombo district, Sri Lanka
PP 162	Assess the perception of the economic crisis among Nursing Students and its relation to educational activities in the School of Nursing, Kalutara, Sri Lanka
PP 163	Effectiveness of Self-Learning for academic performances among Third-Year Nursing Students of the School of Nursing, Kalutara
PP 164	Factors influencing attendance to Well Women Clinic (WWC) among females between 35-45 years in PHNS area Nagoda, Sri Lanka
PP 165	Efficacy of whey water in the management of Melancholia from the perspective of the Unani system of Medicine: A systematic review
PP 166	Quality of Life (QoL) and self-efficacy on health-promoting behaviors among Nursing Students: A cross-sectional study conducted at College of Nursing, Anuradhapura
PP 167	The contraceptive practices among Muslim Women in MOH Kalutara
PP 168	Pregnant women's knowledge, attitudes, and practices regarding Infant Immunization: A cross-sectional study
PP 169	Attitudes and knowledge among healthcare students about the Covid-19 vaccine in Sri Lanka

PP 170	Level of physical activity, sedentary behavior, and quality of sleep among students at a selected healthcare institute in Welisara, Sri Lanka
PP 171	Study on factors affecting the self-confidence in performing Peripheral Vein Cannulation procedure among Nursing Students of School of Nursing (SON), Kalutara
PP 172	Study on the level of acceptance of the Covid-19 vaccination among Pregnant Women in the Kalutara MOH (Medical Officer of Health) area
PP 173	The factors affecting the theory-practical gap in clinical procedures among Student Nurses in the School of Nursing (SON), Kalutara
PP 174	Prevalence of dysmenorrhea and its' effects on academic performance among Nursing Students
PP 175	A study related to the causes and coping techniques of stress among Student Nurses in School of Nursing, Kalutara
PP 176	The sleeping pattern disturbances among final-year Nursing students in the School of Nursing, Kalutara
PP 177	The knowledge, practice, and factors affecting the hand hygienic practice among the Nursing Students in Nurses Training School, Kalutara
Reflections	
PP 178	Reflection on the clinical practice of maintaining nurse-patient relationships during the procedure done by the student nurses
PP 179	Reflection on nursing students' communication skills exhibited at the final practical examination
PP 180	Reflection on the importance of wearing PPE in Healthcare
PP 181	Reflection on the consequence faced when incorrect sample labelling occurs in a laboratory
PP 182	Reflection on postpartum care after childbirth

PP 183	Reflection on “Display on an error on the glucometer”
PP 184	Reflection on the importance of proper assessment of equipment
PP 185	Reflection on Blood Drawing
PP 186	Reflection on the importance of concentration and competency in a laboratory
PP 187	Reflection on the importance of considering patient safety at all times
PP 188	Reflection on the importance of adhering to the standard guidelines in suctioning
PP 189	Reflection on the importance of patient education

KEYNOTE SPEECH

The art of recovery in Mental Health

MR. PAUL JOHNSON¹ AND MS. REBECCA SIMPSON²

¹Associate Director of Nursing and Group Analytic Psychotherapist working for Norfolk and Suffolk Foundation Trust

²Nursing and Quality Matron at Lancashire and South Cumbria Foundation Trust, Preston, Lancashire, United Kingdom

Recovery in mental health is a term used to describe the personal lived experiences and healing journeys of ‘people with severe and enduring mental health conditions with long term needs’ (Deegan, 1998, Anthony, 1993).

In the traditional medical model, it was the healthcare professional who decided that there’s something ‘wrong’ with the service user before prescribing some sort of ‘treatment’ to ‘cure’. It focused on what’s ‘wrong’ and symptoms reduction in an attempt to make the service user more ‘normal’ or a ‘contributing member of society’. In this paternalistic approach, service users are a passive ‘patient’ whilst the professional is an active, authoritarian ‘fixer’ of problems – the expert. There is obviously great merits of taught experience but this only tells one part of the story and creates a power imbalance increasing dependency from the service user to the professional.

It is ‘The Good Doctor’ who decides what is best for you. The power lies with them.

In a recovery/person led model, the service user who is the expert of themselves using their lived experience, also known as experts by experience because of the scope of their first-hand experience with their diagnosis/health condition. Recovery understands that the service user knows themselves better than anybody and can identify their needs, preferences, motivations, desires, what works for them and what hinders progress or recovery. Recovery purports that the service user knows what ‘normal’ or ‘healthy’ or ‘well’ looks like for themselves, and what actions are reasonable for their circumstances and what is not.

In this holistic approach, Service users are an active participant in their health.

ORAL PRESENTATIONS

HEALTHCARE ADMINISTRATION AND MANAGEMENT

PLENARY - OP 01

Contemporary challenges in Healthcare Management

DR. SARATH SAMARAGE

Senior Fellow, Institute for Health Policy

Former Deputy Director General of Health Services, Ministry of Health, Sri Lanka

Modern healthcare systems face challenges that can impact outcomes for patients and healthcare organizations. The Covid-19 pandemic has further highlighted and exacerbated issues underlying these challenges.

Technological changes, clinical advances, and increasing societal expectations of these organizations are compounded by the difficulty of managing their human capital. These public or private institutions, which provide health-related services and strive for high levels of effectiveness and efficiency, must meet excellent standards of clinical care.

The changing healthcare climate has created enormous challenges for healthcare managers and executives. Healthcare administrators responsible for addressing these issues require knowledge of healthcare systems, societal issues, finance, Information Technology (IT), and organizational management.

This presentation will look at some of the critical challenges that healthcare managers face in the current context and beyond.

OP 02

A review on patient satisfaction with hospital services of Type 2 Diabetes Mellitus complications in Colombo East Teaching Hospital, Sri Lanka

Dharmasiri G.E.D.L.R.B.^{1*}

¹*School of Management, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: Qualities such as quality of service, contentment, and security are evaluated by carrying out the required survey with a view to the views of the patient. The significance of measuring and assessing the quality of healthcare services and monitoring has been increasingly realized and acknowledged, given the relevance and perspective of patients on healthcare. This study was conducted to review the patient satisfaction of type 2 diabetes complications in Colombo East Teaching Hospital in Sri Lanka.

Methods: A descriptive, cross-sectional study was carried out using a mixed-methods approach. 100 patients suffering from type 2 diabetes who were conveniently sampled were recruited for the study. Data was collected using a standard satisfaction survey questionnaire developed based on the NHS National Survey of People with Diabetes, which included several questions relating to the services provided by Colombo East Hospital. The study was based on the SERVQUAL model, which consists of dimensions such as reliability, assurance, tangibility, empathy, and responsiveness.

Results and Discussion: According to the study, the researcher identified five hypotheses. The first hypothesis was that there was a significant relationship between reliability and patient satisfaction at Colombo East Hospital, and the correlation analysis depicted a positive relation between these two variables ($p=0.030$). In addition to that, the second hypothesis stated that a significant relationship exists between assurance and patient satisfaction, and it was found that a positive relationship exists between those variables as the p value was 0.000. Further, it was suggested by the third hypothesis that a significant relationship is found between tangibility and patient satisfaction which was confirmed as the p value was 0.012. Moreover, the fourth hypothesis demonstrated that there is a significant relationship between empathy and patient satisfaction and that statement was confirmed due to the p value of 0.035 indicating a positive relationship. Furthermore, the final hypothesis declared that a significant relationship exists between responsiveness and patient satisfaction, which was affirmed due to the depicted p value of 0.032 illustrating a positive relationship.

Conclusion: In all Sri Lankan hospitals, aspects of the quality of services must be regularly evaluated and continually monitored at the institutional level. This may enhance public and private services in hospitals. Training programs for hospital workers in the areas of motivation, attitude modification, and effective communication, as well as the development of an awarding and rewarding system, help enhance the overall quality and happiness of the patients served.

Key Words: *Sri Lanka Health Care Sector, Patients Satisfaction, Service Quality*

OP 03

Cost analysis of Cardio-Thoracic Interventions in Sri Lanka: In search of a framework for funding

Sanjeewa G.G.C.¹, Edirisinghe E.A.K.K.¹

¹School of Business Administration, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Many deaths have been associated with heart diseases around the world and linked with a significant number of deaths even in Sri Lanka. The chronic nature of coronary heart disease (CHD) and high out of pocket health expenditure add a substantial cost burden to the economy of the households. Adding on to this, there have been concerns about the availability of funding mechanisms for the general public which has further increased the waiting list. This has even raised issues in relation to universal health coverage.

Methods: A multi-stage mixed method study was conducted to analyse the cost of care of Cardio-thoracic interventional services in Sri Lanka with a view to proposing a funding framework for future healthcare interventions. A questionnaire was given to patients who underwent Coronary artery bypass graft (CABG) in the three cardiac-interventional hospitals of Sri Lanka to analyse their household cost and to gauge the financial burden if any. Unit cost for cardiac-interventional services was calculated through secondary data analysis of the same three hospitals. After the above analysis, a qualitative approach was taken to capture in-depth information and solutions to the identified gap. Interviews were done with CABG patients of the same three hospitals to gain information on their financial burden and to identify coping strategies taken by patients. Finally, a focus group discussion was held with key stakeholders to look for any solutions for the identified problems.

Results and Discussion: The average total cost per household was calculated to be Rs. 74,511. From this Rs. 49,608 (66.6%) was direct cost and Rs. 24,903 (33.4%) was an indirect cost. The unit cost per CABG was calculated to be Rs. 615,724 for a month. Per month unit cost for a Cath lab procedure was calculated to be Rs. 659,712. The mean total monthly income of a patient's family was Rs. 26,585. Only 4% had an insurance scheme. Therefore, there was clear catastrophic health spending within the studied group. From the qualitative study it was found that many people didn't have a set coping mechanism, and all had financial difficulties that have affected their overall quality of life. Following the stakeholder discussion, a funding framework was proposed along with a few other suggestions.

Conclusion: It can be concluded that there was a definite financial burden to households as the majority had a family income level which was below the mean total household cost. Four funding mechanisms can be introduced as a solution to the identified burden. Further research needs to be done in validating this framework.

Key Words: *Quality of Life, Funding Mechanisms, Health Insurance System*

OP 04

Identifying the factors affecting service quality of Telehealth in a private sector health service provider in Sri Lanka

Wewita W.D.S.J.C.^{1*}, Perera P.G.V.¹

¹*School of Education, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: As the internet integrated technology into the medical field, the concept of telehealth services was born. It is a timely opportunity to improve the quality of access to better healthcare. This research report was conducted in Sri Lanka to analyze and evaluate the factors affecting the service quality of telehealth in Sri Lanka, with special reference to private sector healthcare providers in Sri Lanka.

Methods: This was a descriptive, cross-sectional study conducted among family clinic telehealth clients who had received telehealth services during the past 6 months. In-depth interviews were conducted to collect data among one hundred telehealth clients selected using the purposive sampling technique. The collected data was analyzed using both descriptive and inferential statistics with the aid of SPSS statistical software.

Results and Discussion: Almost half of the respondents (46%) belonged to the age category of 26–40 years, and 31% were higher diploma holders. The first variable, “reliability” indicated a mean value of 3.85 and recorded a standard deviation of 0.61350. Additionally, “assurance” about the service quality of telehealth documented a 4.11 mean value and a standard deviation of 0.60237. The variable, “tangibles” depicted a 3.47 mean value on the scale and the standard deviation was 0.85805. Furthermore, “empathy” was recorded as 4.23 with a standard deviation of 0.67286. “Responsiveness” marked 4.44 as the mean value, and the standard deviation was 0.52823. Moreover, “telehealth service quality” which was the dependent variable, displayed 3.86 as the mean value while the standard deviation was 0.78438. The correlation analysis revealed that the independent variable’s “reliability” and “assurance” showed weak positive correlation values of 0.376 and 0.313, respectively. Along with that, “tangibles” which was another independent variable, displayed a positive correlation value of 0.503, which meant that it had a positive correlation with the dependent variable “telehealth service quality”. In addition to that, the independent variable products “empathy” and “responsiveness” disclosed an extremely weak positive correlation with “telehealth service quality”. Furthermore, the model adequacy exhibited an R square value of 0.728, representing a model adequacy of 72%. The variables’ “reliability”, “assurance”, and “tangibles” revealed the existence of statistically significant positive relationships. Apart from that, “empathy” was a variable having a statistically significant weak positive relationship “responsiveness” had a statistically insignificant positive relationship.

Conclusion: The study revealed that, since the telehealth service in Sri Lanka is still an emerging business area, independent variables such as "reliability", "assurance", "tangibles" and "empathy" play a big role in influencing the telehealth service quality. Alternatively, "responsiveness" can be viewed as a minor requirement for customers, which could yet affect other areas such as customer retention.

Key Words: *Telehealth, Private Sector, Factors, Service Quality*

OP 05

An assessment of factors for human resource optimization from the internal stakeholders' perspective in a private healthcare facility in a Public Hospital

Balasooriya B.M.J.^{1*}

¹*School of Management, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: A firm's or company's Human Resources Department is typically accountable for overseeing and creating policies governing the workers and the relationship that the company has with its workers. This research was conducted to evaluate the process of HR optimization to enhance productivity and the quality of the service provided in a Private Healthcare Facility.

Methods: This was a descriptive, cross-sectional study conducted among 217 randomly selected participants. A mixed-method approach was used to collect data from the sample. The data gathered was analyzed using PSPP and Microsoft Excel software and graphically represented in the form of bar charts, pie charts, tables, and graphs.

Results and Discussion: From the sample, 52.1% were females (n=113) who belonged to the age category of 31–40 years (42.9%, n=94). Most of them had 6–10 years of experience (35.3%, n=77). It was revealed that the salary categories of 43,000–58,000 and 59,000–74,000 had participants of 23.5% (n= 60). More than half (58.1%, n=126) agreed that they were happy with the way they were treated by the organization. Almost half of the respondents (47.7%, n=104) accepted that they were being supported by colleges and junior and senior staff at work. It was accepted by 82.5% (n=179) that they were satisfied with the financial benefits, while 64.9% (n=140) were satisfied with the present performance evaluation scheme of the organization. Of the participants, 75% (n=162) had a positive perception of their job security. Nearly half (44%, n=95) expected financial value for their performance. The majority of the employees (76%, n=165) accepted that the company was the best place to develop their careers with professional growth and opportunities within the organization. A significant number (66.7%, n=145) had a positive mindset that they could get involved in decision-making and increase the company's reputation. Most of the employees (89%, n=193) were aware of their job role, and 73.4% (n=159) were aware of their authority and responsibilities. There was positive feedback (825, n=178) as the employees mentioned that the training they received from the company was sufficient to perform the tasks well. However, 67.7% (n=147) expected to have more career succession training to develop their professional capacity. It was satisfactory to observe that 79.4% (n=172) believed that they possessed sufficient competencies to carry the workload for a period of 2 years with the same energy.

Conclusion: It is recommended that the hospital increase its performance with new strategies to produce the optimal output. and also equip performance appraisal structures and other specific recommendations such as aligning business strategies with external and internal factors, ensuring that talent strategy aligns with the company's overall plan, getting ahead of competitors by being proactive, evaluating what aspects need training and executing it, and using various tools to assess the capabilities of the workforce.

Key Words: *Human Resources, Health Care, Public, Factors*

OP 06

Evaluating the impact of hospital service marketing strategy from the patient's perspective on the hospital performance of a Private Hospital in Colombo, Sri Lanka

Raheem G.H.B.A.R.^{1*}, Perera B.N.B.C.¹

¹*School of Management, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: Marketing strategies are crucial in commercializing and introducing a product into the market successfully. It can be identified as a comprehensive long-term method that increases sales and profitability in the market. This research was conducted to evaluate the impact of hospital service marketing strategy from the perspective of patients on hospital performance in a Private Hospital in Colombo.

Methods: The study was a quantitative, cross-sectional study. A sample of 133 inpatients from a leading private hospital in Colombo was selected using systematic random sampling. Data was collected via a personal survey through a questionnaire. The questionnaire was prepared based on the service marketing mix strategies with an emphasis on people, physical evidence, and process strategies adopted by the hospital. The data gathered was analyzed using descriptive and inferential statistics.

Results and Discussion: Findings of the study revealed that the hospital had adopted a people strategy, a physical evidence strategy, and a process strategy. An average of 57.3% (n=76) of respondents experienced 'medium' and 35.3% (n=47) experienced 'high' performance from the hospital, while 7.3% (n=10) of participants rated it as 'low'. However, the adopted service marketing strategies were different within the wards of the hospital. Though the respondents have agreed, the communication skills of the staff in wards D and F depicted lesser mean values than other wards. The physical hygiene of ward E was comparatively lower than that in other wards. Respondents scored as neither disagree nor agreeing with less waiting time during admission to ward B. There was a weak association between physical hygiene and the performance of the hospital, yet all the other indicators had a moderate association with it. Statistically significant relationships were discovered between individual service marketing strategies and the performance of the hospital. Important predictors were less waiting time during the admission process, the friendly approach of the doctors and nurses of the hospital, and the availability of parking.

Conclusion: The findings of this study concluded that service-marketing mix strategies, namely, people strategy, the physical evidence strategy, and the process strategy, individually, have a statistically significant relationship with hospital performance. The study recommended the hospital should improve the overall service marketing strategy to enhance hospital performance by critically analyzing the present situation of each ward. Communication skills of the doctors and nurses, physical hygiene of the wards, less waiting time during the admission process, and parking facilities are important to consider.

Key Words: *Hospital Service, Marketing Strategy, Hospital Performance*

OP 07

A study on patient satisfaction on Telepsychiatry Video Consultation during the Covid-19 pandemic, Sri Lanka

Dissanayake S.A.^{1*}, Wijetunga R.¹

¹*School of Management, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The significant fundamental shift in the method of care delivery from traditional in-patient consultation to telemedicine due to the unexpected effects of the Covid-19 pandemic has captivated the attention of patients, doctors, and healthcare-providing institutes. Telemedicine is a viable option to provide continuous access to quality healthcare more efficiently and cost-effectively. This study was conducted with the aim of studying patient satisfaction with telepsychiatry video consultation during the Covid-19 pandemic.

Methods: The study was descriptive research. The telepsychiatry Satisfaction Questionnaire (TSQ) was distributed among 150 participants. Data were analyzed with Statistical Package for Social Sciences (SPSS) software. A questionnaire was created with the scoring of a five-point Likert scale based on the conceptual framework leading to operationalization.

Results and Discussion: About 58.7% (n=88) were females and the majority (40.7%, n=61) belonged to the age category of 18- 30 years. Of them, 76% (n=114) agreed that it was easy to connect through video consultation. In addition, 69.3% (n=104) stated that there were no audio or video disturbances though out the session. A majority (68%, n=102) agreed that it is effective as much as in-patient visits as it is possible to see the doctor via video. Moreover, 80% (n=120) agreed that they were satisfied with the duration of their session. Additionally, 92.6% (n=139) accepted that video consultation is more effective to maintain physical distance and minimizing the risk during Covid-19. From the sample, 8.6% (n=13) disagreed that their condition was clearly understood by the doctor. Further, 64% (n= 97) agreed that in-patients visit is more effective than video consultation. Along with that, 88% (n=132) stated that it was easy to receive their prescription and pills using online prescriptions. Furthermore, 80% (n=120) mentioned that telemedicine is an acceptable way to receive healthcare services even in a non-pandemic time. The majority (80%, n=121) stated that they will use telemedicine services in the future while 82% (n=124) declared that they recommend video consultation services to their friends. The majority (96%, n=145) mentioned that telemedicine saved traveling time to the hospital or the specialist clinic. Moreover, 80% (n=120) agreed that video consultation secures their privacy well. It was disregarded by 60% (n=91) that video consultation made them physically and emotionally uncomfortable.

Conclusion: According to the data analysed on service outcome and patient satisfaction, patients agreed that their healthcare needs were fulfilled via video consultation as well as they were happy with online prescriptions. Strong positive correlations were shown between the fulfilment of medical needs and patient satisfaction, acceptability of telemedicine even without a pandemic, and patient satisfaction, and between the recommendation of telemedicine to others and patient satisfaction.

Key Words: Telepsychiatry, Video Consultation, Patient Satisfaction, Covid-19

OP 08

A study on patient satisfaction with service delivery among Elderly Patients at Family Medical Clinic, District General Hospital Negombo, Sri Lanka

Ratnasingam G.^{1*}

¹*School of Business Administration, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Elderly care is an emerging discipline, studying patients' satisfaction is widely measured for the evaluation of medical care, and perception of care deliveries further identify the need and expectations of the customer. The aim of this study was to assess patient satisfaction with services delivered among elderly patients at the Family Medical Clinic at District General Hospital Negombo, Sri Lanka in view to improving the services of these hospitals to achieve a better patient satisfaction level.

Methods: This was a hospital-based descriptive cross-sectional study including comparison and correlation. Thus, the study consisted of 429 elderly patients who were aged above sixty-five from the Family Medical Clinic at District General Hospital, Negombo through systematic random sampling. Participants were interviewed regarding demography, functional ability, and perceived health services were measured with the Patient Satisfaction Questionnaire (PSQ-18). The collected data was analyzed statically.

Results and Discussion: The results show a relatively high level (74.8%, n=321) of general satisfaction among elderly patients who attended the family medical clinic. In addition, the interpersonal connection between elderly patients and health staff was highly shown as maximum capacity which was a key during service delivery; Convenience services and adequate spending time with patients were once again scored in a positive way to deliver meaningful quality care.

Conclusions: The results show a relatively good level of satisfaction among the elderly patients who attended at the family medical clinic at District General Hospital, Negombo. Furthermore, there was a significant association on another subscale of satisfaction such as interpersonal, and technical quality services noted. Thus, separate geriatric care services are recommended to cater to the expanding vast population of aged categories.

Key Words: *Elderly, Patient Satisfaction, Services Delivery, Quality Of Care*

OP 09

Employee job satisfaction in public and private sector Healthcare Industries

Raphael S.S.^{1*}, Kodithuwakku D.²

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

²*International College of Business and Technology, Colombo, Sri Lanka*

Introduction: Employees are the most important resources as well as the most valuable assets of an organization. The nature and amount of work performed by them have a direct impact on the productivity of an organization. Therefore, maintaining healthy employee relations in an organization is necessary in order to achieve growth and success. Therefore, Managers of hospitals must fulfill requirements to both employees and Patients. Patients get unsatisfied if their specific demands are not met, which makes it harder for hospital staff to address their needs. From a hospital's point of view, patient and employee satisfaction levels must be considered jointly. One of the primary metrics for hospital quality is patient satisfaction. In health care management, job satisfaction is important. In the long term, maintaining hospital staff is mostly dependent on overall development and work satisfaction. The aim of this study was to assess the job satisfaction of employees in private and public sector healthcare industries.

Methods: This study compared the job satisfaction levels of employees working in public and private hospitals. For this, the researcher randomly chose two hospitals and random employees from each private and public sector. Each hospital delivered 15 questionnaires. This study relies on convenience sampling, which falls under the category of non-probability sampling.

Results and Discussion: The researcher chose 5 variables that affect workers' job satisfaction. They were working conditions, promotion, salary, training, and co-worker relationship. According to the findings the researcher first calculated the relationship between the main independent variables and the dependent variable. The main independent variables that the researcher chose were working conditions, salary, Promotion, Training, and co-worker relationship. The comparison of Pearson correlation between private and public sector hospitals, except for Training and Co-worker relationships all other variables show higher satisfactory conditions in the private sector than the public sector healthcare industries.

Conclusion: As a result, the researcher was unable to predict an exact conclusion when examining the findings. However, after reviewing the results, it was found that the randomly chosen private hospitals prioritized providing their employees with favorable working conditions, salary, and promotion while the public sector hospitals gave their staff members the proper training and promotions to ensure that they were happy in their jobs. When analyzing co-worker relationships both the private and public sector gives an equal amount of priority.

Key Words: *Job Satisfaction, Employees, Healthcare*

PHYSIATRY AND REHABILITATION

PLENARY - OP 10

The use of Artificial Intelligence in the utilization of healthcare in Dementia

MS. JAN DAVISON¹ AND MS. NICOLA KNOWLES¹

¹WMG, The University of Warwick, United Kingdom

New knowledge in the field of digital health technology in the care of frail elderly patients and those with early dementia will be considered and discussed.

Prevention of hospital admissions for dementia patients has the potential to improve patient outcomes and reduce costs and pressures for health care providers. Remote monitoring technologies can help health care staff to identify and deliver interventions designed to prevent hospital admission, allowing patients to remain in their home setting. The use of a specific remote monitoring technology can result in the reduction of urgent care utilisation and an increase in preventative care measures.

OP 11

Public awareness regarding the role of a Physiotherapists in Western Province, Sri Lanka

Vanderwall I.¹, Sedra T.K.C.^{1*}, Thamel L.R.¹, Rodrigo B.K.J.S.T.¹, Anjalika A.L.A.S.¹, Athukorala W.A.A.S.V.S.¹, Samarasekara K.¹, Mudunkotuwa M.D.M.S.¹, Maheepala M.M.T.N.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Physiotherapy is one of the vital fields of medicine. However, there appears to be a lack of awareness among the public regarding the role of a physiotherapist. Thus, the main aim of this cross-sectional study was to investigate the level of awareness regarding the role of a physiotherapist among the public in the Western Province, Sri Lanka.

Methods: This descriptive, quantitative, cross-sectional study included 147 respondents from the Western province, aged above 18, and with internet access. The snowball sampling method was used. The questionnaires were submitted online via soft copy. The questionnaire consisted of 2 parts which included identified respondents' demographic data and examined respondents' familiarity with the role of a physiotherapist.

Results and Discussion: The majority of the participants were female (58%, n=85) while most of the subjects were aged between 20-29 (65%, n=96). The participants were aware of the physiotherapy profession or physical therapy services in the field of health care services (86%, n=126). The study population claimed to have interacted with a physical therapist due to a personal injury (86%, n=126). The majority (80%, n=118) of the respondents stated that a female physiotherapist is responsible for delivering physical therapy services. The participants said that sports injuries most commonly required physiotherapy (78%, n=115). The study respondents consider massaging to be a therapeutic modality used in physical therapy (81%, n=119). The majority (97%, n=143) believe it is necessary to raise awareness of physical therapy services among community members and specifically via social media (86%, n=126). Lastly, 96% (n=141) of the subjects trust the physical therapy role in promoting and enhancing health care efficiency.

Conclusion: The public's level of awareness regarding the physiotherapist's role is considered satisfactory, as a majority of the selected results were not wrong. Nevertheless, a lack in regards to a complete understanding of a physiotherapist's role in the Western Province, Sri Lanka persists.

Key Words: *Physiotherapy, Awareness, Medical Care, Physiotherapist Role, Health Care Services*

Physical Activity (PA) and associated factors among Pregnant Women during the Covid-19 pandemic in Kotawehera Divisional Secretariat

Maheepala T.N.¹, De Silva C.A.^{1*}, Dissanayake T.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: With the propagation of the pandemic, various aspects of life including PA levels have been changed measurably. The pregnancy period is considered a risky period of women's lives, where the women undergo several physicals, and social as well as psychological changes. Hence, the impact of the pandemic on the PA levels of pregnant women requires importance. In addition, it has been noticed that there is very less evidence on this particular topic in Sri Lanka. Therefore, this study was conducted to assess the PA levels of pregnant women in the Kotawehera divisional secretariat of Kurunegala District in Sri Lanka during the pandemic.

Methods: A cross-sectional study was carried out on a sample of 73 pregnant women in the Kotawehera Divisional Secretariat. The population was approached through a convenient sampling method. Data was collected with the help of the Pregnancy Physical Activity Questionnaire (PPAQ), which is a validated tool for detecting PA levels (Chasan-Taber et al., 2004). The Ethical clearance was obtained from the BioInquirer Ethics Review Committee. Furthermore, the collected data was entered into the database and analyzed using Microsoft Excel.

Results and Discussion: The majority (52.1%, n=38) of the pregnant women were between the maternal age of 28-32 years. Furthermore, 83.6% (n=61) were housewives and 47.9% (n=35) had an education above the high school level. When considering the PAs conducted apart from work, many of the respondents (56.2%, n=41) only spent 30 minutes to 1 hour per day preparing food. Moreover, 43.8% (n=32) stated that they watched television for 2 to 3 hours per day. Many of the respondents (59.7%, n=43) stated that they spend 1 to 2 hours sitting and reading or talking when not working. Most of the pregnant women (64.4%, n=47) also stated that they spend less than 30 mins on heavy cleaning. In terms of going places, 64.4% (n=47) did not even engage in walking slowly. When considering activities done for exercise, 52.8% (n=38) stated that they walk slowly for less than 30mins. However, 45.8% (n=33) did not engage even in slow walking for exercise. Many of the women (64.4%, n=47) did not engage in jogging (slow running). In addition, a significant percentage (89%, n=65) did not participate in pre-natal exercise classes during the pandemic peak.

Conclusion: Based on the overall results, many of the pregnant women did not engage in much PA during the pandemic peak. It was seen that majority did not even engage in slow walking or jogging. Furthermore, many individuals were engaged in activities seated indicating a sedentary behavior. However, this could be because the majority did not attend pre-natal classes during the pandemic peak. Thus, it is recommended to distribute physical activity guidelines and activities they can engage in the form of a leaflet so that they can adhere to it and engage irrespective of a lockdown status.

Key Words: *Physical Activity, Pandemic, Pregnant Women*

OP 13

The knowledge and attitude towards Palliative Care (PC) among physiotherapy and nursing students in the Western Province, Sri Lanka: A cross-sectional study

De Silva C.A.^{1*}, Rodrigo S.T.¹, Maddumage S.P.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Palliative Care (PC) is a way of improving the Quality of Life (QoL) of patients with life-threatening illnesses and their families. However, PC is still uncommon in Sri Lanka, with only a few places across the country providing PC services. Thus, this study aimed to assess the knowledge and attitude toward PC among physiotherapy and nursing students in the Western Province, of Sri Lanka.

Methods: This is a quantitative, cross-sectional study conducted via an online survey among nursing and physiotherapy students in the Western province. The Frommelt knowledge and attitude towards care of the dying (FATCOD – form B) scale were used to collect data and statistical analysis was performed using SPSS Version 25.0. Ethical clearance was obtained from the BioInquirer Ethics Review Committee.

Results and Discussion: A total of 124 (66.9%, n=83 females) students responded to the survey. Among them, 62.1% (n=77) were nursing students and the majority 52.4% (n=65) were between the age of 24 to 26 years. In terms of knowledge, 78%, (n=97) stated that PC is active care of the dying. However, 69.4% of the individuals stated that PC is a pain medicine, and 35.5% stated that PC is a rehabilitation medicine, which was incorrect. The majority (75%, n=93) stated that PC is needed for metastatic cancer with uncontrollable pain yet, 87.1% (n=108) incorrectly answered that PC is needed for all dying patients. Only a minority (20.25, n=25) knew delirium is a common non-pain symptom encountered in PC. Overall, 38.4% (15 questions out of 39) of the knowledge-related questions were incorrectly answered by the respondents. The mean FATCOD score (total) was reported as 108.65±10.89 indicating that students had favorable attitudes towards caring for dying patients. Moreover, statistically significant (p<0.05) higher FATCOD scores were reported in males compared to females (111.24±8.85 Vs. 107.36±11.60) and in physiotherapy students compared to nursing students (111.04±9.82 Vs. 107.18±11.30). The mean scores for attitudes towards caring for a dying person and the dying person's families were 56.66±6.38 and 51.98±5.86 respectively. The mean item scores of the total scale ranged from 1.85±1.11 "The length of time required to give care to a dying person would frustrate me" to 4.49±0.82 "Families should be concerned about helping their dying member make the best of his or her remaining life."

Conclusion: Although the majority of students had positive attitudes towards death and caring for the dying, they lacked knowledge in the area of palliative care. Thus, special attention should be paid to implementing palliative care training sessions for nursing and physiotherapy students.

Key Words: *Palliative Care, Nursing, Physiotherapy, Undergraduates*

OP 14

Evaluation of the risk of falls among Elderly Patients

Gnanasekaran T.^{1*}, Sathileen M.M.A.¹, De Silva G.A.Z.R.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: It has been extensively studied how falls affect elderly persons. Elderly care home residents, however, are a vulnerable group that may have particular risk factors for falls. The aim of this study was to report the prevalence and risk factors for falls, fall-related concerns, and fall-related medical attention in this population.

Methods: Data on older individuals' sociodemographic characteristics and health status were gathered in “Devsiri Sevana” Elders' home. Prepared close-ended questions were asked verbally to get the answers from the target population and the answers were collected using a Google form. A sample size of 21 participants was evaluated. Timed Up Go (TUG) test was conducted to assess the balance impairment of the elderly. The Barthel Index for Activities of Daily Living was used to assess functional activities. Data analysis was carried out using Statistical Package for the Social Sciences (SPSS) software.

Results and Discussion: A total of twenty-one participants were evaluated, of which the majority were female (85.7%, n=18). According to the mean value of (n=11), older adults (61.1%, n=13) between the ages of 71 and 89 are more likely to experience falls. Most elderly people who fell within six months reported a fear of falling when walking. Out of which, 76.2% (n=16) of elders who had a hearing and vision problems are at risk for falling. The majority (68.8%, n=14) of elderly people who have hypertension and are taking medication for it are at risk of falling. Most elderly people used hand railings when walking for stability and support.

Conclusion: The findings gave us a basis for understanding the factors that older people could be at risk for falling. The results of this study can be used to guide treatments against falls, be prepared for early detection of falls for this population and suggest potential topics for further investigation.

Key Words: *Elderly, Falls, Medical Conditions, Fear, Risk factors*

OP 15

Impact of E-learning (online learning) on Lower Back Pain (LBP) prevalence and associated risk factors among healthcare students in Western Province, Sri Lanka: A study during Covid-19 pandemic 2021

Fernando W.C.P.D.^{1*}, De Alwis N.L.¹, Shiraz A.R.M.¹, Nugapitiya E.M.L.S.¹, De Silva Z.R.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Low Back Pain (LBP) is seen as a major health issue and is frequently treated in the primary healthcare system. LBP is very prevalent and affects most people at some point in their lives and is influenced by both physical and psychosocial variables. Finding a single cause or even a single significant component for LBP can be difficult because it is a complicated disorder that is influenced by many different factors. Due to the pandemic, traditional classroom learning has been shifted to virtual learning. Many students are experiencing back pain due to the prolonged hours that they spend working online. Thus, the aim of this study was to ascertain the impact of online education during the Covid-19 pandemic on the prevalence of LBP.

Methods: This was a descriptive cross-sectional research conducted among 85 undergraduates (18–30 years) without any prior medical conditions in Gampaha district. An online survey with 25 closed-ended questions was utilized to collect the data. Data analysis was done using Microsoft Excel.

Results and Discussion: The majority of participants, 98.8% (n=84) had no chronic illnesses prior to Covid-19, and most participants, 75.3% (n=64), were in the 20 to 25 age range. Approximately 36.9% (n=31) of the participants exercised two to three times per week, and they were active before Covid-19. Prior to the pandemic, around 34.5% (n=29) of the participants sat and moved equally. However, around 59.5% (n=50) of them spend most of their time sitting down after Covid-19, and the majority of participants (94%, n=79) began online education during the pandemic. Of these, 72.9% (n=62) found it uncomfortable to sit through a 2-to 3-hour online lecture. The majority of individuals, 98.8% (n=84), had no chronic illnesses before Covid-19. They were healthy and active, free of any chronic illnesses or LBP.

Conclusion: Considering the outcomes, LBP is common among undergraduates who were learning online due to the effects of Covid-19. This can be because they were less active and spent a lot of time sitting still. Proper posture and preventive techniques should be used to avoid more serious injury.

Key Words: *Low Back Pain, Prevalence, Covid-19, Pandemic, E-learning*

OP 16

The effect of the Covid-19 pandemic on the level of Physical Activity (PA) among school-going adolescents in postal code Colombo 07, Sri Lanka

De Silva C.A.^{1*}, Pathirannehelage U.V.¹, Rodrigo S.T.¹, Sewwandi S.A.¹, Athukorala V.S.¹, Alavi F.A.¹, Sedra T.K.¹, Vanderwall I.¹, Thamel L.R.¹, Maheepala M.M.T.N.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Regular PA is crucial for an individual's development throughout their whole lifespan. Nevertheless, many individuals are finding it difficult to get adequate exercise amid the pandemic. Yet, there is very less evidence focusing on PA of Sri Lankan school-going adolescents. This study aimed to understand and assess the effect of the pandemic on the levels of PA among school-going adolescents while raising awareness and highlighting the importance of PA programs in schools.

Methods: A descriptive cross-sectional study was conducted by selecting a sample of 81 school-going adolescents who were approached through a convenient sampling method. The International Physical Activity Questionnaire (IPAQ) which is a validated tool was used to collect data and circulated as a Google form. The responses were descriptively analyzed using Microsoft Excel. Ethical clearance was gained from the BioInquirer Ethics Review Committee.

Results and Discussion: The questionnaire was distributed among male and female school-going adolescents where the majority were females (53.1%, n=43). Prior to the pandemic, many people engaged in moderate PA three times per week (22.2 percent, n=18), but this has decreased, with only 8.6% (n=7) of people engaging three times per week after the pandemic. When considering walking before the pandemic, many respondents (38.3%, n=31) engaged in walking all seven days for an average of 15 minutes on those days. Yet, after the pandemic, many participants (24.7%, n=20) engaged in walking only twice per week. In terms of sitting on a weekday before the pandemic, many respondents (23.5%, n=19) were likely to sit for 5 hours per day which has increased to 8 hours per weekday.

Conclusion: According to the comparisons, the PA levels of school-going adolescents have decreased since the pandemic's onset. A PA program that can be practiced irrespective of the pandemic status can be recommended to the schools via the student welfare societies.

Key Words: *Physical Activity, Pandemic, School-Going Adolescents*

EDUCATIONAL RESEARCH AND LEARNING TECHNIQUES

PLENARY - OP 17

Teacher Learning, Mobility, and Contextual Responsiveness

PROFESSOR INDIKA LIYANAGE

*Beijing Normal University - Hong Kong Baptist University United International College
(UIC), China*

Teachers' Professional Learning and Development (PLD) processes are even more complex in the context of mobility and the necessity for contextual responsiveness. From a situated multiplicity perspective, linear models of PLD favored by managerialism regimes fail to account for these realities. This presentation explores this issue by critiquing current approaches as well as proposing that policymakers and institutions adopt models that recognize and address the complexities of teacher learning. Such a model must encompass all aspects of teachers' work as a unified, reflexive, contextually responsive process that cannot be disentangled from teacher learning. The discussion is framed by the realities of mobility, changes in conceptualizations of language, challenges of teaching language in multilingual settings, and the demands of policy for quality instruction. This presentation describes a few key findings from the presenter's research, discusses their implications, and identifies future directions for further study.

OP 18

Perceptions of International School teachers on their Continuous Professional Development (CPD) at two selected International schools in the Western Province, Sri Lanka

Kaldera H.P.S.R.^{1*}, Perera P.G.V.¹

¹*School of Education, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Continuous Professional Development (CPD) refers to a professional's overall commitment to improving their personal skills and proficiency throughout their career. Because of the high demands to strengthen the quality of Sri Lankan school education, school teachers are expected to be qualified and up-to-date in what they teach. This study aimed to identify school teachers' perceptions of their CPD

Methods: This is a cross-sectional mixed-method study of Sequential Explanatory Design. A semi-structured self-administered google questionnaire was used to collect data. Samples of 110 and 160 teachers from two international schools in the Western province respectively were selected using convenient sampling techniques. Quantitative Data was analysed using SPSS software and qualitative data were analysed using thematic analysis.

Results and Discussion: The majority of the teachers from School 1 (54%, n=59) and 72% (n=112) from school 2 stated that self-learning was their way of obtaining CPD. About 90% (n=99) from school 1 and 77% (n=123) from school 2 attended CPD training once a term. All the teachers from school 1 and 98% from school 2 (n=157) had exposure to learning how to teach online. Furthermore, the majority were from school one (92%, n=101) and many from school 2 (90%, n=144) obtained software skills during the past month. The majority wanted training on Collaborative activity-based, interactive teaching, and technological integration. teaching (school 1– 97%, n=106; school 2 – 98%, n=157). Some had mentioned Research, English, and IT, using virtual platforms in teaching. Time allocated by the administration and support from administrative and peer staff were mentioned as demotivators in obtaining CPD. Financial incentives, personal desires to improve the level of knowledge, personal time that they can allocate for CPD, and the Relevance of content towards development in their teachings were identified as motivators for teachers to obtain CPD. There is a significant positive correlation between years of service to teachers and their current qualifications.

Conclusion: Major issues were identified in the field of CPD of international school teachers in Sri Lanka. Many demotivating factors for CPD were found than motivating factors. More focus should be given to updating types of CPD topics delivered to teachers. More focus should be given to research and modern educational technology. CPD programs should be more frequently happening for teachers.

Key Words: *Continuous Professional Development, Teachers, International School Teachers*

OP 19

The perception of the teacher-student relationship to the academic performance of the students: Study on GCE Ordinary Level Students in the government schools of Sri Lanka

Vanderkoon S.P.^{1*}

¹*Academic Department, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The teacher-student relationship has been recognized as a crucial element in enhancing student learning and academic performance. Positive relationships between students and educators promote long-lasting peace, whereas negative interactions foster hostile environments that are harmful to both teachers and students. Thus, the aim of this study was to determine the teacher-student relationship in the academic performance of GCE Ordinary Level students.

Methods: A descriptive cross-sectional study was carried out among 113 GCE Ordinary Level students. The population was selected by using a random sampling technique and data was collected through a questionnaire. The questionnaire comprised both closed-ended and open-ended questionnaires. Moreover, the collected data were analyzed descriptively.

Results and Discussion: The majority of the students (51.3%, n=58) who answered the questionnaire were females. Many of the students (95.6%, n=108) were from Grade 11 while the remaining was from Grade 10. About 60.2% (n=65) stated that they have a good relationship with their teachers. Furthermore, many of the students (59.1%, n=65) agreed that the teacher-student relationship has affected their academics positively. However, a minority (8.2%, n=9) stated that it has affected them negatively. When considering the factors that affected this relationship, many students (61.4%, n=67) stated that their teachers have trust in their students. Moreover, most of the respondents (67.9%, n=74) stated that the teacher offers encouragement and positive reinforcement, as well as constructive criticism. Yet, 26.4% (n=28) of the students stated that the teacher is not available for the student outside of class for reviewing or answering questions. When asked to describe the impact of the teacher-student relationship on academic performance, many stated that they tend to perform well in subjects when they have a positive relationship. They also explained that an unhealthy relationship would result in the students being unproductive during class.

Conclusion: Based on the overall results, many students experienced a healthy teacher-student relationship. Furthermore, this also has had a positive impact on their academic performance. Yet, it is required to use the findings of this study and encourage a positive teacher-student relationship for better academic performance.

Key Words: *Impact, Teacher-Student, Academic Performance*

A comparative analysis of the factors affecting the job satisfaction of Upper Secondary Teachers in the selected private and public sector Schools in Beruwala

Shakeel I.^{1*}, Perera P.G.V.²

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Education, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Job satisfaction is a multidimensional and complicated term that may mean various things to different people. Job satisfaction of teachers is essential for the long-term growth and development of any educational institution. Thus, this study aimed to determine the factors affecting the job satisfaction of secondary teachers in the public and private sector schools in Beruwala.

Methods: A descriptive cross-sectional study was conducted among 100 school teachers from 5 private schools and 4 public schools in Beruwala. The data was obtained using a structured questionnaire. Data analysis was done using SPSS software.

Results and Discussion: The results showed that 60% of the private school teachers had a conducive teaching environment whereas only 46% had that among the public school teachers. This study also revealed that private and public sector teachers have different factors that affect their job satisfaction. Of private sector teachers, 54% are satisfied with their salary whereas 62% of the teachers in the public sector are not satisfied. In terms of feeling comfortable at school, 42% of private school teachers felt comfortable in school, and 44% of public school teachers. In terms of workload, most of the public school teachers (66%) stated that they had overworked and 30% of the private sector teachers too slightly agreed with this statement.

Conclusion: It was discovered that most of the teachers in public sector schools draw their job satisfaction from having a positive working relationship with management, their relationships with their peers, job security, and status. On the other hand, it was found that salary level, promotion and growth, and working conditions highly affected the job satisfaction of private-sector teachers.

Key Words: *Job Satisfaction, Private School, Public School, Hygiene Factors, Motivating Factors*

Educators' perception of their role as a Clinical Preceptors within the Sri Lankan Healthcare Educational System

Karunaratne A.I.¹, Maheepala T.N.¹, De Silva Z.¹, Maddumage S.P.^{1*}, Raphiel S.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: There are culturally defined duties and responsibilities that are expected from an educator. The role of an educator within academic performance and the role of a preceptor is confined to clinical performance. Preceptorship educates and guides healthcare students in the clinical setting allowing them to interact with a professional team and to be exposed to the reality of a healthcare system. In Sri Lanka, the ability of preceptors to supervise students effectively is limited by time and resources as they are often expected to play dual roles as educators and preceptors. Similarly, in some instances, the educator will have to play the role of a preceptor. Even though there seem to be clear boundaries between the two roles, both should have a common outcome: better patient care and a skilled/ confident workforce. Thus, the aim of this study was to describe educators' perceptions of their role as preceptors within the private healthcare education system. Ultimately transition students to developing their confidence and skills as autonomous professionals, irrespective of the labeled trainer (educator or preceptor).

Methods: Qualitative research was done on educators who were working within the private education setting. Data collection was done through individual interviews. Data were collected until data saturation was reached which made a sample of 20 (11 physiotherapy educators and 8 nursing educators) and was analyzed thematically with the help of transcribed data.

Results and Discussion: Five themes were identified and the relationship between the two roles, role identification to suit the individual need, common evaluation systems, improving clinical standards, and overcoming barriers with limited resources. The commonly identified challenge within the clinical setting was the application of theoretical knowledge into practice: "we as educators teach them the concept, students should be able to apply that into practice with their use of clinical reasoning". The use of simulation labs to minimize this gap was suggested. Many stated the separation of the two roles is necessary but agreed that both roles should feed into each other. Eg: "Rather than the educator just lecturing on a disease condition, this could be related to an interactive/ real-time scenario even within the classroom". Concepts such as reflections, developing expertise, and reasoning need to be done as a combined effort of both the educator and the preceptor.

Conclusion: Educators had a positive perception of preceptorship and had a clear goal in their role as educators but agreed that this was a joint venture between an educator and a preceptor. Inadequate pedagogical training and infrastructure in the healthcare system. Thus, implementing preceptorship training programs would be beneficial to both preceptors and preceptors in the successful transition of students to healthcare professionals.

Key Words: *Preceptorship, Educator, Perception*

OP 22

A study on student perceptions of student-led clinical presentations at the International Institute of Health Sciences, Sri Lanka: Educational outcomes

Reginold K.N.^{1*}, Maheepala M.M.T.N.²

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Presentations are a great way to have students practice all language systems areas such as vocabulary, grammar, discourse, phonology, and skills such as speaking, reading, writing, and listening. Clinical presentations organized by the International Institute of Health Sciences, the scientific committee, are an opportunity for students to express and improve themselves. It is held as an event where two speakers from a specific batch present on a topic related to healthcare with a video. The aim of this study was to assess student perceptions of the student-led clinical presentations at the International Institute of Health Sciences, Sri Lanka.

Methods: This was a quantitative cross-sectional study that included 100 students from the second and third years of the general programs at the International Institute of Health Sciences, Sri Lanka. It was carried out with the help of a self-administered survey-based questionnaire by providing to a random population of students at the International Institute of Health Science, Sri Lanka. The data was analyzed and assessed with the help of Statistical Package for the Sciences (SPSS).

Results and Discussion: The present study showed that 70% of the students were between the age of 21-30 out of which 55% were females. Among the 70% of students who attend clinical presentations weekly, 60% attend because it's compulsory and only 15% attend because they are eager to learn. Only 65% of the total population listens to the presentation when they find the topics interesting. The respondents also mentioned that the presenters do not interact with the audience (55%) and when they do 65% of them like the interactions. The videos and questions displayed were mentioned to be relevant and useful occasionally, 55% and 50% respectively. The majority also stated that they try to answer the questions always (80%). The panel report was also mentioned to be beneficial for the future by 45% of the respondents. The study also showed that 55% of the topics presented were related to their curriculum and it helped the students to understand the topic better.

Conclusions: Students who attended clinical presentations were attentive when they found the topic interesting or when the presenter interacted with the audience. It also showed that the presentation was beneficial when they listened as they also found similar topics in their curriculum. They also suggested making it interesting by interacting with the audience, rewarding the students, and also having group presentations that provided emotional support for the presenters. Further research should be conducted in order to evaluate the actual effectiveness of student-led clinical presentations at the venue and by increasing, student-presenter engagement improvements could be achieved for these sessions.

Key Words: *Student-Led, Clinical Presentation, Effectiveness, Student Perceptions*

OP 23

A study on Teachers' perceptions towards educational technology integration in post-pandemic classrooms

Mohamed N.F.F.^{1*}, Perera P.G.V.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Education, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Online education started as a result of this and is now prevailing everywhere as the solution for the Covid-19 pandemic issue; hence, the aim of this study was to look at international school teachers in the western province to understand the impact of the technology perception of the teachers in technological integration.

Methods: The selection of 40 samples was made using a simple random sampling method. Teachers in the Western Province who are working in international schools were selected as the sample, and primary data collection has been done with the self-administrated questionnaire distribution. Data analysis was done via SPSS software, where several statistical methods were used to analyze the gathered information.

Results and Discussion: Descriptive statistics were used in understanding the sample data summary. Reliability was checked using Cronbach's Alpha value which shows higher reliability, and Pearson Correlation analysis has been used in correlation analysis which shows a positive correlation among the variables. Multiple linear regression analysis has shown that positive and significant relationships exist among the independent and dependent variables, where the impacts of the perceived ease of use, perceived usefulness of students, perceived skills and knowledge, and perceived usefulness of teachers on technological integration have been recorded in 95 % confidence intervals.

Conclusion: It has been found that perceived ease of use, perceived usefulness of students, perceived skills and knowledge, and perceived usefulness of teachers are highly impacting on the technology integration among the teachers.

Key Words: *Perceived Ease Of Use, Perceived Usefulness Of Students, Perceived Skills And Knowledge, Perceived Usefulness Of Teachers, Technology Integration*

Self-Esteem and Students' adjustment to the College: A cross-sectional study among Nursing Students at the College of Nursing, Anuradhapura

Kumari H.M.H.S.¹, Ranathunga W.R.H.¹, Dilrukshi H.R.M.¹, Bandara R.M.C.R.¹,
Warnasooriya W.M.N.M.¹, Wijayasundara W.M.S.K.^{1*}, Shantha K.A.S.¹

¹*National Institute of Health Sciences, Nurses Training School, Anuradhapura, Sri Lanka*

Introduction: The students' pre-existing level of self-esteem strongly contributes to successful or maladaptive adjustment to a new situation. A new learning environment may be seen as just another challenge and the student with high self-esteem will actively participate in learning new behavior. Furthermore, self-esteem among nursing students is also important in providing high-quality service to clients. Self-esteem and psychological well-being are considered to have influences on adjustment to college. The aim of this study was to assess the self-esteem and adjustment to college among nursing students at the College of Nursing, Anuradhapura.

Methods: A cross-sectional study was carried out with 121 respondents of nursing students selected randomly from the College of Nursing, Anuradhapura. Information was collected through the self-administered questionnaire. Self-esteem was assessed using 10-item Rosenberg's Self-Esteem Scale and Adjustment was assessed using a 23-item Scale for Students Adjustment to the College Questionnaire (SACQ) (Baker & Siryk, 1999). The collected data was analyzed using SPSS version 26 software. Simple statistical measurement, percentage, mean, and correlation were used for the data analysis, and the significance was set as < 0.05.

Results and Discussion: The majority of the participants were females (91.7%, n=111). Furthermore, most of the participants (61.2%, n=74) were between the ages of 24-25 years and 60.3% (n=73) were in their third year. This study found the mean score of self-esteem and adjustment to the college was 21 ± 2.45 and 56.57 ± 12.33 respectively. Many of the students reported a good level of self-esteem (54.5%, n=66) and a significant number also for a moderate level of adjustment (88.4%, n=107). Furthermore, moderate adjustments were seen in all categorical parameters including social adjustment (67.8%, n=82), academic motivation (65.3%, n=79), academic environment (66.9%, n=81), and institutional attachment (66%, n=80). However, the majority reported an emotional adjustment for good adjustment (53%, n=65). Significant mean differences in self-esteem were found for gender ($p=0.046$) while adjustment with the academic year ($p=0.032$). A positive, significant relationship was found between self-esteem and adjustment to college ($r=0.178$, $p=0.05$). The level of adjustment to the college was predicted by 13.2% (n=16) from the self-esteem of the participants.

Conclusion: Nursing students had a good level of self-esteem during a moderate level of adjustment. The gender and academic year of the participants had significant differences. Furthermore, self-efficacy and college adjustment had a positive significant relationship and prediction. Continued learning support, supervision, and socialization programs need to be strengthened in the nursing school environment and in clinical learning.

Key Words: *Self Esteem, Adjustment, Academic Institution, Nursing Students*

BIOSCIENCE AND BIOMEDICINE

PLENARY - OP 25

Telomere length in predicting Chronic Lymphocytic Leukaemia (CLL) outcomes

DR. THET THET LIN

*Lecturer in Biomedical Science, Faculty of Health and Life Sciences, Coventry University,
United Kingdom*

Telomeres are the physical ends of eukaryotic linear chromosomes. Telomeres form special structures that cap chromosome ends to prevent degradation by nucleolytic attack and to distinguish chromosome termini from DNA double-strand breaks. Telomeres are composed of repetitive DNA sequences (TTAGGG)_n in humans, which are bound by specialised telomere binding proteins and get shortened with ongoing cell division and short telomeres trigger a G1/S cell cycle arrest. In response to telomere shortening during each cell division, telomeres can lose capping function in cells that lack telomerase-activity. Telomeres have a dual role in cancer. Telomere shortening can lead to induction of chromosomal instability and to the initiation of tumours, however, initiated tumours need to reactivate telomerase in order to stabilise chromosomes and to gain immortal growth capacity.

In recent years, it has been reported that telomere shortening is associated with increased genomic complexity in Chronic Lymphocytic Leukaemia (CLL). CLL is the most common leukaemia in the Western world and affects mainly elderly patients. CLL is known as a disease with a heterogeneous clinical course ranging from a few months to many decades. Although the Binet and Rai staging systems are reliable predictors of outcome between the staging groups, they fail to identify good and bad prognostic subsets within each stage. As most patients are diagnosed with early-stage disease, there are numbers of biological prognostic markers developed over the years to predict the clinical outcome in CLL. Recently, telomere length has been reported as the strongest determinant of clinical outcome in CLL and predicts survival following chemotherapy, even in patients with early-stage disease. Telomere length was also a powerful predictor of outcome to frontline treatment with fludarabine, cyclophosphamide, rituximab (FCR)-based regimens (FCR)-based treatment.

PLENARY - OP 26

Environmental isolate to industrial workhorse

DR. AMIAS MOORE^{1*} AND PROFESSOR GARY BLACK²

¹Senior postdoctoral research assistant for the Hub for Biotechnology in the Built Environment, Applied sciences, Northumbria University, Newcastle Upon Tyne, United Kingdom

²Professor at Northumbria University, Newcastle Upon Tyne, Former Senior Lecturer at University of Sunderland, United Kingdom

Eighty million tons of waste lignocellulose biomass is produced each year globally, and it accounts for 33% of municipal waste. Therefore, utilising lignocellulose as an abundant and renewable feedstock to produce industrially relevant chemicals is appealing. However, due to the complexity and heterogeneity of the different polymers that make up lignocellulose as well as their recalcitrant nature, it has been difficult to develop model bacterial chassis into efficient lignocellulose degrading cell factories.

The past decade has seen a startling increase in the number of novel bacterial species with metabolic pathways that have the potential to be exploited for the production and degradation of useful chemicals. Coupled with the recent breakthroughs in silico metabolic and protein modelling, there is an unprecedented amount of data that can be exploited to develop new whole-cell biocatalysts.

A novel isolate was found and cultivated directly from lignocellulose waste, with the ability to degrade cellulose and hemicellulose. Serendipitously, this strain had remarkable amenability to genetic manipulation, as well as reasonable metabolic flexibility. We aim to develop this strain into a bona fide chassis strain that can degrade lignocellulose from wastepaper to produce precursors for green plastic, food additives, and pharmaceuticals. We illustrate how this can be done by up-regulating key enzymes already present in the organism, bio-prospecting for new enzymes from metagenomic libraries, and finally constructing a genome-scale metabolic model to guide further genetic interventions.

Novel-Transgenic zebrafish based heavy metal biosensor for specific detection of Cadmium and Zinc

Herath H.M.L.P.B.^{1, 2}, Gunawardena Y.I.N.S.³, De Silva K.M.N.², De Silva W.R.M.^{1*}, Afonso L.¹

¹*School of Life Sciences and Environment, Deakin University, Australia*

²*Department of Chemistry, University of Colombo, Sri Lanka*

³*Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka*

Introduction: The contaminations by heavy metals (mainly introduced extensive industrial use and household applications, and natural phenomena such as volcanic eruption) in environmental samples including water, soil and air lead to serious adverse health effects on human and animals. Studying the effect of heavy metals on animal health via toxicological assessment tests and analysing environmental samples with heavy metal detection techniques for the presence of heavy metal contaminations are two key aspects of implementing strategies to eliminate heavy metal-bound diseases. The following study developed a zebrafish-based heavy metal biosensor as a water quality assessment tool.

Methods: Initially Heavy metal sensitive gene circuit was computationally designed utilising metallothionein gene promoter (Mt2) and discosoma red (dsRED) fluorescence gene sequence. Subsequently, the chemically synthesised Mt2-dsRED gene construct was microinjected (utilising transposase gene editing system TOL2) into zebrafish embryos. Eventually, the successfully developed transgenic Zebrafish biosensors were subjected to heavy metal sensitive calibration and validation assays.

Results and Discussion: In summary, the zebrafish biosensor developed in this section was specifically responsive for Cd²⁺ and Zn²⁺ with the minimum detection limit of 4 ppb for each and was showing no significant signals were shown for Ni²⁺. The full-length heavy metal sensitive gene construct integrated into zebrafish genome was 2435 bp in size, the Mt2 promoter sequence was 1521 bp long and the DsRED reporter gene sequence was 688 bp long. Collectively, the successfully developed heavy metal sensitive transgenic zebrafish line in this experimental section showcased its prominent features to be involved in laboratory based highly sensitive heavy metal assessment assays in low heavy metal concentration ranges such as 0-10 ppb.

Conclusion: The study successfully developed an embryo-based laboratory assay that could be widely applicable in heavy metal detecting experiments. The study adds significant value in assessing bioavailable heavy metals in contaminated water samples giving a more realistic assessment on heavy metal toxicity. The outcomes of this thesis will be useful in the field of environmental toxicology in order to fine tune the fundamentals of existing heavy metal detecting biosensing techniques and broaden the calibre of applied interest.

Key Words: Biosensor, Zinc, Cadmium, Transgenic, Heavy Metal, Zebrafish

Determination of initial cloning and expression conditions for multiple novel Amine Oxidases from Metagenomic Sequences with enzyme activity analysis

Gunatilake H.G.D.^{1*}, Black G.¹

¹*School of Life Sciences, Northumbria University, Newcastle Upon Tyne, United Kingdom*

Introduction: Owing to its precise chiral and positional selectivity whilst offering an eco-friendly alternative for traditional synthetic applications in the fields of pharmaceuticals, agrochemical, and food industries, it is evident that the use of enzymes has augmented the synthesis of industrially relevant chemicals. Meanwhile, metagenomics presents a valuable tool in producing novel biocatalysts enabling the production of enzymes using organisms that are not cultivable and can be used to mimic and achieve random mutations that are naturally achieved in several protein engineering methods. This project determines the initial conditions to amplify, clone, and express several novel Amine Oxidases (AOs) using a metagenomic sequence (environmental sample) to assess the initial conditions in producing enzymes that could be utilised either industrially or medically according to its specificity.

Methods: Metagenomic sequences were obtained from mix propagated soil bacteria and the sequence was BLAST searched using the primary-AO sequence from *Escherichia coli* K12 strain. Seven similar AO sequences, that were present in the metagenomic sequence, were identified and selected for further processing using open sourced online bioinformatic tools (primer design, signal peptide identification and viable restriction enzyme prediction) and the selected sequences were amplified using PCR and cloned into a pET-28a(+) vector where expression is achieved in *E. coli* BL21-(DE3) cells. Bradford assay is used to identify total protein and Benzylamine assay was used to detect the probable activity of the AOs expressed.

Results and Discussion: Initial PCR conditions were established for all 7 sequences of DNA clone and probable expression of AO proteins is achieved for 4 sequences. Activity was not detected in the expressed proteins, possibly due to inadequate expression levels and incorrect protein folding which could not be optimised due to time constraints. Complete confirmation of the PCR fragments using sequencing, use of modified expression vectors and hosts (Ex: BL21-CodonPlus (DE3)-RIL), increasing protein solubility and protein purification through immobilized metal affinity chromatography (IMAC) could be mentioned as further work for optimisation of the expression process.

Conclusion: The study lays the basis for further expression and activity analysis of AOs using metagenomic sequences that could be utilised in many industrial and medical applications aiding the synthesis of multiple reactions which account for significant proportions in the global market, especially in the pharmaceutical industry. However, further optimisation should be conducted with the above-mentioned methodologies to assess practical applications of AO production.

Key Words: PCR, Amplification, Metagenomics, Amine Oxidase, Expression

Investigation of chemical constituents of *Morinda citrifolia* (Noni) leaf and fruit growing in Sri Lanka

Fernando P.E.S.^{1*}, Jayathilake J.M.N.J.¹, Weeratunge H.D.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*Industrial Technology Institute, Malabe, Sri Lanka*

Introduction: *Morinda citrifolia* or commonly known as Noni, is well renowned for its bioactive properties. This study was carried out to investigate the chemical components that were present in *M. citrifolia* leaf and fruit extracts, whereas a fermented fruit sample was also used for the identification of compounds.

Methods: The Noni species were obtained from Western and Northwestern provinces of Sri Lanka. Methanolic extraction was done using dried noni leaves and ripe fruits using Soxhlet extraction method. The essential oils of *M. citrifolia* ripe fruit, dried leaf and 21-day fermented fruit juice were prepared by hydro-distillation. High-Performance Liquid Chromatography (HPLC) and Gas Chromatography-Mass Spectrometry (GC-MS) were the two methods by which chemical constituents were evaluated based on their volatility.

Results and Discussion: The reverse phase HPLC analysis was performed to quantify, *p*-Coumaric acid, ferulic acid and quercetin in methanolic extracts of dried noni leaves and ripe fruits. It was found that *Morinda citrifolia* leaves contain *p*-Coumaric acid as 0.8%, w/w, ferulic acid as 5.8%, w/w and quercetin as 6.1%, w/w. Ripe fruit contained, *p*-Coumaric acid as 0.01%, w/w, ferulic acid as 0.4%, w/w and quercetin as 0.4%, w/w. The GC-MS results showed the presence of phenols, alcohols, fatty acids, and ketones in the 21-day fermented *M. citrifolia* fruit sample. Among them, 38.3% of ethyl alcohol was found as the major compound present. As per the GC-MS results, Caprylic acid was identified as the principal constituent present in both the leaf essential oil and fruit essential oil obtained; 64.2% and 74.3% respectively. In addition, the primary aroma components of fresh, fermented noni juice and essential oils were due to the presence of octanoic acid and hexanoic acid.

Conclusion: This pilot study provided scientific evidence to prove the presence of chemical constituents with various properties in leaf and fruit extracts of *Morinda citrifolia* plant growing in Sri Lanka. Further, phytochemical properties of both the leaf and fruit of *Morinda citrifolia* have a high potential to be used as a food supplement while having anti-inflammatory and antibacterial properties that are associated with caprylic acid.

Key Words: *Noni, Compounds, GC-MS, HPLC*

Investigation of antioxidant properties of *Morinda citrifolia* (Noni) leaf and fruit extracts in Sri Lanka

Perera O.L.^{1*}, Jayathilake J.M.N.J.¹

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The traditional medical system of Sri Lanka, which has more than 3000 years of tested and evidenced efficacy, is still in use and is commonly the first line of defense for natives. Many recent studies have focused on *Morinda citrifolia* (Noni) due to its potential effects on treating and preventing a wide range of diseases. In Sri Lanka, however, there have been limited in-vivo and in-vitro investigations on its composition and antioxidant capacity. The objective of this study was to investigate the antioxidant properties, total phenolic content, and total flavonoid content of extracts from different parts (Chillaw and Seeduwa) of *Morinda citrifolia* growing in Sri Lanka, including the leaf and fruit.

Methods: Methanol was utilized as the solvent, and the antioxidative effects were assessed using the 2,2-diphenyl-1-picrylhydrazyl assay and the oxygen radical absorbance capacity assay. Total polyphenol and total flavonoid concentrations were determined using the Folin-Ciocalteu and aluminum chloride methods, respectively.

Results and Discussion: Noni leaves had greater Total Phenolic Content (0.519 ± 0.09 GAE/g), Total Flavonoid Content (6.943 ± 1.22 QE/g) and antioxidant activity ($15.48 \mu\text{g/mL}$) levels compared to Noni fruits which had Total Phenolic Content (0.483 ± 1.8 GAE/g), Total Flavonoid Content (1.79 ± 0.12 QE/g) and antioxidant activity ($28.90 \mu\text{g/mL}$) respectively. Based on the results of the Oxygen radical absorbance capacity assay, Noni leaves had higher antioxidant properties (67.06 ± 15.9) than the fruits (48.85 ± 9.7).

Conclusion: The results demonstrated that Noni leaves and fruits are good sources of antioxidants. Furthermore, results suggest that this plant can be a new source of antimicrobial properties as well due to the long-lasting nature of the extracts over time. Therefore, in Sri Lanka, it is better to encourage the use of Noni products, particularly Noni leaves.

Key Words: *Morinda citrifolia*, Antioxidant Properties, Sri Lanka

OP 31

Antibacterial activity of selected Soaps and Hand wash (Antiseptic and Herbal) against potential pathogens

Usliyanage L.W.^{1*}, Samaraweera G.A.², Perera M.T.S.M.², Perera V.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*Department of Microbiology, Faculty of Medicine, Sabaragamuwa University of Sri Lanka*

Introduction: Transmission of certain bacterial infections can be significantly reduced by personal hygiene practices. Germ disinfection, defense against skin illnesses, and skin disease therapy are all benefits of antibacterial and herbal (soaps and handwash). Maintaining hand hygiene using soaps and handwash (antiseptic and herbal) can control the potential pathogens that live on the skin, such as *Staphylococcus aureus* and *Escherichia coli*. The main aim of this study was to determine the antibacterial activity of soap and handwash (antiseptic and herbal) against such pathogens.

Methods: Antiseptic soap (n=3), herbal soap (n=3), antiseptic liquid hand wash (n=3), and herbal liquid hand wash (n=3) were collected randomly from pharmacies in the Colombo District. The antibacterial activity of the samples was tested using Kirby Bauer's disc diffusion technique against *S. aureus* and *E. coli* by measuring the diameter of inhibition zones. The colony forming unit was calculated to obtain a reduction percentage in the removal of bacteria following hand sanitization. ANOVA using SPSS was used for statistical analysis.

Results and Discussion: Inhibition Zones (IZ) were observed with all antiseptic hand washes and two antiseptic soaps against *Staphylococcus aureus*. However, IZ was visible for only one herbal hand wash. None of the herbal hand washes showed IZ. Inhibition zones were not observed for any soaps or hand washes against *Escherichia coli*. The reduction percentages of colony forming units on hands were higher for liquid hand washes when compared to soaps. According to the results, antiseptic hand washes and soaps showed higher antibacterial activity than herbal products. Adding herbal products might have affected the antibacterial activity against the selected bacteria. *E. coli* exhibited higher resistance to all selected soaps and hand washes.

Conclusion: Selected soaps and hand washes were effective against *Staphylococcus aureus* but ineffective against *Escherichia coli*. Antiseptic soaps and handwash inhibit and remove bacteria more effectively than herbal soaps and handwash. Moreover, it could be stated that handwash has a higher antibacterial effect and bacterial removal ability compared to soaps.

Key Words: Antiseptic, Herbal, *Staphylococcus aureus*, *Escherichia coli*, Inhibition Zone

Investigating the presence of Antimicrobial-Resistant (AMR) bacteria in retail pork products in Rathnapura District, Sri Lanka

Mahaliyana D.P.^{1*}, Perera M.T.S.M.², Samaraweera G.A.², Perera V.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*Department of Microbiology, Faculty of Medicine, Sabaragamuwa University of Sri Lanka*

Introduction: Microbes can contaminate pork products at any point during the production process, even during retail distribution. Furthermore, Antimicrobial-Resistant (AMR) bacterial contamination of pork products is a serious issue that needs to be addressed to ensure the microbiological safety of retail ground pork products. Yet there is no current evidence of the existence of AMR bacteria in retail pork meat. Thus, this study aimed to look into the presence of AMR bacteria in retail pork products in Rathnapura District, Sri Lanka.

Methods: Seven fresh pork meat samples were collected from Rathnapura District retail stores. The collected samples were tested for contamination with *Methicillin Resistant Staphylococcus aureus* (MRSA) and extended spectrum β -lactamase producing (ESBL) *Salmonella spp.* *Staphylococcus aureus* and *Salmonella spp.* from pork samples were identified by selective media such as MSA, DNase, XLD and biochemical tests. MRSA was identified with a cefoxitin screening test. ESBL was screened by a double disc synergy test. An interview-based questionnaire was used to identify the factors contributing to bacterial contamination of meat products.

Results and Discussion: Of the seven samples, two samples were contaminated with MRSA (n=2, 28.57%). Four samples were recognized as contaminated with ESBL-producing *Salmonella spp.* (n=4, 57.14%). Furthermore, the majority of the respondents (85.7%, n=6) who answered the questionnaire showed that they did not follow hand washing while meat handling. Moreover, all the retailers (100%) did not wear gloves as a hygiene practice. Additionally, most of the retailers (57.1%, n=4) did not wear aprons when handling meat products. When considering product storage, all the retailers stated that they do not follow a specific packaging method when selling meat products.

Conclusion: MRSA and ESBL-producing *Salmonella spp.* contamination in pork samples is a cause for concern. Poor hygienic practices could have directly impacted the prevalence of pathogenic multi-drug resistant bacteria such as MRSA and ESBL-producing *Salmonella spp.*

Key Words: *Antimicrobial-Resistant Bacteria, Retail Pork Meat, Contaminated*

OP 33

Evaluation of a cost-effective method for extracting RNA from human blood samples

Peiris P.C.^{1*} and Wickramasinghe T.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*Department of Biochemistry and Clinical Chemistry, Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka*

Introduction: In response to case-specific requirements, the extraction of RNA has improved over time by incorporating a range of materials into the process. To achieve higher RNA extraction quality and yield, commercial kits are routinely utilized. However, the cost of employing commercial kits has been a constraint in the development of high-throughput sequencing. Thus, optimizing approaches for sample-specific RNA extraction procedures have recently been highlighted. The main objective of this study was to establish a cost-effective RNA-extraction method for human blood samples.

Methods: The RNA extraction from PBMCs (peripheral blood mononuclear cells) was performed using a commercial kit; RNeasy Mini kit (Qiagen) and the RNA-Xpress reagent method (low-cost option). The process was carried out according to the provided standard protocol. The yield and integrity of isolated RNA were assessed by Agarose gel electrophoresis, Nanodrop spectrophotometry, and qPCR. Furthermore, the results were statistically analyzed using Microsoft Excel.

Results and Discussion: RNA was extracted successfully from PBMCs using both low-cost and commercial kit methods. The observed gel electrophoresis from PCR showed traces of DNA in the extracted RNA. Thus, the samples were treated with DNase, and RT-PCR was carried out, where high-intensity gel bands were obtained for both methods. The CT values of qPCR for the DNase-treated commercial kit (13.518) and cost-effective method (13.448) determined the yield and purity of extracted RNA were relatively similar.

Conclusion: The available evidence from this study indicates that RNA obtained from the RNA-Xpress reagent method was relatively similar to the RNA from the RNeasy mini kit method. Hence, this signifies that the RNA-XPress reagent method offers a reliable yield and integrity for RNA, indicating an ability to act as a substitute for the commercial kit to avoid the occurrence of high costs during RNA isolation. It is recommended to enhance the process to increase the yield of isolated RNA from human blood samples.

Key Words: RNA Extraction, PBMC, Yield, Integrity

Testing the antimicrobial properties of water extract of Aerial roots of *Ficus benghalensis* against *Staphylococcus aureus* and *Escherichia coli*

Sudarshan V.S.^{1*}, Khalid G.A.N.¹, Seneviratne D.B.R.¹, Weerakkody I.N.¹, Mahaliyana D.P.¹, Jayathilake J.M.N.J.¹, Nicholas S.¹

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: *Ficus benghalensis* is a tree native to the Indian subcontinent that is regarded as one of the most widely used plant species in the world. Various parts of the tree, such as leaves, bark, fruits, roots and flowers, are widely used and significant in the field of Ayurvedic medicine. The problem pertaining to the research was less studies and research done in Sri Lanka with regards to analysing toxicity and bio-active properties of aerial root of *Ficus benghalensis*. The aim of this study was to test and analyse the anti-microbial properties of *Ficus benghalensis* aerial root extract.

Methods: Water extraction was performed to obtain an extract from the aerial roots of *Ficus benghalensis*. A concentration series with five different concentrations was prepared according to a simple dilution method. The anti-microbial tests were conducted in a triplicate method according to the disk diffusion method on *Escherichia coli* and *Staphylococcus aureus*, and the inhibition zones were recorded after 24 hours.

Results and Discussion: The positive control test was conducted using three antibiotics, which were Ampicillin, Penicillin and Methicillin. An inhibition zone of 20 mm, 22 mm, and 14 mm respectively, was observed for Ampicillin, Penicillin, and Methicillin against *Staphylococcus aureus*. *E. coli* displayed inhibition zones of 10 mm, 0 mm, and 10 mm respectively, for the same antibiotics. At a concentration of 10 mg/ml, the average inhibition was 18.5 mm. For 1 mg/ml, an inhibition zone of 15 mm was recorded. A zone of 7 mm was shown against the 0.1 mg/ml concentration. No inhibitory effect was shown for 0.01 mg/ml and 0.001 mg/ml concentrations. As per observed, when the concentration was high, the inhibition zone was greater.

Conclusion: Though the *Ficus benghalensis* aerial roots are used commonly in traditional medicine, scientific data that supports bioactivities and toxicity studies are rare. This study demonstrates the antibacterial activities based on experimental results. Further studies are needed to identify other bioactive properties of the plant. Furthermore, *in-vivo* experiments are recommended to be conducted before developing extracts into consumable products.

Key Words: Anti-Bacterial, *Ficus benghalensis*, *Staphylococcus aureus*, *Escherichia coli*

OP 35

Evaluation of photocatalytic activity and antioxidant properties of green synthesized Silver Nanoparticles from *Carica papaya* leaves

Silva K.S.D.¹, Kandiah M.^{1*}

¹*School of Science, BMS, Colombo, Sri Lanka*

Introduction: Azo dyes are a primary waste product in the apparel industry which can easily contaminate water habitats. It can raise major health concerns for humans as well as for environmental sustainability. This research is primarily focused on evaluating the photocatalytic activity of green synthesised Silver Nanoparticles (AgNPs) from *Carica papaya* leaves, against hazardous apparel Azo dye, Eriochrome Black T (EBT) and to analyse the antioxidant properties.

Methods: *Carica papaya* leaves were homogenised and the plant extract was prepared using water. The AgNPs were biosynthesized by mixing the plant extract with Silver Nitrate (AgNO_3) solution and heated at 90 °C for 30 min. The characterization of synthesized AgNPs were performed by Scanning Electron Microscope (SEM) and UV spectrophotometer. The photocatalytic activity of AgNPs was analysed using EBT under UV light, by photodegradation. The antioxidant properties of AgNPs were analysed and compared to the plant extract by total antioxidant content, total phenolic content, total flavonoid content, and DPPH radical scavenging activity. One-way ANOVA was generated by using Microsoft Excel 2016 software. The correlation graphs were produced using IBM SPSS Statistics 23 software with $p < 0.05$ significance.

Results and Discussion: The general morphology of SEM-visualised AgNPs manifest a cubic shape and approximate size of 25 nm. UV spectrometric studies have shown the well-defined absorption peak in the visible region at 420 nm, which is the corresponding absorbance due to surface plasmon in AgNPs. The band gap energy was calculated as 2.95 eV using Planck's equation and validated their capacity to act as semiconductors. EBT was successfully degraded under UV irradiation by 6670 and 440 ppm concentrations of AgNPs. When calculating the rate constant using the first-order kinetic Langmuir Hinshelwood model, 440 ppm concentration showed 0.0034 min^{-1} and 6670 ppm concentration showed 0.0044 min^{-1} rate constant indicating that EBT dye degrades more effectively with 6670 ppm AgNPs. It confirms that there is a positive correlation between AgNP concentration and the degradation of EBT. Moreover, AgNPs showed a significantly higher antioxidant activity compared to their plant extracts in each antioxidant analysis.

Conclusion: The results display that green synthesised AgNPs using *Carica papaya* leaves can be employed in controlling industrial dye waste, mainly organic pollutants via photocatalytic degradation, without creating secondary contaminations. Moreover, it will be an initiative to overcome advanced diseases and new cancer prevention and treatment methods via superior antioxidants.

Key Words: Azo Dyes, Antioxidants, Silver Nanoparticles, *Carica Papaya* Leaves, Photocatalysis

NURSING AS A PROFESSION IN THE GLOBALIZING WORLD

PLENARY - OP 36

Nursing - looking forward and remembering the past

MS. GLENDA WHITING

*Registered Nurse, Registered Midwife and Health Educator,
Head of School of Nursing, International Institute of Health Sciences, Sri Lanka*

This forum will be embracing the theme “Translational Science; Opportunities for Humanity.” which translate scientific insights into actual, practical therapeutic interventions that save peoples’ lives and improve their health.

I am presenting "Nursing - looking forward and remembering the past" under the theme “Nursing as a profession in the globalizing world”.

There are various descriptions of nursing but commonly seen as encompassing autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people.

Much has changed but some remains the same and this presentation will explore nursing past present and future and touch on

- The changing role of ‘the nurse’
- Opportunities to study, peer-to-peer education
- Strengthening the voice of the nursing profession
- Advances in technology

OP 37

Psychological well-being and resilience: A cross-sectional study among Nursing Students at College of Nursing, Anuradhapura, Sri Lanka

Bandula N.B.D.S.¹, Abeynayake D.A.S.K.¹, Rupasingha S.R.S.P.¹, Dharmasiri G.G.N.T.K.¹,
Dissanayaka W.D.M.P.M.¹, Wijayasundara W.M.S.K.^{1*}, Shantha K.A.S.¹, Abeynayake
A.M.A.²

¹*National Institute of Health Sciences, Nurses Training School, Anuradhapura, Sri Lanka*

²*Ministry of Health, Sri Lanka*

Introduction: Nursing students experience higher levels of academic stress than those of other disciplines, which leads to psychological distress and has unfavorable effects on well-being. Resilience is found to have an impact on learning experiences, academic performance, course completion and, in the longer term, professional practice. Psychological well-being plays a vital role in nursing students' mental health and affects their decisions to stay in the nursing profession. However, the relationship between resilience and well-being remains unexplored in nursing students, which are significant attributes to their academic achievement and future career perseverance. Thus, this study aimed to assess the psychological well-being and resilience among nursing students at the College of Nursing, Anuradhapura.

Methods: A cross-sectional, descriptive design was implemented among nursing students studying for the basic nursing diploma program at the College of Nursing, Anuradhapura. The 10 item Connor-Davidson Resilience Scale (CD-RISC-10) and Carol D. Ryff's Psychological Well-being Scale was used to measure resilience and psychological well-being respectively. Data were collected among randomly selected 156 first-year and third-year nursing students at the College of Nursing, Anuradhapura. Data analysis was done with the SPSS 26 version for descriptive and inferential statistics. The level of significance was set as < 0.05 .

Results and Discussion: A total of 156 nursing students participated in the study. The majority of the participants were female (94.2%), and the majority were in the age range of 24–25 years (69.2%, $n=108$). 57.2% ($n=89$) of the participants were in their first year. The mean score for psychological well-being was 53.35 (SD 8.63) while the majority of the respondents reported having a low level of psychological well-being (72.4%, $n=113$). The mean score for resilience was 31.58 (SD 5.3) and the participants reported possessing a level of resilience above the average level was 51.9% ($n=81$). The significant mean difference in psychological well-being was 0.013, while resilience with gender was accumulated to be 0.010. There was a significant positive and moderate relationship between psychological well-being and resilience ($r=0.235$, $p=0.003$).

Conclusion: Despite the low level of psychological well-being among students, the resilience level was above average. Gender and the academic year of the participants were significant factors. Several recommendations for improving the mental health and psychological well-being of nursing students are to be discussed.

Key Words: *Psychological Well-Being, Resilience, Nursing Students, Nursing Education*

OP 38

Attitudes toward seeking help for depression among Nursing Undergraduate (ug) Students in a private institute

Nazeer Z.A.A.^{1*}, Deneththi M.P.^{1*}, Hathurusinghe H.D.R.H.¹, Fernando W.D.P.¹,
Ragasekara H.¹, Samaranayake N.¹

¹*School of Nursing, International Institute of Health Science, Welisara, Sri Lanka*

Introduction: Depression is a common psychological issue that affects the majority of undergraduates. Studies show undergraduate nursing students are more prone to suffering from depression due to clinical placements, studies, and night shifts. Although depression is identified as a serious medical condition, studies have found that only a limited number of nursing undergraduates seek any sort of help. Thus, this study aimed to identify the attitudes of undergraduates towards seeking necessary help for depression, in order to encourage better help-seeking among them.

Methods: This was a cross-sectional study done among 151 undergraduate nursing students between 18 and 28 years of age. A vignette describing a peer suffering from depression was presented, and participants were given a questionnaire based on the case vignette, constructed according to Amarasuriya et al., 2018. The data were analyzed using SPSS software.

Results and Discussion: Of the 151 participants, 68.2% (n=103) were females. A majority of the participants, 70% (n=106) were willing to reach out for professional help rather than informal help for the issue depicted in the case vignette. Respondents who preferred to get help from a psychologist and a counselor were 62.7% (n=95) and 73.3% (n=111) respectively. In addition, fewer participants sought help informally through parents (48%, n=72) and friends (34.7%, n=52). However, 5.3% (n=9) of the total participants were reluctant to communicate the problem with anyone if they ever suffered from depression, while a majority of 94.7% (n=143) preferred to share the problems and seek necessary help.

Conclusion: Since the majority of students were able to identify the problem as depression, intended to communicate regarding problems, and were willing to seek professional psychological help indicates a positive attitude towards seeking help for depression.

Key Words: *Depression, Undergraduates, Help-Seeking, Attitudes*

OP 39

Evaluating the effectiveness of treating Psychiatric Patients using Virtual Reality (VR) technology: Systematic review

Opanayake S.D.^{1*}, Avinash N.^{1*}, Perera K.O.¹, Paththeperuma R.H.¹, Hiranthika R.¹, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Medical psychiatry deals with mental, behavioral, and emotional problems at their early stages of development. Psychiatrists have medical expertise that allows them to prescribe medicines and conduct treatments. Virtual Reality (VR) is a unique ability to transfer you to another location that may be utilized to generate effective simulations of circumstances in which psychological issues arise. The aim of this study was to find the effectiveness of this treatment in treating psychiatric patients through the evaluation of the literature.

Methods: This was a systematic review of the experimental research papers done in relevance to the use of VR technology in treating psychiatric patients and its effectiveness. Data was collected using research published in PubMed, Google Scholar, and Researchgate. Fifty research articles were selected that were relevant to treating disease conditions like Post Traumatic Disorder (PTSD), Phobias, and Schizophrenia and pain relief using VR which had been published during the time period of 2010-2020. The data was collected into a customized google form filled in according to the content of each research paper studied by the team members.

Results and Discussion: Results from this study were gathered according to various types of psychiatric disorders. For PTSD, a study has been done using 156 patients. According to the study, VR therapy helped patients to have fewer PTSD diagnoses and symptoms. For Phobias, VR-graded exposure treatment was first shown to be effective in decreasing fear of spiders, social phobia, and Flying phobia. For Schizophrenia patients, VR treatment showed interestingly positive results. VR usage for stress and pain relief generally offers basic types of diversion to reduce one's attention available for conscious pain processing. VR treatments have shown to be more cost-effective in almost all methods than using traditional treatment methods.

Conclusion: With the results that we have obtained, we can conclude that VR treatments will provide a significant impact in treating patients with various Psychiatric disorders, and it is proven that these methods are cost-efficient and will become very useful if implemented in Sri Lankan hospitals. This would be a new benchmark study for initiating treatment methodologies for psychiatric disorders.

Key Words: *Virtual Reality, Psychiatry, Dementia, Schizophrenia, Phobia*

OP 40

A study on the willingness for professional adjustment in Nursing among third-year Nursing Students of the Nursing Training School of Kalutara

Premathilaka H.P.L.H.^{1*}, Ranasinghe R.A.T.S.¹, Samaranyaka A.G.W.S.P.¹,
Wimalasiri D.A.P.S.¹, De Silva U.C.K.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Professional adjustment is the growth of the whole individual and the development of all his/her capacities, physical, mental, social, and spiritual towards the efficient and effective performance of his/her profession. In a profession, values are standards for action preferred by experts and professional groups and establish frameworks for evaluating behavior. Nursing is a profession, rooted in professional ethics and ethical values & nursing performance is based on such values. This study aimed to study the willingness to professional adjustment in Nursing among third-year Nursing students of NTS, Kalutara.

Methods: This was a cross-sectional, descriptive study done among a conveniently selected 105 third-year Nursing students of NTS, Kalutara. Data were collected through a self-administered questionnaire distributed as a Google form. The collected data were descriptively analyzed.

Results and Discussion: The response rate was 105 and 98.1% (n=103) of the participants were females. The majority (90.5%, n=95) were 24-26 years old. About 68.57% (n=72) had chosen the profession as a self-decision. Furthermore, 76.2% (n=80) complained about an unbearable workload, and 73.3% (n=77) agreed they get psychological wellness through the nursing profession. Moreover, willingness to accept the change and uncertainty of the present was the main personal factors affecting the nursing profession. When considering the institutional factors, strict rules and regulations (61.9%, n=65), support from the seniors (69.52%, n=73), and support from the non-academic staff (65.7%, n=69) were the main institutional factors that affected. As the leading professional behaviors affecting the nursing profession, the majority stated seniority 80.9% (n=85), punctuality 84.7% (n=89), and uniform (80%, n=84) as the proper care for the patient. Most respondents also stated that it follows a code of ethics.

Conclusion: Most third-year nursing students have accepted personal factors, institutional factors, and professional behaviors affecting professional adjustment in nursing.

Key Words: *Nursing Students, Professional Adjustment, Professional Behaviors*

OP 41

Perception and satisfaction on Clinical Learning Environment (CLE) among Nursing Students in Sri Lanka: For the optimal outcome of Nursing Education

Rodrigo P.T.P.^{1*}, Dissanayake D.P.D.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Clinical Learning Environment (CLE) is a dynamic network of forces that operates inside the clinical setting and has an effect on learning outcomes. The CLE is the location where theoretical and practical components are integrated and turned into professional skills and attitudes. This study explored the Sri Lankan student nurses' perceptions and satisfaction with their clinical learning environment in 2022.

Methods: A descriptive correlational study was carried out using 350 participants selected using a stratified random sampling technique. The CLE, Supervision + Nurse Teacher scale (CLES+T) was used to collect data. The data were analyzed using SPSS statistical software. Student nurses' perception and satisfaction of the CLE were assessed by the sub-dimensions according to the following order as; the role of the Nurse Tutor (NT), the leadership style of the Ward Manager (WM), the supervisory relationship, and the pedagogical atmosphere of the ward.

Results and Discussion: The findings indicated that the majority of the participants 60.0% (n=210) have a “neutral” level of perception, while only 18.6% (n=75) have a “poor” perception and 21.4 % (n=65) have a “good” perception regarding their CLE. Only 16.0% (n=56) of the participants reported "poor" overall satisfaction with their CLE while 40.6% (n=142) and 43.4% (n=152) of the sample indicated "good" and “neutral” levels of satisfaction respectively. It was identified that there was a strong significant positive correlation ($r=+0.718$) between the perception and the satisfaction regarding student nurses' CLE according to the spearman's correlation test.

Conclusion: Authorities need to take some strategies to arrange the CLE as favorable for the students since their performance in the CLE is affected by their perception and satisfaction with CLE. It is imperative to ensure the quality of clinical practice for the optimal outcome of the three-year Nursing Diploma in Sri Lanka. Further research is recommended to explore the other stakeholders' perceptions regarding the nursing students' CLE.

Key Words: *Clinical Learning Environments, Nurse Tutor, Ward Manager, Supervisory Relationship*

Knowledge and self-efficacy on Palliative Care among Nursing Students in Nurses Training School, Anuradhapura

Wijesundara W.M.K.I.S.^{1*}, Thathsarani W.M.R.¹, Fernando W.S.D.¹, Lakshan A.G.C.¹, Sewwandi M.A.M.¹, Bandara R.M.T.M.¹, Wijayasundara W.M.S.K.¹, Shantha K.A.S.¹

¹*National Institute of Health Sciences, Nurses Training School, Anuradhapura, Sri Lanka*

Introduction: Palliative care is essential in nursing care due to the increasing number of patients requiring attention in the final stages of their life. Nurses' lack of knowledge regarding palliative care and negative attitude toward palliative care is one of the most common barriers to quality palliative care. The aim of this was to investigate knowledge and self-efficacy in palliative care among Nursing students at Nurses Training School, Anuradhapura.

Methods: A descriptive, cross-sectional study with 108 third-year nursing students randomly selected at the Nurses Training School, Anuradhapura. The two validated questionnaires, Palliative Care Quiz for Nursing (PCQN) and Self efficacy scale were used for data collection. Data analysis was done with Statistical Package for the Sciences (SPSS version 26) for descriptive and inferential statistics. Significance was set as < 0.05 .

Results and Discussion: The response rate was 100% among the participants, who were mostly females (88.9%, n=96). The majority of them (97.2%, n=105) had learned about palliative care. While 91.7% (n=99) of the participants learned palliative care by reading books, 44.4% (n=48) learned palliative care through lecture discussions, and among them, 73.1% (n=79) had provided nursing care for palliative patients. The mean self-efficacy score for palliative care is 29.69 (SD 7.896) out of a possible range of 12-48. The mean knowledge score is 33.67 (SD 7.98) out of a possible 50. Regarding the categories, most of the participants had an average level of self-efficacy of 55.6% (n=60) and a good level of knowledge regarding palliative care (41.7%, n=45). There is a significant difference in palliative care knowledge based on gender ($P=0.021$), palliative care reading ($P=0.032$), and caring experience ($P=0.032$). A significant positive relationship was found between palliative care knowledge and self-efficacy ($r=0.210$, $P=0.001$). Palliative care knowledge predicts 31% of palliative care self-efficacy.

Conclusion: The majority of nursing students had an average level of self-efficacy and a good level of knowledge of palliative care. Gender, reading on palliative care and caring experience significantly refer to palliative care knowledge while caring experience for self-efficacy. Both palliative care and self-efficacy have a positive significant relationship predicted by a certain level. Palliative care education should be strengthened to improve the self-efficacy of palliative care among nursing students.

Key Words: *Palliative Care, Self- Efficacy, Knowledge, Nursing Students*

OP 43

A study on knowledge, attitude and practices regarding Pressure Ulcer (PU) prevention among Nursing Officers in Teaching Hospital, Ragama, Sri Lanka

Samarakoon S.M.S.R.B.^{1*}, Rathnayake N.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Pressure Ulcers (PU) are a common problem in the health care system, particularly at Intensive Care Units (ICU) and Critical Care Units (CCU) while producing a significant burden on patients, relatives, and nurses. PU prevalence rate in ACU is 0% to 12% and CCU is 24.3% to 53.4%. Moreover, PU is accountable for 2% of preventable deaths. The aim of this study was to assess the level of ICUs and CCUs nurses' knowledge, attitudes, and self-reported practices of PU prevention in Teaching Hospital, Ragama, Sri Lanka.

Methods: A descriptive cross sectional study was done using a convenience sampling method. A validated questionnaire was used to assess knowledge, attitude, and practice toward PU prevention instruments. A separate questionnaire was used to evaluate nurses' adherence to recommendations for preventing PU. The study was carried out among ICU and CCU nurses in Teaching Hospital Ragama Sri Lanka.

Results and Discussion: Mean scores of participants' knowledge, attitude, and their self-report practice were 72.18, 66.87, and 72.72, respectively. Therefore, knowledge and practice were at a moderate level, while attitude being at low level according to the scoring system. The maximum knowledge score was obtained by nurses with an average level of years of experience. A strong and positive correlation ($r=0.244$, $p<0.05$) between attitudes and practice of PU prevention among the participants was noted.

Conclusion: ICU and CCU nurses surveyed in this study demonstrated a moderate level of knowledge about PU prevention, their attitude level was negative and self-reported practices were moderate. Continuing education or in-service training should be provided to enhance ICU nurses' knowledge, attitude, and practice of PU prevention.

Key Words: *Intensive Care Nurses, Critical Care Nurses, Knowledge, Attitude, Practice, Pressure Ulcer, Prevention*

OP 44

Perception of the OSCE Exam among third-year Nursing Students at the School of Nursing, Kalutara

Anuruddhika J.N.H.^{1*}, Gunarathna N.D.M.¹, Jayamali M.W.J.¹, Neranjala A.D.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: The OSCE examination is an important factor affecting nursing care quality. This research aimed to study the perception and effectiveness of the OSCE exam among third-year nursing students.

Methods: Quantitative research was conducted, and an open-ended questionnaire was used to study the effectiveness and perception of the OSCE among the sample of students at the School of Nursing, Kalutara. Data was then collected through a self-administered questionnaire sent as a Google form and analyzed using Microsoft Excel.

Results and Discussion: All of the approached nursing students responded to the questionnaire (100%) and a majority of respondents (99%) were female in the age group of 23-25 years with a percentage of 83.5%. Moreover, 70% of the respondents say the OSCE is fairer than traditional practical exams. About 62.5% responded that the OSCE covered a huge area of knowledge compared with the traditional practical exam. Furthermore, 75.7% of the respondents mentioned that the OSCE is easier to pass and can score better when compared with traditional exams. About 65.2% of the respondents agreed that OSCE is a well-standardized exam. The respondents agreed that OSCE exam results could be obtained swiftly. 63.1% of respondents agreed that the OSCE exam is very stressful. 83.5% of the respondents agreed that the OSCE needs abundant human resources. Moreover, 97.1% of the respondents were in agreement that OSCE needs material resources. In addition, 92.4% of the respondents were unable to evaluate practical issues in a clinical setting.

Conclusion: The perception and effectiveness of OSCE of first-year nursing students at the School of Nursing, Kalutara, where the majority of nursing students had good satisfaction with the OSCE exam, and they said it has many advantages, though they said OSCE has many challenges during the exam.

Key Words: OSCE Exam, First-Year Nursing Students, Perception, Effectiveness

OP 45

Knowledge and attitude toward nutrition among Mothers in De Soysa Maternity Hospital for Women, Sri Lanka

Senavirathna R.M.P.B.^{1*}, Dissanayake D.P.D.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Nutrition plays a vital role in life and good nutrition is an important part of leading a healthy lifestyle. A healthy pregnancy diet will promote the growth and development of the fetus. The purpose of this study was to highlight general knowledge and attitudes towards nutrition among antenatal and postnatal mothers in De Soysa Maternity Hospital for Women while specific objectives were to assess maternal knowledge on dietary intake and nutrition during pregnancy and the postpartum period, the maternal attitudes on dietary intake and nutritional status during pregnancy the and the postpartum period and to determine the relationship between maternal nutritional knowledge, attitude, and birth outcomes.

Methods: A descriptive correlational study was done with a sample of 300 antenatal and postnatal mothers admitted to the hospital using a pretested interviewer-administered questionnaire. A simple random sampling technique was used to select the participants. Statistical analysis was done using the SPSS computer software.

Results and Discussion: The majority of the participants (57.7%, n=173) were between 21–30 years of age and married (97.3%, n=291). Among the participants, 63.7% (n=191) of them were unemployed while the majority (89.3%) of them were educated only up to grade 5. The majority of the women (60.7%, n=182) have average knowledge while (78%, n=234) of them have moderate attitudes toward nutrition during pregnancy. The Chi-square test was used to determine the relationship between variables. The research results clearly show that there is a significant relationship between nutritional knowledge and the employment status of the mother ($p=0.031$) and the employment status of the spouse ($p=0.008$). Nutritional attitude is significantly related to religion ($p=0.009$). But there is no significant relationship between nutritional knowledge and attitudes toward nutrition during pregnancy. There was no significant relationship between knowledge and attitudes toward nutrition and birth outcomes ($p=0.939$ and $p=0.334$ respectively).

Conclusion: There is no significant relationship between knowledge, attitudes, and birth outcomes among pregnant mothers. Hence, awareness programs should be organized in MOH areas by the Ministry of Health to increase mothers' knowledge of nutrition and to change their attitudes toward nutrition during pregnancy.

Key Words: *Pregnancy, Nutritional Knowledge, Nutritional Attitude, Antenatal Mothers, Postnatal Mothers*

OP 46

A study on challenges faced by Nursing Students when providing Nursing care for critically ill patients among Students at the School of Nursing Kalutara, Sri Lanka

Mekala G.I.A.M.¹, Bhagya G.K.L.^{1*}, Gunarathna K.A.T.M.¹, Athapaththu S.N.¹, Shamalee H.M.R.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: A critically ill patient can be defined as a patient who has a life-threatening or potential life-threatening physiological alteration requiring intense and vigilant medical care. It has been evident from previous literature that student nurses face crucial challenges when caring for critical patients. This study aims to explore the challenges faced by nursing students when providing nursing care for critically ill patients.

Methods: The study sample consisted of 145 third-year nursing students at the school of nursing Kalutara. The sample was selected using a convenient sampling technique. Data was collected through a self-administered questionnaire distributed as a google form and descriptively analyzed using Microsoft Excel software.

Results and Discussion: The findings showed that the majority (68.3%, n=99) of the students were in the 25-26 years age range. Out of the 145 participants, 98.6% (n=143) have cared for critically ill patients. Only 47.9% (n=69) of the participants stated that they are afraid to care for critically ill patients. Out of the 145 patients, 65.5% (n=95) of the participants had faced communication problems with the patient. Other than those two factors, the majority of nursing students have personal issues, patient-related issues, and environmental issues related to the care of critically ill patients.

Conclusion: It can be concluded from this study that a considerable number of student nurses have challenges when caring for critically ill patients and being afraid to care and having communication problems can be highlighted as major challenges.

Key Words: *Personal Factors, Environment, Nursing Students, Critically Ill Patient*

OP 47

Prevalence of stress related to working in night shifts among Nurses in selected Private Hospitals in the Gampaha District, Sri Lanka: A cross-sectional study

Herath T.E.^{1*}, Peiris I.N.¹, Wepitiyage S.S.¹, Fernandopulle M.K.¹, Hewavitharane P.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: One of the most underrated yet significant problems nurses encounter is stress. It manifests in so many faces of a nurse's professional and private life. The physical demands and tiredness can be taxing, and the emotional demands are limitless. This study aimed to determine the relationship between nurses working night shifts and stress in the Gampaha district, Sri Lanka.

Methods: This study is a quantitative, descriptive cross-sectional research. Data was gathered through a close-ended Google questionnaire that was shared among male and female nurses aged 20 and above, who work in a few selected private hospitals in the Gampaha district, Sri Lanka. The collected data was analyzed to give each nurse a score on the Perceived Stress Scale (PSS), to determine their level of stress.

Results and Discussion: Data was collected from a total of 96 nurses, which included 30 male nurses (31.25%) and 66 female nurses (68.75%). Among all the participants, 78.1% (n=75) had moderate stress levels, followed by low stress levels, which was 12.5% (n=12), and the least number of participants had severe stress levels, which was 9.4% (n=9) of all the participants. Out of the 84 nurses that had moderate and severe stress levels, 46.4% (n=39) did night shifts for 5–6 days a week, while 35.5% (n=30) did 1–2 night shifts per week.

Conclusion: The findings provide clear evidence that there is a significant relationship between the number of night shifts that the nurses work and their stress levels, and the correlation between the number of night shifts and stress levels is positive.

Key Words: *Prevalence, Night Shift, Stress, Nurses, Private Hospital*

OP 48

Attitude toward Mental illness among Staff Nurses of Teaching Hospital, Karapitiya

Anushka P.A.N.^{1*}, Kariyawasam P.N.², Ruban R.³

¹*International Institute of Health Sciences, Welisara, Sri Lanka*

²*Department of Nursing Faculty of Allied Health Sciences, University of Ruhuna, Galle, Sri Lanka*

³*Teaching Hospital Karapitiya, Galle, Sri Lanka*

Introduction: Mental health is a key to relationships and personal contributions to the community or society. When considering negative attitudes toward people with mental illness, includes separatism, stereotyping restrictiveness, benevolence, pessimistic prediction, and stigmatization. Furthermore, many factors can be associated with mental illness with the attitude of nurses and other health care professionals. Obtaining a clear understanding of nursing attitudes may inform policy and be used to implement change to ensure optimal patient care. Thus, the aim of the study was to assess the attitude toward mental illness among staff nurses in Teaching Hospital Karapitiya (THK).

Methods: A descriptive cross-sectional study was carried out using 272 nurses who were working in medical and surgical units at THK. A self-administered questionnaire was developed using the ASMI and validated under guidance. Data was collected in separate units at feasible times. Data were analyzed using descriptive analysis and SPSS version 20.

Results and Discussion: About 272 participated in assessing attitudes toward mental illness. The study indicated that the majority of the participants had a positive attitude toward mental illness. The statistical results showed that there is a significant impact on the attitude toward mental illness by the age group of the nurses. The mean score of the ASMI increased over the first three categories. However, it showed a reduction in the final age category. But considering the cutoff point of 102, nurses in all categories have a positive attitude toward mental illness. When considering negative attitude separatism, the highest number of nurses with negative scores is included in the age category 33-41 (n=13). In Stereotyping, 32 nurses of the same age group showed a negative attitude which is the highest. Nurses working in medical units were more negative than the nurses who work in surgical units. In the subscale of separatism, a significant No of both medical (n=46) and surgical (n=39) nurses showed a negative attitude. The study showed that the negativity of the attitude toward mental illness increased with older age categories. But there was a deviation in the age category of 22-28 years. The attitude of the nurses who do have a friend with a psychiatric disorder was more positive than those who do not.

Conclusions: This study revealed that nursing officers in THK, show a significantly positive attitude towards mental illness. Efforts must be made to improve the attitudes of nurses, through increasing awareness of mental health problems, providing education on mental illness, and enabling discussion. Conducting regular in-service training programs to provide the psychiatric nursing staff with up-to-date necessary knowledge about mental illness

Key Words: *Attitude, Mental Illness, Nurses, Separatism, Stereotyping Restrictiveness, Benevolence, Pessimistic Prediction, Stigmatic*

Attitudes and perceptions towards body image among Students at a selected educational institute in Gampaha District, Sri Lanka

Seneviratne D.B.R.^{1*}, Kaldera H.P.S.R.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Body image concern is the dynamic perception that can alter depending on the environment, physical state, and emotion. Concerns about body image have been on the rise recently and affect people of all ages, mainly teenagers and young people. Hence, this study was conducted to explore the perception of body image concerns among students in an Educational Institute in the Gampaha District, Sri Lanka.

Methods: A descriptive, cross-sectional study design was used to conduct this research. A convenient sampling method was equipped to select the study sample of 100 participants who were above the age of 16 years. Data was collected using a self-administered questionnaire and was analyzed using Microsoft Excel software.

Results and Discussion: The study revealed that 74% were females and the age category of 19-21 years represented the highest number of participants which was 44%. More than one-third (36%) were in the weight category of 51-60 kg and the other weight categories were less than 30kg, 41-50 kg, 51-60 kg, 61-70 kg, 71-80 kg, 81-90 kg, 91-100kg, 101-110kg, 111-120 kg and more than 120 kg. A significant number (52%) stated that they view their body image at a satisfactory level. The majority (80%) were satisfied with their current height. Further, 58% expressed that they compare their body shape with others and from them, 34% indicated that they compare their body shape with public figures. A notable amount (68%) stated that they attempt to change their body shape and from them, while 52% specified that they reduce meals and engage in sports and exercise as an action for that. Moreover, 48% declared that they have been criticized because of their body shape. Additionally, 56% agreed that it is normal for individuals to worry about body shape. More than half of the sample (76%) accepted that counseling should be recommended for individuals who engage in unhealthy methods to control weight. Moreover, 52% disregarded that thinking about weight and body shape has made it difficult to concentrate on interesting activities. The majority (58%) disagreed with the expression that it is uncomfortable to view themselves in the mirror.

Conclusion: It was concluded that the majority was satisfied with their body image and had varying views about body image concerns as a rising social issue. Most were aware of the unhealthy practices used to control weight. This study was able to assess the attitudes and the perception of body image concerns that exist as an escalating issue among the youth.

Key Words: *Body Image Concerns, Awareness, Attitudes, College Students, Youth*

PUBLIC HEALTH AND HEALTHCARE SERVICES

PLENARY - OP 50

Health Services and their provision in the Digital Age

DR. NIHAL DE SILVA

*Dean, Co-founder, Chairman of the Board of Directors, International Institute of Health
Sciences, Welisara, Sri Lanka*

This is the digital age and we humans are in the 4th Industrial Revolution, where, in most situations, we expect services to be convenient, fast, reliable, accurate, inexpensive, with rapid testing and equally rapid transfer of results, and even access to a help desk for questions and answers – all, by using mobile smart devices from home or while traveling. Banking transactions are a good example.

Can such systems be introduced to healthcare and medical services? Yes, they can - and they are already in operation in some countries. This system called Telehealth and Telemedicine will be the wave of the future, although at the moment, due to unequal resources and education, availability and implementation are not universal and uniform.

The basic requirements for such a system are computer literacy, digital (electronic) equipment, and rapid information transfer systems (Informatics). This also assumes that the patient (consumer) and the service (care) provider are digitally savvy. In contrast, traditional health service providers and systems are comparatively slow, inefficient, subject to human error, and stressful and expensive in terms of access-related services. Information processing and transfer (on paper) are always years and miles behind.

The trend and direction are that more and more services are delivered to the consumer rather than the other way around. Consumer comfort and convenience is the goal. Theoretically, this system should be less expensive to the consumer and the provider. Presently, both systems are in use such that comfort and costs can be easily measured to understand their benefits. The best benefit is that the “distance” between the consumer and the service provider is minimized, saving time and cost. Also, multiple services can be provided rapidly by a single provider over a wide geographical area, irrespective of terrain and access.

Overall, the telehealth/telemedicine systems using Artificial Intelligence and Robotics are environmentally friendly and inexpensively sustainable.

OP 51

Use of digital technology to streamline the medical oxygen supply process in a low resource setting hospital in Sri Lanka during the Covid-19 pandemic: A frugal approach

Gunasena M.¹, Janaka E.^{2*}, Saman Y.B.³, Pathirana S.³, Dharmagunawardene D.³

¹*Peterborough City Hospital, Northwest Anglia Foundation Trust (NWAFT), United Kingdom*

²*Postgraduate Institute of Medicine, University of Colombo*

³*Ministry of Health, Sri Lanka*

Introduction: Oxygen therapy has been a cornerstone in medical practice for centuries and approximately 20% of patients who have Covid-19 require hospital admission for oxygen. The rural hospitals basically use oxygen cylinders, and the stocks are managed by ordinary paper-based systems. The cylinders are transported by the supplier on a scheduled plan and each transport costs a lot. The system was challenged during Covid-19 since inadequate human resources, high turnover, and fluctuant demand for oxygen cylinders.

Methods: Ethics review approval was obtained from PGIM Colombo. The study was carried out from August 2019 to March 2020. A qualitative and quantitative mixed method was used. The qualitative study was based on an interview guide while the quantitative study was an SAQ (self-administrated questionnaire). The questionnaires were locally validated. The sample population (n-127) includes the director, consultants, matron, nurses, and healthcare assistants. As per the results of the pre-intervention study, an intervention package was developed. It included an android app to track the oxygen supply process within the institute, stock management, and cost analysis. The android app was developed on a freely available platform, MIT App inventor at zero cost. Furthermore, an SOP (Standard Operation Procedure), training guide, and training programs were arranged. The SOP was distributed among units and displayed. A post-intervention survey was conducted after four months to assess the impact of this novel method.

Results and Discussion: The results of the qualitative study revealed the need of streamlining the Oxygen supply process within the hospital. The necessity of having a frugal method in terms of resources and sustainability perspectives was suggested. Furthermore, the need for an SOP and training sessions was also highlighted. The quantitative study revealed the accessibility of medical gas was improved by 30% while the information flow regarding the Oxygen gas supply process improved by 90%. Finally, the knowledge and skills improved by 48% along with the satisfaction percentage improved by 38.5%. The total cost per month for the transportation of cylinders was reduced drastically from Rs. 333,000 to Rs. 87,300 due to the reduction of the supplier visit to the hospital.

Conclusion: The study highlighted the importance of digitalization to ensure the availability of real-time data for an effective and efficient decision-making process. The use of freely available platforms to develop this kind of application brings financial savings to the organization.

Key Words: *Medical Oxygen Supply, Android App, MIT App Inventor, Covid-19, Digitalization*

OP 52

The social and economic impact of Dengue: A Case Study of the National Hospital, Colombo, Sri Lanka

De Silva D.L.E.C^{1*}

¹School of Business Administration, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: The global prevalence of dengue has grown intensely in recent decades. About half of the world's population is now at risk. It is estimated that 100-400 million infections occur each year. The economic impact of dengue fever is difficult to quantify. Currently, only a few studies on dengue fever have been attempted in Sri Lanka, out of which, the majority have focused on clinical areas or have not taken into account the disease's overall burden. In 2017, there were 186,101 dengue cases reported across the island, with 215 deaths, with the majority of cases being reported in the Colombo District. Also, it imposes a heavy burden on the national health budget. A large number of public health staff are involved in the management of dengue patients and dengue control activities year-round, and it represents a formidable development challenge for developing economies. It is necessary to develop an effective methodology to assess the whole range of social and economic impact of dengue in Sri Lanka. The aim was to identify the social and economic factors attributed to the prevalence of dengue disease in Sri Lanka.

Methods: All data were analyzed by using Microsoft Excel, the SPSS 22 software package, and R software, and used logistic regression model approach was used to realize the independent effect of each of these potential variables on the dependent variables (dengue prevention practices) of knowledge, attitudes, and practices (KAP) related to dengue prevention. Quantile regression to analyze the economic impact of dengue was applied.

Results and Discussion: In 2017, 4800 dengue patients were admitted to National Hospital in Colombo. The average economic impact of dengue illness in Sri Lanka was LKR.37,988 in 2017. The highest responses 57.5% (n=115) had positive attitudes and good practices on prevention of dengue, while 42.5% (n=85) were in the moderate to poor category.

Conclusions: Knowledge, attitudes, and behavioral factors have significant effects on health. Furthermore, the non-medical costs were substantially higher compared to the medical costs. The total cost does not vary with the gender of the hospitalized dengue hospitalized patients. Concerning age, the average total cost was highest in early adulthood. Moreover, hospitalized patients with DHF dengue type had substantially higher costs compared with those with DF dengue type.

Key Words: *Dengue, Social Impact, Economic Impact, Dengue Prevention*

OP 53

Factors affecting academic performance among third year Nursing Students in School of Nursing, Kalutara

Madhuwanthi G.N.^{1*}, Madhushani K.D.¹, Madhuwanthi A.A.N.¹, Thalagala T.R.J.¹,
Dilrukshi K.T.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: In nursing education, there are many factors which may affect academic performance. In the Sri Lankan nursing education setting, very little research attention has been given to this area. Therefore, it is a timely necessity to explore the factors contributing to academic achievements of student nurses. This study aimed to identify the factors affecting academic performance among third year Nursing Students in School of Nursing Kalutara.

Methods: A cross-sectional descriptive quantitative study was conducted among 102 third year nursing students in School of Nursing Kalutara by using a self-administered questionnaire in September 2022. The collected data was analyzed descriptively.

Results and Discussion: The majority of the respondents (76.5%, n=78) were in the age group of 22-25 years and were females (93.1%, n=95). When considering the student-related factors, the majority agreed that poor health status, postponing studies, and language barriers affected their academic performances. Most of the respondents studied at night and for about 1-2 hours. According to the findings, the majority agreed that peer groups, academic staff, and the physical educational environment affected their academic performance. When considering the teaching method related factors, the majority think lecture discussion is the most effective teaching method and the lecturer affected their studies.

Conclusion: According to the findings of the research, poor health status, postponing studies, language barriers and the lecturer were the major factors that affect the studies of the nursing students at School of Nursing Kalutara.

Key Words: *Factors, Academic Performance, Academic Achievement*

OP 54

Analysis of selected non-pharmacological therapy used in traditional medicines for Mental Disorders

Rathnayake R.M.C.D.^{1*}, Kodithuwakku N.D.¹

¹*Institute of Indigenous Medicine, University of Colombo, Sri Lanka*

Introduction: *Unmada* (mental disorders) depicts a range of different psychological conditions described under a single heading. Abnormalities of *Mana* (psyche), *Buddhi* (intellect), and physical components are involved in the presentation of *Unmada*. One aspect of therapies for *Unmada* is non-pharmacological therapy. It is advocated for both somatic and psychological diseases. The aim of this study was to analyse the selected different traditional non-pharmacological therapies for mental disorders and identify the underlying mechanisms.

Methods: Among many other therapies, psychotherapy for instance *Mantra* (Hymns), *Bali* (offering to God), *Homa* (Oblations), etc, hypnotherapy, and application of *Manchu*/foot and wrist fetters for the aggressive patients were selected for the present study. Information was gathered using traditional Chinese medicinal resources, traditional manuscripts, Ayurvedic authentic textbooks, traditional textbooks, and research articles on standard websites.

Results and Discussion: There are a lot of traditional non-pharmacological therapies for *Unmada Chikithsa*. According to the evidence, psychotherapy may reduce the vitiated *Pitha* and *Vatha* and giving spiritual support through the different vibes. As first evidence of hypnotherapy in “*Udidisha Thanthanjaraya*” mentioned hypnosis was found to be making a relaxed state of mind by exploring the hidden painful thoughts or experiences with the association of neurophysiological mechanisms. The application of *Manchu* is based on the healing-touch concept which is mainly depending on *Marma* points and acupuncture points. All points are connected with the brain and pressed to stimulate the senses around the bilateral ankle and wrist joint when the patient tries to remove the *Manchu*.

Conclusion: Traditional medicine has specific treatment approaches such as non-pharmacological interventions for mental disorders. Based on the gathered information, these non-pharmacological therapies were found to be scientific and would be able to be prove with high scientific research.

Key Words: *Unmada Chikithsa, Manchu, Marma, Non-Pharmacological Therapy, Psychotherapy*

OP 55

Knowledge and attitudes of legal abortions among reproductive-aged Females in the Gampaha District

Perera W.M.S.N.^{1*}, Kaldera H.P.S.R.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: A procedure to end a pregnancy is called an abortion. It's also referred to as a pregnancy termination on occasion. Either a surgical procedure or the administration of medication will end the pregnancy. The general objective of this study was to assess the knowledge and attitudes toward legal abortions among reproductive-aged females in the Gampaha District, Sri Lanka.

Methods: This was a quantitative, descriptive, cross-sectional study. Data were collected using a questionnaire with close-ended questions. Data were analyzed using the SPSS version 25 software and by preparing several descriptive graphs and diagrams according to the gathered data. Microsoft Excel Version 2019, was used to enter the collected data.

Results and Discussion: A total of 210 females participated in this study. According to the knowledge of the respondents, 74.3% (n=156) thought abortion was legal if the pregnancy is resulting from rape and 71.4% (n=150) thought abortion was legal if the baby is likely to be born with severe disabilities. Almost every respondent 91.4% (n=192) wanted abortion to be legal to terminate a pregnancy resulting from rape and the lowest being 35.7% (n=25) to abort, due to poor economic status and to the request of the couple. More than half of the participants 61.5% (n=129) wanted abortion to be legal in all or most cases. When asked about attitudes toward abortion, 82.9% (n=174) of the participants believed that the pregnant woman should have the right to decide on an abortion. Exactly half 50% (n=105) disagreed with abortion being legal to anyone even though 87.1% (n=183) believed that legal restrictions drive people to unsafe abortions. Nearly half the participants, 45.7% (n=96) believed the existing law for abortion is unfair.

Conclusion: The study highlighted the overall knowledge and attitudes toward legal abortions among reproductive-aged females in the Gampaha District, Sri Lanka. When considering knowledge, the majority of the participants believed that abortion was legal if the pregnancy was caused by rape, and also if severe disabilities were seen in a baby that is to be born. Regarding the attitudes toward legal abortions, the majority believed that a pregnant woman should have the choice to have an abortion. Despite popular belief that legal restrictions encourage risky abortions, precisely half of the participants disagreed that abortion should be legal for anybody.

Key Words: *Abortion, Knowledge, Legalization, Penalization*

OP 56

Knowledge and attitude regarding Human Papillomavirus (HPV) and HPV-vaccine among Secondary-School Teachers in Schools of Gampaha District, Sri Lanka

Fernando W.T.H.^{1*}, Rajakulathunaga D.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The human papillomavirus (HPV) infection is associated with a multitude of cutaneous and mucosal presentations. The HPV-16 and HPV-18 types dominate among the other strains of HPV, which is the main cause of precancerous cervical lesions in females and a few manifestations of male malignancies. The majority of individuals who engage in sexual activity have a greater tendency to acquire any clinical appearance of HPV at some point during their lifespan. The diminution in HPV infection and associated malignancies is mostly due to the immunity acquired via HPV vaccination. The aim of this study was to assess the awareness and attitudes regarding HPV and HPV vaccination among secondary-school teachers.

Methods: A descriptive, cross-sectional study was conducted utilizing secondary-school teachers in the Gampaha district. Self-administered questionnaires were distributed among the participants selected for the study by using a non-probability convenience sampling method. The data acquired relating to the factors of socio-demography, knowledge, and attitudes of the teachers were analyzed using IBM SPSS Statistics 26 software to assess the association between the variables.

Results and Discussion: Among 165 participants, the majority of respondents were females (74.50%, n=123), and most of the respondents were in the age range of 31–50 years (60.6%, n=100). The study showed that 17% (n=28) of participants had proficient literacy in biological and health science streams, and when considering the vaccination status of the participants, a minority of 15.8% (n=26) were already vaccinated against HPV. The study demonstrated a weak positive correlation between dependent and independent factors and no statistically significant association between knowledge regarding HPV infections and attitudes regarding HPV vaccination.

Conclusion: According to the study, the majority of individuals being unvaccinated against HPV regardless of gender has been affected by the lack of knowledge and negative attitudes towards HPV and its vaccination. However, a negative attitude towards vaccination is not entirely based on a low knowledge of HPV. A proper education should be passed on regarding different clinical manifestations of human papillomavirus and the significance of vaccinating against this virus.

Key Words: *Human Papillomavirus, HPV Vaccination, Cervical Malignancies, Public Health*

Public awareness and utilization of telehealth services during the Covid-19 pandemic among the residents of Gampaha district, Sri Lanka

Perera W.M.S.N.^{1*}, Silva L.P.W.¹, Bandara U.W.R.N.C.¹, Fernando D.R.S.S.¹,
Hathurusinghe H.D.R.H.¹, Gunawardhana K.E.S.¹, Nanayakkara K.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Information and communication technologies (ICTs) have become successful in addressing issues that face providing accessible, cost-effective, and high-quality health care services in both developed and developing countries. Using information and communication technologies, offers the potential to overcome geographical barriers and improve access to health care services through telehealth/telemedicine. The aims of this study were to determine public awareness and utilization of telehealth services during the Covid-19 pandemic among the residents of Gampaha district, Sri Lanka.

Methods: This was a quantitative, and descriptive cross-sectional study. Data was collected using a self-administered questionnaire which included 23 closed-ended questions. Data was entered into a database established with the Statistical Package for Social Science version 20.0 (SPSS) and it was analyzed using descriptive statistics such as mean and SD.

Results and Discussion: There were a total of 120 participants in this study. Only 55% (n=66) were aware of telehealth services in Sri Lanka during the Covid-19 pandemic and only 35% (n=42) of the participants knew the difference between telehealth and telemedicine. A few participants 15% (n=18) disagreed that computers (laptop or desktop) or smartphones, integrated or external microphones, integrated or external web cameras are needed for the utilization of telehealth services. Pros and cons of these services were known by 55% (n=66) of the respondents. Out of the total participants only 15% (n=18) have utilized telehealth/telemedicine at least once. From those 18 participants all of them reported their overall experience as “excellent.” The services that are provided over the telehealth system are thought to be the same as in-person visits were only by 32.5% (n=39) participants as the rest disagreed. Participants 75% (n=90) believed that the usage of telehealth services are user friendly and 90% (n=108) believed that telehealth services have become beneficial during Covid-19 outbreak.

Conclusion: The study highlighted the overall public awareness and utilization of telehealth services during the Covid-19 pandemic among the residents of Gampaha district, Sri Lanka. The findings revealed that a moderate amount of participants were aware regarding telehealth services during the pandemic and that more than a fraction of the respondents knew the difference between telehealth and telemedicine. Only a minority of participants have utilized telehealth at least once but have all reported their experience as "excellent". Majority of the participants however believed that telehealth services were beneficial and user-friendly during the pandemic.

Key Words: Covid-19, Telehealth, Telemedicine, Quantitative

SOCIAL DYNAMICS

PLENARY - OP 58

Biopsychosocial approach to address social dynamics of contemporary health issues

PROFESSOR CHANDANI LIYANAGE

Senior Lecturer in Sociology, Faculty of Arts, University of Colombo, Sri Lanka

Achievements in public health have been attributed to the power of modern medicine. However, transformations in health and medicine acknowledge the role of socio-structural factors and cultural practices that carry a concrete consequence for people's lives and their wellbeing. The present paper explores continuity and changes in health, ill-health, and healthcare by scrutinizing social dynamics of health from an intersectionality perspective. Health and illness have consequences that move beyond biology and do not occur random. Patterns of mortality and morbidity or person's life chances are related to social structures and vary according to gender, socioeconomic status, race/ ethnicity, age, and other social determinants. The dominant biomedical approach fails to account for social inequalities and disparities in health among different social groups. It treats patients as passive objects rather than "whole persons". The paper analyses how social dynamics contribute to shaping people's access to health-promoting resources, social construction of health/ illness, health beliefs and perceptions, influence of ethnicity, gender, and socioeconomic status on access to and quality of health care, the role of healthcare institutions and health professionals in society, social implications of biomedical innovations, and gaps in lay-professional interactions in ill-health management. Growth of hospital medicine in the nineteenth century depends upon the knowledge of the professionally trained healthcare providers who lead the inquiry into a disease and interested in the symptoms not on the views of the patient. The treatment is based on what they have been trained to associate with the symptoms. In laboratory medicine, both doctor and the patient are displaced by investigations carried out in the laboratory. The paper concludes by highlighting a collaborative approach among popular, folk, and professional sectors of local healthcare structure that enhances lay-professional interactions minimizing gaps in healthcare delivery system. The intersectionality perspective provides insight into how patients and practitioners understand health/illness and their roles in the health care process. It is essential to recognize that lay people have valid interpretations and experience regarding health/ill-health that shaping through social identities, social groups, social networks, and social institutions. A bio-psychosocial approach is recommended with community-centred interventions to empowering the people and capacity building to enhance competency of healthcare providers to implement bio-psychosocial approach addressing social dynamics of health.

Key Words: *Social Dynamics, Bio-Psycho-Social Approach, Intersectionality, Social Structure, Cultural Practices.*

A study on analysis of Mental Health Problems derived from Fuel Crisis in Sri Lanka

Jayasanka S.P.S.R.¹, Edirisinghe E.A.K.K.², Pitigalaarachchi P.A.A.C.¹, Fernando K.P.A.^{3*}

¹*Academic Department, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Business Administration, International Institute of Health Sciences, Welisara, Sri Lanka*

³*School of Nursing International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The period following the economic liberalization initiated in 1977 was moderately high but it was a volatile economic growth. Major income sources in Sri Lanka had been precluded due to the Covid-19 pandemic and some other specific interrogations. The import rates were highly increased. The 2022 fuel price increases of 37.5% occurred at the same time as the shortage of supply resulting in a crisis that impacted the mental health of the population as a massive crisis faced ever before. This research was conducted to investigate mental health problems derived from the fuel crisis in Sri Lanka

Methods: Staff at IIHS developed a questionnaire to explore the levels of anxiety, frustration, anger, mood, and stress with response inquiry on a Likert scale. A self-administered questionnaire was distributed electronically on the spot and some of the responses were written and recorded to a convenience sample of 100 customers who had been waiting in fuel queues in adherence to a descriptive analysis of the quantitative research design.

Results and Discussion: The questionnaire was distributed among randomly selected participants who were queuing for fuel in several cities in Colombo in July 2022. From the sample, 75.7% of respondents were males, and they reported having stayed in the queues for two days. In addition, 48.5% reported having considerable mental pressure. Further, 47.5% mentioned that they experience difficulty in controlling anger and 46.5% stated that they had had violent emotional outbursts, they themselves reported being verbally and physically aggressive and abusive to others. Moreover, 38.4 % have had excessive levels of food consumption in the queue. The majority of the participants used alcohol 52.2% and tobacco 43.5% while they waited in the fuel queue. Respondents reported feeling pessimistic, gloomy, and unhappy and having lowered self-esteem.

Conclusion: This study was representative of the wider population in Sri Lanka and directly resulted from the considerable financial and emotional stress incurred during the recent fuel crisis. The collapse of life as a dominant change had heavily suppressed people and the economic situation is hugely deleterious to the well-being, mental health, and safety of citizens.

Key Words: *Fuel Crisis, Shortage, Economic Liberalization, Volatile Economic Growth, Mental Health*

OP 60

A sociological study on Sri Lankan slums and shanty Children's education

Perera W.T.S.D.^{1*}

¹*Faculty of Social Sciences Humanities, University of Kelaniya, Sri Lanka*

Introduction: Education is an activity which plays a significant role in society. Its aims and methods depend on the society in which it takes place. The Asian subcontinent is home to almost half of the urban population in the world and the majority of them belong to shanty and slum communities living under impoverished conditions. It is important to identify that there are factors related to social inequality which could create barriers to the fulfillment of the need for better education and the full participation in the education of students from those communities. The aim of this study was to identify the level of Sri Lanka slums and shanty children's education.

Methods: Students of two state urban schools located in the Colombo district, under the governance of the Colombo Municipal council were selected in order to collect primary data. Respondents were selected using purposive sampling and one girls' school and one boys' school were selected to have insights on both female and male students' points of view. Students representing grade 5-13 were selected. Structured interviews were conducted with 10 teachers and semi-structured interviews were conducted with 25 students and their parents/guardians. Two structured interviews were conducted with officials related to the education system of the country, considering them as key informants. Secondary data were used in the data analysis. Qualitative analysis and thematic analysis were used to analyze the data.

Results and Discussion: Slums and shanty children's education review mainly showed that more than half of the population was schooling. It also shows that a high over-age and dropout ratio exists among slum children. Over-age is often the outcome of late admission to the school. Late admission is caused both by the demand side (migration from rural areas to slums/shanty) and by the supply side (lack of school capacity for all children, a short period of admission, the requirement of birth certificate, etc). School availability at a short distance does not explain why quite a large number of slum-area children are still less educated. Economic problems were one of the main reasons why children did not attend school.

Conclusion: According to the findings it can be concluded that factors such as economic status, lack of school capacity for all children, a short period of calling for admissions, and the requirement of a birth certificate have affected slums and shanty children's education. However, the distance to the school seems not to have a relationship with their schooling.

Key Words: *Education, Family Background, Slums, Sociology, Social Diversity*

Impact of Covid-19 on Homeless Adults in the Gampaha District, Sri Lanka

Perera W.T.S.D.¹, Maheepala T.N.², Samarasekara K.¹, Mudunkotuwa M.D.M.S.¹,
Vanderwall I.¹, Sedra T.K.C.^{1*}, Thamel L.R.¹, Rodrigo B.K.J.S.T.¹, Anjalika A.L.A.S.¹,
Athukorala W.A.A.S.V.S.²

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The Covid-19 pandemic was believed to be immensely challenging for the homeless. This study aimed to determine how Covid-19 has impacted the lives of the homeless in certain aspects in the Gampaha District of Sri Lanka.

Methods: This observational, qualitative, cross-sectional study was conducted in the first quarter of the year 2022. The study included 20 respondents from the Gampaha District aged over 25 and was selected via a convenient sampling method. The participants were questioned in their native language, and the answers to the interview-administered questionnaire were recorded, translated, and later analyzed using the thematic analysis software. The questionnaire assessed food, shelter, medication, sanitary needs, mental and physical wellbeing, and substance abuse; before and after the Covid-19 pandemic.

Results and Discussion: In terms of food, the study's findings reveal that the majority of the homeless received 1 or 2 meals per day after the pandemic, while a few stated they just managed with water on the days' food was not found (also note that they were able to fulfill all three meals per day before the pandemic). However, there were a few individuals (n=3) who stated that there was more food during the pandemic due to the increased number of donations. With regards to shelter, five subjects were negatively impacted after the pandemic because of fear of the police or due to their property being stolen during their sleep. When considering substance abuse, a prominent finding among five participants was that, due to increased expenses, only alcohol was stopped or reduced following the pandemic. Regarding physical health, swelling, asthma, the common cold, and headaches were common findings after Covid-19. The majority's mental health was affected either by depression or loneliness, mainly due to the fear of contracting the virus, isolation, and death. Lastly, sanitation and medication seemed to be the least affected factors, as they were provided for free by the government.

Conclusion: As a result of this study, it was confirmed that the socioeconomic status of the homeless was affected. Due to the lack of research in the area, this research will stimulate further research on the topic presented here. Additionally, it will spread awareness to those who expect to support the homeless, which includes the government, responsible authorities, and NGOs.

Key Words: Homeless, Covid-19, Coronavirus, Public Health, Awareness, Poverty

Eating habits and lifestyle changes during Covid-19 lockdown among Students in a Healthcare Institute in Gampaha District, Sri Lanka

Jeganathan J.S.S.^{1*}, De Silva O.S.¹, Perera S.H.¹, Fernando R.V.N.¹, Samarakoon D.C.E.¹,
Jayasundara H.S.D.¹, Weerakoon N.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: People all around the world have been affected by the Coronavirus (Covid-19) outbreak in social, physical, and economical ways. Food access and intake, travel, school-related events, outdoor sports, and access to various types of entertainment and fitness are all severely impacted by the pandemic's limitations. The aim of this study was to explore eating habits and lifestyle changes during the Covid-19 pandemic lockdown among teenagers and young adults in the Gampaha district.

Methods: A quantitative, cross-sectional, descriptive study was conducted with a sample of 256 healthcare students from age of 15 to 25. A convenient sampling technique was used in a self-administrated questionnaire. All these questionnaires were computerized (Google form).

Results and Discussion: Among 256 students, the majority had a good educational status; 41.6% (n=106) passed A/L's and 36.5% (n=93) were diploma or undergraduate holders. The highlighted causes of the Covid-19 pandemic were, that stress and anxiety levels elevated among 46.9 % (n=120) of students, meanwhile, it was grossly similar in 40.2% (n=103) of individuals. In addition, sitting and screening time rose among 42.2% (n=108) of students. Quality of sleep during this pandemic has decreased 31.3% (n=80) of students. Related to our study, the intake of nutrition supplements to boost immunity illustrates not much fluctuation, as a majority 39.1% (n=100) mention it similarly, thus, 36% (n=92) exaggerate elevated consumption of supplements for protection. Furthermore, the predominant number of students which is 43% (n=110) have expanded their intake of immunity-boosting foods such as lemon, garlic, and citrus foods. With outrageous countrywide situations, most of the students 37.1% (n=95) reduced their intake of junk food, with the low access to restaurants. While this is a great benefit worldwide, in maintaining health, during this time snacking between meals increased by 35.5% (n=91), which leads to bad health outcomes for the younger generation.

Conclusion: The majority of students had recognized the necessity of nutritious food with the low access to restaurants, so the responses were satisfactory. The eminent changes in dietary patterns and ways of life after lockdown might demonstrate the propensity to embrace ordinary life rather than limitations. Be that as it may, as the Covid-19 pandemic is continuous, our information should be affirmed and explored in the future for greater examinations.

Key Words: Covid-19, Eating Habits, Lifestyle Changes, Diet, Anxiety, Students

The impact of social media exposure on the Covid-19 vaccination acceptance in the Western Province, Sri Lanka

Costa T.^{1*}, Maheepala M.M.T.N.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The Coronavirus results in a severe acute respiratory syndrome, Covid-19, which is a major global public health concern currently. The outspread of variants is a considerable public health problem and social media is one of the most efficient yet controversial ways to notify the general population about the consequences of the pandemic. This study aimed to investigate the impact of social media exposure on Covid-19 vaccination acceptance in Western Province, Sri Lanka.

Methods: The research conducted is a qualitative study, done with the help of an interviewer-based questionnaire and the results were obtained until the data saturation. Hence twenty-five participants were considered from the Western province of age groups above 18 years old. The collected data were analyzed using basic thematic analysis.

Results and Discussion: The results are included from all categories of ages, but most active participants were from ages 18-29. The majority of the participants have used a search engine such as Google to search for the side effects and effects of the vaccine on the body. It was noted that most of the participants used WhatsApp in their daily life, while some used Facebook and a lesser amount used Instagram when using social media. All the participants used social media daily which made them exposed to social media further. Relatively the same amount of people searched on social media for Covid-19. Even if the majority of the participants were exposed to social media, few people used it as a reliable source while most of them relied on it rarely. The majority had concerns about the vaccine. Many participants accepted the invitation for vaccination and the majority received the vaccine for their own protection, while some had other reasons such as visa approvals, and government rules. Most received Pfizer and Sinopharm as their vaccine while less than a few participants received AstraZeneca and Moderna while there was no participant who received Johnson and Johnson as their vaccination. In regards to the effectiveness of data on vaccines, most of the participants neither believed nor disagreed that this data was effective while some participants also strongly agree that the effectiveness data are true.

Conclusion: In conclusion, even if the majority uses social media daily and searches about Covid-19, only a few tend to use it as a reliable source which makes the data effective to concerns amongst people. Hence there is a partial effect of social media on the acceptance of the invitations for the Covid-19 vaccination, while it was accepted due to the protection of themselves and to protect the society for a Covid-free environment.

Key Words: *Vaccination, Social Media, Acceptance, Impact*

OP 64

Acknowledgment of the challenges and changes in the construction field caused by unemployment due to Covid-19 in Galle Face Green, Colombo district, Sri Lanka, 2021

Ranathunga S.H.¹, Rodrigo B.K.J.S.¹, Gunathilaka S.¹, Perera B.O.L.^{2*}, Liyanage S.³, De Silva V.³, Mahen H.³, Dissanayake D.³, Peiris S.³, Thevarasa T.H.³, Wirasagodaarachchi C.⁴

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

³*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

⁴*Examination Department, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Coronavirus disease is a highly contagious infection caused by the newly discovered virus, Covid-19. It's more than a health crisis: it is threatening the foundations of communities and economies. Each country faces distinct challenges in dealing with the dual crisis of Covid-19 infection as well as economic, psychological, and social shocks. Job losses are occurring because of physical isolation and quarantine periods, which are critical to preventing the coronavirus's rapid spread and saving lives. The aim of this study was to acknowledge the challenges and changes in the construction field caused by unemployment due to Covid-19 in the Colombo district, especially on the Shangri-La apartment project.

Methods: A construction field-based, qualitative cross-sectional study was conducted using a convenient sampling method. The study population was 10 male workers within the age of 18-60 years, who worked in the construction sector in the Galle Face Green area, Colombo, Sri Lanka, and have lost their job for 6 months or more due to Covid-19. The data were collected using a structured interview and open-ended questionnaire to the target population. The data was analyzed using basic thematic analysis.

Results and Discussion: According to the findings, the greatest challenges, and changes for all respondents were changes in food consumption, stress related to unemployment, difficulties in affording healthcare needs, and uncertainty about the future.

Conclusion: Future research on the multilevel effects of the pandemic on unemployment is provided by the analysis of 10 open-ended survey responses that give voice to minor workers who worked in the construction industry and lost their jobs due to the pandemic. The study's findings provide insights into the challenges and changes in construction sites, lay the groundwork for future work by researchers and practitioners to address construction workers' concerns, and serve as lessons learned for the industry in the event of a future pandemic.

Key Words: Covid-19, Construction Field, Unemployment

OP 65

Evaluating the issues in public transportation in Colombo District, Sri Lanka

Jeganathan J.S.S.^{1*}, Fernando K.P.A.¹, Samaradiwakara O.¹, Grunert K.¹, Gnanasekaran T.²,
Maheepala M.M.T.N.²

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Transportation is a key factor for every country. People use public transportation because it is cost-effective in many countries when compared to owning their own vehicle and using it daily. Therefore, the aim of this study was to evaluate the issues in public transportation.

Methods: A descriptive, qualitative study was conducted with 27 passengers from the ages of 18 to 65. A convenient sampling technique was used to analyze the chosen individuals who use public transport within the Colombo district, Sri Lanka. An interviewer-administered questionnaire was used that included open-ended questions. Collected data were analyzed using basic thematic analysis.

Results and Discussion: Among 27 passengers, the majority had considerable educational status. Both males and females equally participated in this study. The majority of the study population uses public transport very often (more than 5 days a week). However, there are a few individuals who use public transport less than 5 days a week. When considering the purpose of public transport usage, the majority stated that they use public transport for education purposes and some individuals stated they use public transport for multiple purposes, and some use it only for work purposes. Few people stated that they used public transport for other purposes such as shopping, trips, and meetups. Regarding the tidiness of the public transport, many of them stated that it was partially clean, and only very few stated it was clean. According to people's responses to the condition of the public transport, only a few individuals stated it was in good condition. When considering the passengers' safety, the majority of them admitted that they were facing safety issues such as harassment, violence, pickpocketing, and bullying. The majority of people were facing multiple safety issues, a few faced only harassment, and a few faced only pickpocketing. When we look at overall passengers' safety many of them stated it was average, few stated it was poor, and very few stated it was safe.

Conclusion: This study shows the majority of the study population was facing issues while using public transport. According to this study, many people utilize public transport very often though they are experiencing more issues in regard to tidiness and safety in public transport.

Key Words: *Public Transport, Safety, Issues, Tidiness*

POSTER PRESENTATIONS

Evaluation of an RNA extraction method for formalin-fixed paraffin-embedded samples

Umair M.F.M.^{1*}, Wickaramasinghe T.P.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

²*Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka*

Introduction: The extraction of ribonucleic acid (RNA) from Formalin-Fixed Paraffin-Embedded (FFPE) tissue has proven to be difficult due to the chemical cross-linking of RNA protein and RNA fragmentation, which greatly affect the process. Isolation of sufficient RNA for reverse transcription quantitative PCR (RT-qPCR) becomes very complex and challenging. To avoid yield loss, most methods use a sequential isolation method in which DNA and RNA are separated after lysis by filtration or sedimentation and then subjected to separate purification workflows. The following study evaluated two RNA extraction methods and their extraction capacities.

Methods: The RNA extraction was performed using a commercial kit; RNeasy Mini kit (Qiagen) and the RNA-Xpress reagent method to obtain RNA bands. Extraction of RNA was carried out according to the provided standard protocol. The yield and integrity of isolated RNA were assessed by agarose gel electrophoresis, nanodrop spectrophotometry, and qPCR.

Results and Discussion: The DNA was successfully extracted using Qiagen, RNEASY MINI KIT (50) method. However, the RNA bands were not visible for both the manual RNA-XPress TM Reagent method and the kit. The gel electrophoresis from PCR shows the DNA bands from the FFPE tissue sample for the procedure the RT PCR was carried out. The RNA bands were not visible through both methods under gel electrophoresis.

Conclusion: Further improvements in the Kit extraction method and the Xpress reagent method need to be made to obtain RNA from the relevant samples. The results suggest that extraction of RNA is still challenging in laboratory conditions and needs to be improved and troubleshoots carried out for better reproducible results. That could be used in multiple biochemical applications.

Key Words: RNA Extraction, Formalin-Fixed Paraffin-Embedded (FFPE), Embedded Sample

Investigating the anti-candidal activity of the bark of *Mimusop elengi* (Sapotaceous) and its effect on germ tube production of *Candida albicans* (Saccharomycetaceae)

Pranitha M.^{1*}, Niriella D.K.¹

¹*School of Biomedical Sciences, International Institute of Health Sciences, Sri Lanka.*

Introduction: Candida is a normal flora that lives in the human body, this normal flora affects the human body only if it is grown out of control. Candida is normally located in the human oral region, gastric region, vaginal region and on skin surfaces. Candida can turn into infection due to unsanitary behaviors; this infection can be systemic and superficial in the human body. To cure or to control this type of infection different types of herbal plants are used, in the study, one herbal plant *Mimusop elengi* from the family of *Sapotaceous* and to fight against one microorganism *Candida albicans*. This study was done to understand the anti-candidal activity of *Mimusop elengi* and also to explain with evidence whether the anti-candidal activity of bark extract of *Mimusop elengi* effect *Candida albicans*.

Methods: In this study, the bark extract was tested against *Candida albicans* (ATCC10231) in the method of well diffusion assay and the bark extract of *Mimusop elengi* was tested against the clinical *Candida albicans* sample to inhibit germ tube production. The study was triplicated and the average was taken.

Results and Discussion: In both the methods the extract was presented in a concertation series as 25 mg/ml, 12.5 mg/ml, and 6.25 mg/ml to select the suitable concentration to fight against *Candida albicans*. All three concentrations of the extract showed a positive inhibition activity in well diffusion method but in the germ tube production method none of the concentrations shows no significant inhibition of the germ tube compared to the control.

Conclusion: The Ayurvedic plant does have the anti-candidal activity against *Candida albicans* as per the screening test-well diffusion assay was done but the germ tube production test was a failure because the bark extract of *Mimusop elengi* with three different concentrations was not strong enough to inhibit the germ tube produced by yeast cells of *Candida albicans*. With the evidence gathered the bark of *Mimusop elengi* can be used as a medication for *Candida* infection. In the future, further investigation can be done with more advanced screening tests.

Key Words: *Candida albicans*, *Mimusop elengi*, Anti-candidal activity, Inhibition, Screening Tests

PP 003

Assessing the ergonomics and impact on back pain among Tailors in Gampaha District, Sri Lanka

De Silva C.A.^{1*}, Sewwandi S.A.¹, Vishwajith K.U.¹, Athukorala S.V.S.¹ Jayakody J.A.N.A.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Back pain is extremely common and experienced by people of all ages. It is also one of the commonest causes of job-related disability and a leading contributor to missed workdays. As tailoring is entirely a crucial occupation for the human race, this study aimed at assessing the sitting ergonomics and impact of back pain among tailors in the Gampaha district, Sri Lanka.

Methods: A cross-sectional study was conducted among 80 tailors between the ages of 25 to 50 years in the Gampaha district. A self-administered questionnaire that was previously tested via a pilot study was to collect data. A convenient based sampling technique was used to distribute the validated questionnaire. The responses were stored in the databases and analyzed using MS Excel. Ethical Clearance was sought from the BioInquirer Ethics Review Committee.

Results and Discussion: The majority (60%, n=48) of the respondents were between the ages of 30-50 years. Furthermore, most of the participants (56.25%, n=45) were more than 5.5 feet in height. About 58.8% (n=47) of the tailors used manual-powered (foot pedal) sewing machines. Furthermore, 35% (n=28) of respondents worked more than 8 hours per day. Many tailors worked 4 to 6 days per week (57.5%, n=46) and used chairs with backrests (72.5%, n=58). However, 30% (n=24) of the respondents stated that they did not use adjustable chairs. When considering back pain, 97.5% (n=78) of the tailors felt back pain while working. About 61.3% (n=49) of those respondents stated that they experience localized pain. In addition, 56.3% (n=45) stated that the nature of the pain was intermittent. Many respondents (93.8%, n=75) state that they have been treating their back pain for 1 to 3 months. Furthermore, more than half of the participants (53.8%, n=43) state that they work in an environment that can be altered if needed.

Conclusion: When considering the overall results, most of the tailors have been experiencing back pain while working. Even though most of the participants have been working in an environment that is changeable, they need to be properly advised and educated in the ways to do so. Thus, they can be educated on ergonomic changes that can be made as well as simple exercises (stretchings) that can be done during working hours.

Key Words: *Tailors, Ergonomics, Back Pain, Sri Lanka*

Nutrition and Dietary habits among Preschool Children in Badulla West, Sri Lanka

Dayasiri G.D.C.K.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Malnutrition is one of the leading causes of morbidity and mortality among preschoolers in Sri Lanka. Preschoolers need healthy food to meet their growth and developmental needs. The availability of supplementary food can ensure the reduction of malnutrition in preschool children. Healthcare providers should focus on health education among parents, especially on the exact nutritional requirements, quality, and quantity required by their children at specific ages. The aim of this study was to assess the knowledge among mothers regarding the nutrients and dietary patterns of preschool children and prevention from malnutrition or other nutrition-related diseases.

Methods: A descriptive, cross-sectional design was used to explore public knowledge regarding nutrition and dietary patterns. The study was carried out among a conveniently selected 100 mothers of preschoolers studying in the Badulla West area. Data was collected through a printed, self-administered questionnaire, and the collected data were analyzed descriptively.

Results and Discussion: The majority of the respondents (50%) had children aged 5–6 years, whereas 40% of the respondents had children aged 4–5 years, and 10% of the children were aged 3–4 years. The majority (58%) of the respondents had children who belonged to the underweight category according to the body mass index (BMI), whereas only 30% of the preschoolers had a healthy weight. A relatively low percentage of respondents had children who were overweight (10%) or obese (2%). The majority of the respondents (72%) were not aware of what a balanced diet means.

Conclusion: According to the research results, most preschoolers are underweight. The reason for this could be a lack of awareness regarding a balanced diet and correct dietary patterns. Therefore, it is necessary to encourage behavioral changes and to implement public policies to fight inadequate nutrition levels and poor dietary habits.

Key Words: *Children, Dietary Habits, Imbalanced Nutrition, Malnutrition, Parents*

Renal complications in Thalassemia; A changing paradigm

Thilakarathne M.M.S.V.¹, Yasara J.W.N.^{2*}

¹*Department of Pathology, Faculty of Medicine, University of Kelaniya*

²*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Thalassemia is one of the most common monogenic disorders in the world. Though the pathophysiology of the disease has been extensively studied, the current management of thalassemia is primarily limited to supportive care. The quantitative reduction of globin synthesis in thalassemia is associated with hemolysis and ineffective erythropoiesis. The resulting chronic anemia is managed by regular blood transfusions, which in turn leads to several complications, including iron overload. As the disease prognosis has improved, attributed to the advancement of clinical management, similar to other aging populations, renal complications have become more prevalent.

Results and Discussion: Recent studies on transfusion-dependent thalassemia patients revealed that renal complications are the fourth cause of morbidity among thalassemia patients (4%), while endocrine, cardiovascular, and hepatic diseases were responsible for 44.7%, 41.3%, and 40.5% of morbidity, respectively. However, the lack of knowledge on the effects of the disease and the pharmacological management options of thalassemia on the kidneys has been a major setback when addressing the current issue. Evaluation of renal complications among thalassemia patients has become a priority due to the increased use of deferasirox (DFX) and improved survival of patients. The most prevalent renal complications among thalassemia patients are tubular dysfunction, haematuria, glomerular dysfunction, renal cysts, and nephrolithiasis. hypoxia, anemia, iron overload, and iron chelators have been discovered to play a significant role in renal injury in thalassemia patients through numerous studies done on patients with Alpha-thalassemia, Beta-thalassemia, and Haemoglobin E/beta-thalassemia.

Conclusion: Therefore, renal complications associated with thalassemia have a multifactorial origin, and early recognition has a significant impact on the management and prognosis of the disease. Therefore, further clinical studies focusing on the true burden of renal complications among thalassemia patients and the contribution of several targeted factors, including iron chelators, are required.

Key Words: *Thalassemia, Renal Complications*

The impact of work-life balance on the job satisfaction of the Employees: A study from the public sector, Sri Lanka

Sugande M.D.M.^{1*}, Shantha M.S.¹

¹*Department of Economics and Statistics, Sabaragamuwa University, Belihuloya, Sri Lanka*

Introduction: Work-life balance is a work arrangement that ensures that employees balance their personal and professional responsibilities. Poor work-life balance is a major issue that poses risks to employee well-being, employee satisfaction, and organizational performance. Most employees often find it difficult to balance social and professional responsibilities. The aim of the study was to investigate the effect of work-life balance on employee satisfaction in a certain public sector organization (information withheld due to confidentiality agreements).

Methods: The study was an explanatory research, which used descriptive design research to attempt to describe phenomena systematically. The sample consisted of 95 employees who worked at the above-said organization. In order to obtain representative samples, a simple random sampling method was used. The researcher used a questionnaire to collect data from respondents and the data were analyzed using Statistical Package for the Social Sciences (SPSS). The collected data were presented using frequency charts, pie charts, and bar charts. In addition, the researcher used multiple regression analysis to determine the impact of work-life balance and employee satisfaction.

Results and Discussion: The findings of this study indicated that there was a positive significant relationship between workload, work expectation, and work support with employee job satisfaction. There was also a significant negative relationship between physical well-being and satisfaction. Out of these variables, three are organizational-related variables and two are personal-related variables.

Conclusion: It was concluded that employees can balance their work and their life through a flexible working environment. If an organization could make a good working environment for their employees, the employees will be satisfied with their jobs even though they do not have a good personal related environment.

Key Words: *Work-Life Balance, Public Workers, Job Satisfaction*

**Nursing Students' level of satisfaction with their clinical learning environment:
A cross-sectional study at Schools of Nursing Kandy, Kurunegala,
Anuradhapura in Sri Lanka**

Subasinghe S.M.I.P.^{1*}, Ratnayake N.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: Nursing education contributes nursing students with the necessary skills, knowledge, and attitudes that help them to offer the best quality of care for patients who are watching for maximum care and protection for their complex health problems. Clinical practice is an essential and basic element of the nursing training program. The study was conducted to assess third-year nursing students' level of satisfaction with their clinical learning environment.

Methods: Cross-sectional descriptive design was used. Quantitative data was collected from 400 male and female third-year nursing students at schools of nursing in Kandy, Kurunegala and Anuradhapura whose age limit was 21-30yrs. The sample size was decided through a random sampling method. A questionnaire was given which was designed to measure the nursing students' level of satisfaction with the clinical learning environment. A pilot study was conducted among 30 students before the main research and was found to be feasible.

Results and Discussion: The students at schools of nursing Kurunegala, Anuradhapura, and Kandy expressed the most extensive levels of satisfaction towards the tutorial staff, while a slightly lesser amount of satisfaction was expressed towards the Nursing staff and the least levels of satisfaction were seen in regard to the medical staff. The highest levels of satisfaction were with the tutorial staff of Anuradhapura, followed by Kurunegala. In contrast, the lowest levels of satisfaction towards the tutorial staff were seen in the school of nursing Kandy. In comparison, Anuradhapura had the highest satisfaction levels, followed by Kandy and Kurunegala respectively. When comparing the satisfaction levels expressed towards medical staff, Anuradhapura stands at the highest student satisfaction level, closely followed by Kandy, whereas Kurunegala showed the lowest levels of student satisfaction toward medical staff. Finally, students in the school of nursing Anuradhapura expressed the highest levels of satisfaction towards their clinical learning environment, and comparatively, followed by Kurunegala while Kandy had the lowest levels of satisfaction although the difference between Kandy and Kurunegala were very minute.

Conclusion: The satisfaction level of a greater number of students was at good and average levels with their clinical learning environment. Continued live discussions are needed to enhance the satisfaction to an excellent level.

Key Words: *Nursing Students, Clinical Learning Environment, Satisfaction, Tutorial*

Prevalence of Low Back Pain (LBP) among Undergraduate Physiotherapy Students in Western Province, Sri Lanka

De Silva C.A.^{1*}, Dissanayake T.¹, De Silva G.A.Z.R.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: LBP is a condition that prevails among people of all ages, and it is considered a common health problem all over the world. Furthermore, LBP among physiotherapy undergraduate students can cause several issues in their academic careers and ultimately have a negative impact on both their academic lives and future careers. However, there is less evidence concerning the prevalence of LBP among physiotherapy students in Sri Lanka. Hence, this study aimed to examine the prevalence of LBP among undergraduate physiotherapy students within the Western Province.

Methods: A descriptive cross-sectional study was conducted among 104 undergraduate physiotherapy students. Students who were in their clinical exposure phase were approached using a convenience non-probability sampling technique. Data was collected using a self-administered questionnaire that was utilized in a study by Nyland and Grimmer (2003). Moreover, the collected responses were stored in the databases and analyzed using Microsoft Excel.

Results and Discussion: The majority of the undergraduate students who responded were females (69.2%, n=72). Most of the respondents (64.4%, n=67) were gaining clinical exposure in their third year. When considering the hours of exposure to placements, 36.7% (n=37) of the undergraduates went more than 40 hours per week. About 58.7% (n=61) of the respondents stated that they were having an average level of fitness. When considering the activity levels, the majority of the undergraduates (74%, n=77) spent 1-10 hours sitting and looking straight ahead per week. Most of the respondents (79.8%, n=83) practiced techniques on others for 1-10 hours per week. Additionally, 64.4% (n=67) of the participants treated patients for more than 30 hours per week. Furthermore, 93.3% (n=97) of the students have experienced LBP. The majority of the respondents (69.2%, n=72) were able to relate the onset of LBP to a specific incident. About 37.5% (n=27) of those respondents were able to relate the onset to prolonged sitting. However, 36.1% (n=26) related the onset to exposure at placements. Most of the undergraduates (81.7%, n=85) have had to take time off studies or employment due to LBP. About 69.2% (n=72) have had LBP for more than 30 days but not every day for the last 12 months. Moreover, about 77.9% (n=81) of the participants have had LBP during the last month. Additionally, 43.2% (n=35) of those individuals felt LBP during placement exposure.

Conclusion: The overall results suggest that most of the clinical-going undergraduate physiotherapy students in the Western province experienced LBP. Furthermore, the onset and initiation of LBP can be related to placement exposure and prolonged lectures. Thus, it is recommended to carry out awareness programs in the earlier years of their programs to reduce the prevalence of LBP in the later years. Furthermore, flexible placement schedules can be initiated among these students.

Key Words: *Low Back Pain, Undergraduate Physiotherapy Students, Sri Lanka*

PP 009

Knowledge of Non-Communicable Diseases (NCDs) and implementation of healthy lifestyle behaviors among Advanced Level students from the Colombo District, Sri Lanka

Peres N.^{1*}, Evens B.¹, Pivithuru D.¹, Thevunie S.¹, Madushani U.¹, Jayasinghe T.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Non-communicable Diseases (NCDs) have surpassed communicable diseases as the leading cause of death in Sri Lanka. Though some information on NCD understanding among schoolchildren has been published in several other countries, information on the context of Sri Lanka is lacking. Thus, this study aims to assess the knowledge of NCDs and implementation of healthy lifestyle behavior among Advanced Level (A/L) students from the Colombo District in Sri Lanka.

Methods: This was a cross-sectional mixed method study conducted among A/L students (n=105; age 17±1 year) in the Colombo District, using a self-administered questionnaire.

Results and Discussion: Among the participants, 16.7% (n=18) were not aware that NCD cannot spread between people. 75.6% (n=79) were aware that a sedentary lifestyle is a major risk factor for NCDs. A significant percentage, 56.1% (n=59), either did not know or had given the incorrect answer regarding the time duration that a person should spend on exercise per day. Almost 58% (n=61) were unaware of the body mass index (BMI) and did not know how to measure BMI. Of the participants, 87% (n=87) knew that inadequate dietary habits can lead to NCDs. Nearly 24.6% (n=25) didn't know that childhood obesity or malnutrition are significant risk factors for NCDs, and 29.3 % (n=31) did not realize that maternal malnutrition could give rise to NCDs in children. A significant portion, 39.8% (n=42), didn't know that alcohol consumption can lead to the development of NCDs. However, 90% (n=95) were knowledgeable that mental stress is a risk factor for NCDs.

Conclusion: The current study population had an average understanding of NCDs. The students were unaware of the significance of daily exercise, weight loss, and alcohol consumption. Thus, the lack of knowledge about healthy and unhealthy behaviours emphasises the importance of conducting regular monitoring for NCD risk factors and initiating NCD prevention programs among adolescents. Further comprehensive research is needed to understand underlying causes and solutions for the above-mentioned complications.

Key Words: *Non-Communicable Diseases, Adolescents, Knowledge, Risk Factors*

The impact of current Economic crisis on College Students

Lakmal S.¹, Perera S.¹, Nishithi H.^{1*}, Fernando S.¹, Janz C.¹, Kumara D.V.¹,
Jayasooriya M.H.M.M.K.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The current degrading economic crisis in Sri Lanka has led college students to difficulty in surviving. Life and scholarly pressure frequently produce troubles and affect understudies' emotional well-being. The aim of this research was to identify difficulties faced by the younger generation and understand the impact of the current economic crisis on college students.

Methods: A quantitative, descriptive, cross-sectional study was carried out using convenient sampling techniques. The study used a sample size of 100 students above 16 years of age in a primary health care institute in Gampaha district, who are willing to take part in the study. The data was collected using a self-administered questionnaire and data analysis was done by Microsoft Excel package.

Results and Discussion: Based on collected information, the data was categorised into behavioural factors, family factors, events at the workplace, medication factors, relationships and personal issues. In the selected sample, around 88% faced financial issues. Among them, 14% of students fought with mental issues for a period of time. Only 12% had a plan on how to address issues they were about to face. Majority (88%) of the participants faced mental problems such as depression, anxiety, anger, sleeping disorders, difficulty for concentration and sadness. Still have to face issues in disablement.

Conclusion: Most of the participants experienced financial difficulties some which lead to mental health issues. Only a few students were prepared to deal with problems they were about to face. Therefore the economic crisis had a significant impact on college students.

Key Words: *Economic Crisis, College Students, Financial, Degrading, Intervention*

PP 011

Prevalence of Post-traumatic Stress Disorder (PTSD) and other Psychological issues on Disabled Soldiers in Abimansala, Sri Lanka

Samaradiwakara D.O.^{1*}, Lakmal S.¹, Kolonne T.H.¹, Sandaruwan T.¹, Sugumar M.¹,
Fernando J.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Post-Traumatic Stress Disorder (PTSD) is one of many prevailing mental health disorders, and it is mostly seen in soldiers because they have to face violent situations where even their lives are at stake and even more in disabled soldiers, as they will live on with a scar from the war. Thirteen years ago, Sri Lanka used to acknowledge the soldiers who were disabled but it depleted over the years. Therefore, this study was conducted to assess the information of disabled soldiers who were experiencing PTSD.

Methods: A quantitative descriptive cross-sectional study was carried out using convenient sampling techniques. The study included 100 soldiers from Abimansala, Sri Lanka, in the age category of 30-60 years and above. Data was collected using a self-administered questionnaire and was analysed using Microsoft Excel.

Results and Discussion: Based on the information gathered, the data were categorised into behavioural factors, family factors, events at the workplace, medication factors, relationships, and personal issues. After joining the army, a significant number of the selected sample experienced post-traumatic stress disorder 88%. Among them 14% of soldiers fought the whole period of the war, 42% fought less than thirty years, 33% fought less than twenty years, and 11% fought less than ten years. The majority (88%) of the soldiers received counselling or treatment in the past for post-traumatic stress disorder. After their disablement, 99% faced mental problems like depression, anxiety, anger, sleeping disorders, difficulty concentrating, and sadness. Results indicate that 51% of disabled soldiers put effort to avoid activities, places, or people that arouse recollection of the trauma.

Conclusion: According to the results of the study a majority of the soldiers were suffering from PTSD. Also, many of them have suffered from other psychological issues. More than half of the soldiers are forced to do things in order to avoid recalling any of their experiences, and there are not many effective interventions available.

Key Words: *Disabled, Soldiers, Post-Traumatic Stress, Abimansala, Sri Lanka*

Prevalence and Socio-Demographic correlates of Psychological problems among Adolescents in Gampaha during Covid-19

Victoria A.G.^{1*}, Grunert K.¹, Amarasinghe W.M.U.W.A.¹, Kumari L.G.P.D.¹, Perera K.A.¹, Seneviratne W.M.K.A.¹, Nawarathna N.M.N.W.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Psychological health problems, especially emotional disorders are common among adolescents. The epidemiology of emotional disorders is greatly influenced by stressful events. This study sought to assess the prevalence rate and socio-demographic correlates of depressive and anxiety symptoms among adolescents in the Gampaha District, Sri Lanka affected by the outbreak of Covid-19.

Methods: A cross-sectional study was conducted among adolescents aged 15-19 during the Covid-19 epidemic. An online survey was used to conduct the rapid assessment. A total of 91 participants were involved in the study. An online survey was used to collect demographic data, assess students' awareness of Covid-19, and assess depression and anxiety symptoms using the Patient Health Questionnaire (PHQ-9) and the Generalized Anxiety Disorder (GAD-7) questionnaire.

Results and Discussion: The prevalence of depressive symptoms and anxiety symptoms was 100% (n=91) and 95% (n=86) respectively, among adolescents during the Covid-19 outbreak. In addition to that, 40% (n=36) of the participants were diagnosed with mild depression. Further, 34% (n=31) of adolescents were diagnosed with mild anxiety.

Conclusion: The findings depicted there was a high prevalence of psychological health problems among adolescents, but no significant association was noticed between anxiety and depressive symptoms with the demographical data collected. The results suggested that the government needs to pay more attention to psychological health among adolescents while combating Covid-19 and the need to implement improving mental health during pandemic situations could be highlighted.

Key Words: Covid-19, Prevalence, Psychological Problems, Adolescents, Socio-Demographic Correlates, Gampaha District

PP 013

Assessing the awareness on preventing dengue among the General Public in Gampaha District, Sri Lanka, 2021

Pathiraja K.H.^{1*}, Silva T.D.¹, Hewage W.S.D.¹, Silva S.P.¹, Jayawardana T.¹, Rathnayaka N.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Dengue fever is a severe, incapacitating mosquito-borne disease caused by one of four closely related dengue viruses. Dengue fever is spread through the bite of a dengue virus-infected *Aedes* mosquito. The aim of this study was to assess the awareness on preventing dengue among the general public in Gampaha District, Sri Lanka, 2021.

Methods: This research could be categorized as a quantitative, cross-sectional study with a phenomenological approach. Participants were both male and female in the age group 18-60 years from the Gampaha District. The sample size of the study was 85, data was gathered through a Google form given as a questionnaire in English, Sinhala, and Tamil languages and the gathered data was analyzed using a SPSS system.

Results and Discussion: The study revealed that most of the participants had a rough idea on dengue, where 91.8% (n=78) knew how dengue fever was transmitted by a mosquito, while 49.4% (n=42) knew which type of mosquito causes dengue fever. Additionally, 78.8% (n=67) knew which time a dengue mosquito normally bites. Furthermore, about 69.4% (n=59) of the population knew the signs and symptoms of dengue fever. Moreover, 83.5% (n=71) of the population have agreed that removing the accumulated water in plant containers will control dengue fever transmission during an outbreak.

Conclusion: These findings suggested that the general public in the Gampaha district had a satisfactory level of knowledge on dengue fever and how it can be prevented but further education regarding dengue fever and improving already available preventive methods will reduce the transmission of dengue during an outbreak.

Key Words: *Dengue, Prevention, Mosquito Borne, General Public*

PP 014

A test on antibacterial properties of bee honey in several bacterial species found in the wound microbiome

Rodrigo S.R.^{1*}, Pinto J.¹, Sankalpa D.¹, Rajapakse A.¹, Dissanayaka Y.¹

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: There are four types of bees in Sri Lanka (*Apis cerana indica*, *Apis dorsata*, *Apis florea*, and *Tetragonula iridipennis*). Honey from these bees is different due to the fact that it is stored naturally in the pot (cerumen), thus contributing to its beneficial properties, especially in the wound healing process, such as preventing microbial infections with the help of hydrogen peroxide present in its composition. The application of honey to the wound has been widely used since ancient times. As a result, it is essential to understand the pharmacological mechanism of honey toward the physiology of the wounded skin to optimize the healing rate in the future.

Methods: Simple disc diffusion method was used as the Antibiotic Sensitivity test (ABST). The test was done using the 0.5 McFarland Standard to improve the results. Data analysis was carried out through an investigation of the results acquired after the experiment. Data was stored using SPSS software.

Results and Discussion: The results observed showed more activity in the purified honey samples than in the processed honey samples used. The results were taken from 24, 48, and 72 hours of the incubation period. The test was done thrice on each bacterial sample, and the average for the three bacterial samples was taken. The results for 24 hours of incubation period were noted as: *Staphylococcus aureus* (Pure 6.8 mm & Processed 3.7 mm), *Escherichia coli* (Pure 2.5 mm & Processed 0 mm) and *Enterococci* (Pure 7.1 mm & Processed 7.3 mm). The results were taken after 48 hours of incubation period were noted down as, *Staphylococcus aureus* (Pure 8.8 mm & Processed 6.7 mm), *Escherichia coli* (Pure 6.6 mm & Processed 0 mm) and *Enterococci* (Pure 9.7 mm & Processed 8.9 mm). The results were taken after 72 hours of the incubation period and were noted as *Staphylococcus aureus* (Pure 4.7 mm & Processed 1.8 mm), *Escherichia coli* (Pure 0.9 mm & Processed 0 mm) and *Enterococci* (Pure 3.8 mm & Processed 1 mm). The reduction of zones was noted to be due to secondary infections.

Conclusion: According to the results, it further consolidates the antimicrobial properties usually seen in honey, but further investigation should be done into more elaborated research. These findings can be especially useful within an ayurvedic home remedy frame while also providing valid information to strengthen terms within society of the healing properties of Ayurvedic medicine. Although aseptic techniques were used, the lack of a biosafety cabinet was identified as a limitation in confirming sterility. However, further research should be done to assess the zones in a controlled manner.

Key Words: *Stingless Bee Honey, Wound Healing, Antimicrobial Effects, Anti-Inflammation, ABST*

Perception of Depression among Young Adults in Gampaha District, Sri Lanka

Perera W.M.S.N.^{1*}, Bandara U.W.R.N.C.¹, Fernando D.R.S.S.¹, Sooriyaarachchi D.²,
Jayasena J.M.T.D.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Depression is highly prevalent and is a serious problem among young adults in Sri Lanka. Despite this, information on the factors that lead to depression is still sparse. The aim of this study was to assess the perception of depression among young adults in the Gampaha District, Sri Lanka.

Methods: This was a qualitative descriptive study. Data were collected with the help of one-on-one interviews and open-ended surveys. Data was analyzed by preparing and organizing the information. It was then reviewed, edited, and merged into themes. Recurring themes, languages, opinions, and beliefs were identified and noted after considering our audience and the purpose of the study.

Results and Discussion: Perceptions of depression were analyzed by conducting 12 interviews. When asked to describe the symptoms related to stress, analysis findings revealed that: staying alone (less social), losing interest in activities that used to be interesting, overthinking, and changes in sleeping along with eating patterns were the most common symptoms seen in a depressed person. Financial issues, abuse in any way, and losing a loved one were stated as the main reasons causing depression. Of the 12 participants who took part, 75% (n=9) believed that drug/alcohol abuse leads to depression, and when asked why, they mentioned that it leads to addiction. Depression will cause relationships with loved ones to be "distant." Accordingly, talking to a loved one, psychotherapy, and changing one's lifestyle by doing something they love were the most frequently suggested ways to overcome depression.

Conclusion: The study's findings provide insight into the overall perception of depression among young adults in the Gampaha district, Sri Lanka. It was found that the participants knew common symptoms and some of the causes of depression. The majority of the participants believed that since drug/alcohol abuse leads to addiction, this in turn would also lead to depression. However, they were also aware of ways to overcome depression.

Key Words: *Depression, Perception, Qualitative*

PP 016

A study on stress among Undergraduates of the International Institute of Health Sciences, Sri Lanka

Perera W.M.S.N.^{1*}, Hathurusinghe H.D.R.H.¹, Kaldera H.P.S.R.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Any kind of change that puts physical, mental, or psychological strain on a person is defined as stress. Everyone experiences stress to some degree. However, how a person handles it has a significant impact on their overall well-being. The aim of this study was to assess stress among undergraduates at the International Institute of Health Sciences, Sri Lanka.

Methods: This was a qualitative descriptive study. Data was collected with the help of one-on-one interviews and open-ended surveys. The data was analyzed using thematic analysis, which was identified after considering our audience and the purpose of the study.

Results and Discussion: Among the 16 undergraduates who participated in this study, all the participants selected both academic and personal relationships as their main stressors, while 75% (n=12) chose "other," and only 50% (n=8) chose financial issues as a stressor. According to the findings from the interviews, key academic stressors were; assignment submission before the deadline, exam stress, and tight schedule. The main financial-related stress was mentioned as paying their monthly course fee before the deadline. Personal relationship issues causing them stress were mentioned as: time spent with loved ones, making friends and different mindsets among peers. Undergraduates who chose "other" only mentioned travel, along with the other types of stressors mentioned earlier as well.

Conclusion: The study's findings provide insight into the overall stress among undergraduates at the International Institute of Health Sciences, Sri Lanka. It was revealed that the majority of the participants believed both academic and personal relationships were the main causes of stress. However, half of them also agreed that financial issues may also be a stressor.

Key Words: *Stress, Psychological, Qualitative*

PP 017

Depression among Older Adults in a residential aged care facility in Welisara, Sri Lanka

Batagama K.S.T.^{1*}, Gnanasekaran T.¹, Wijerathne A.M.¹, Maddumage S.P.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: The prevalence of depression among older people has significantly increased. Depression may result from the various physiological, functional, social, cognitive, and financial losses associated with old age. Thus, this study aimed to determine depression among older adults in a residential aged care facility in Welisara, Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among older adults over 60 years of age who were living in a residential aged care facility. The level of depression was assessed using the standardized and pre-tested 15-item Geriatric Depression Scale (GDS-SF) and a GDS score ≥ 5 was categorized as depression. Data were collected using an interviewer-administered close-ended questionnaire and statistically analyzed using SPSS Version 25.0.

Results and Discussion: A total of 20 participants (age=70.0 \pm 8.36, n=8; 40.0% males and n=12; 60.0% females participated in the study. The total mean score of GDS-SF was 4.0 \pm 2.34. The majority (60%, n=12) of the participants had secondary education while 20% (n=4) had primary education and the remaining 20% (n=4) had no formal education. Around 40% (n=8) of the participants were depressed and among them, 35% (n=7) had mild depression and only 5% (n=1) had moderate depression. All participants stated that they were afraid that something bad was going to happen to them. There was no significant correlation between the depression level with age, gender, or education level.

Conclusion: The study identified that an average number of participants were depressed in the selected aged care facility. Therefore, to improve the awareness of depression among older adults, it is crucial to increase social participation, provide supportive counseling, raise community understanding of mental health, and regularly check for signs of depression.

Key Words: *Depression, Geriatric, Older Adults, Sri Lanka*

Quality of Life (QoL) among Elderly people in a selected Elderly Care home in Welisara, Sri Lanka: A cross-sectional study

Batagama K.S.T.¹, Gnanasekaran T.¹, Wijerathne A.M.^{1*}, Pramodini M.D.S.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Quality of life (QoL) is defined as a state of well-being that is the outcome of a mix of physical, functional, emotional, and social aspects. This study was aimed to determine the QoL among elderly people in a selected elderly care home in Welisara, Sri Lanka.

Methods: A descriptive cross-sectional study was conducted by including people over 60 years of age who are currently living in Devsiri Sewana, an elderly care home. The older people's quality of life questionnaire (OPQOL-brief) was utilized to collect data. Statistical analysis was performed using SPSS Version 25.0.

Results and Discussion: The study included 20 participants from 62 to 82 years of age with a mean age of 70.0 ± 8.36 . The majority (60%, n=12) of the participants were women and 40% (n=8) were men. Most of (60%, n=12) the individuals had secondary education, lived in residential aged-care homes for more than 5 years (65%, n=13), and were treated for a chronic medical condition (75%, n=15). The average total score of all items of the OPQoL brief ranged from 41 to 53 with an average of 47.35 ± 3.21 . Individual item mean scores ranged from 2.95 ± 0.82 to 4.5 ± 0.68 . The lowest mean item score was reported to the statement "I look forward to things" and the highest was reported to "I enjoy my life overall". A total of 15% (n=3) and 50% (n=10) participants considered their overall QoL as very good and good respectively while only 35% (n=7) reported poor to very poor overall QoL. There was no significant correlation between the QoL and participants' sociodemographic characteristics such as gender, educational level or the duration spent in residential care homes.

Conclusion: A variety of factors influence the quality of life of the elderly in elderly care homes. It is important to think about what steps, such as exercise and entertainment, can be taken to improve people's quality of life. More research is needed to determine the impact of other variables on the elderly's standard of living.

Key Words: *Quality Of Life, Elderly, Sri Lanka, Elderly Care Home*

Analysis and impact of financial inclusion on poverty reduction in Households

Sugande M.D.M.^{1*}, Priyanath S.¹

¹*Department of Economics and Statistics, Sabaragamuwa University, Belihuloya, Sri Lanka*

Introduction: Due to the popularity of financial services provided by various institutions around the world, there were a lot of discussions about their importance. It's described as an opportunity for secure savings, financial assistance for low-income persons, small and medium businesses, insurance, and properly planned payment services. Financial institutions nowadays provide different services, including savings mobilization, loans, remittances, and insurance products. This study aimed at the impact of financial inclusion on poverty reduction in the Anuradhapura District.

Methods: A stratified sampling technique was utilized and a questionnaire was used to collect data. The data was collected from the Getalawa Gramanildari Division from 110 families who were residents of that division. Using SPSS (Social Sciences Statistical Package) to code, clean, and analyze the questionnaire. The study used coefficient determination to evaluate the model fit. The adjusted R² also called the coefficient of multiple determinations is the percent of the variance in the dependent variable explained uniquely or jointly by the independent variables.

Results and Discussion: The model had an average adjusted coefficient of determination of 0.561 and which implied that 56.1% of the variations in poverty reduction are explained by the independent variables which are demographic factors, Economic factors, financial factors, and social factors. Out of these four independent variables demographic and economic factors are positively significant impacts on financial inclusion and poverty reduction.

Conclusion: This study shows that there is a positive impact of financial inclusion on poverty reduction. The study recommends strategies for collecting deposits and loans in financial institutions, minimizing the financial supervision of central banks, developing gender-sensitive and low-income groups of financial products and services, and finally improving awareness of financial services in both rural and urban areas.

Key Words: *Financial Inclusion, Poverty Reduction, Households, Getalawa*

PP 020

Assessment of health promoting lifestyle behavior among Student Nurses in Nursing Colleges, Sri Lanka

Samarathunga S.M.S.S.K.¹, Rajakulathunga D.C.¹

¹*International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Healthy lifestyle behavior among nursing students may affect not only their lives but also the quality of patient care and education. This study was conducted in 2021 to identify the level of prevalence of Health Promoting Lifestyle (HPL) behavior and identify any relationship between socio-demographic factors and HPL among Nursing Students (NS) in nursing colleges in Sri Lanka.

Methods: A cross-sectional descriptive method was used to collect quantitative data. Data was collected using a self-administered questionnaire, consisting of a socio-demographic questionnaire and Health Promotion Lifestyle Profile II (HPLP II). The sample was 346 second-year nursing students selected from three colleges of nursing by two stages cluster sampling method. Data were analyzed by using SPSS 25. Kolmogorov-Simonov, Shapiro-Wilk's tests, and Histograms were used to determine whether variables were normally distributed. T-test and One-Way ANOVA test were used to compare independent samples with continuous dependent variables appropriately.

Results and Discussion: The composite mean of overall HPL was 2.6584 (SD=0.410). It was evident that 65% of the NS practice higher HPL and 35% of NS practice low HPL. The composite mean scoring for HPL sub-scales were interpersonal relations (2.9828), nutrition (2.6714), health responsibility (2.4927), physical activity (2.0213), Stress management (2.6708), and spiritual growth (3.0445). Gender, the sufficiency of monthly allowance, religion, BMI, and 'place currently residing' have not significantly affected the HPL behaviors of nursing students. Only 'age' and 'perceived current general health' have affected nursing students' HPL behaviors.

Conclusion: Nursing students' HPL was at a moderate level and nursing students' age and health perception have affected HPL behaviors. School administrators should plan the nursing curriculum to include activities that encourage student nurses to participate in health-promoting lifestyles and should include programs to improve students' health perception. Future studies are needed to explore the barriers that prevent students from practicing health-promoting behavior.

Key Words: *Nursing Students, Health Promoting Lifestyle Behavior, HPLP II*

PP 021

Assessment of relationship between emotional intelligence and academic achievement among Nursing Students in School of Nursing, Kurunegala

Rajakaruna R.V.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Emotional intelligence incorporates the important aspects of nursing which have a profound effect on academic achievement of nursing students. Therefore, the present study was performed to assess emotional intelligence and its relationship with academic achievement of nursing students in a School of Nursing in Sri Lanka.

Methods: A descriptive, cross-sectional study was conducted among 187 nursing Students in the Nursing School of Kurunegala. 32 males and 155 females were selected by random sampling. The SSEIT questionnaire was selected to measure emotional intelligence of the population. Academic achievement was appraised based on their results of the first-year exam. Chi-square test, Mann-Whitney U test and Kruskal Willis test were used for data analysis.

Results and Discussion: Mean emotional intelligence score was ($m=121.02$, $SD=15.62$). A chi-square test of independence was performed to examine the relation between emotional intelligence and academic achievement. The relation between variables was significant, $X^2(4, n=187) = 18.65$, $p=0.001$). Also, the results showed that emotional intelligence scores were significantly lower in male nursing students ($Md=121.5$, $n=32$) compared to the female nursing students ($Md=124$, $n=155$), $U=1959.50$, $z= -1.86$, $p=0.062$, with effect size $r=0.13$. Moreover, emotional intelligence was the same across the categories of monthly income ($p=0.342$).

Conclusion: Findings revealed that there was a relationship between emotional intelligence and academic achievement among nursing students. Further, there was a difference of emotional intelligence between male and female nursing students.

Key Words: *Emotional Intelligence, Academic Achievements, Nursing Students*

PP 022

The impact of Covid-19 on the personal and professional lives of Nurses in a Leading Private Educational Institute in Sri Lanka

Fernando K.P.A.^{1*}, Liyanage R.K.¹, Madhushika C.¹, Sandamali C.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The Covid-19 virus is a newly emerged virus that is currently a global pandemic that the world is facing. Generally, not only people in Sri Lanka but also people all over the world were isolated for more than six months in the beginning. Many have lost their jobs and people have had to start working from home, while frontline essential services have been working with physical risks from the start. Nurses and healthcare professionals were the frontline workforce who saved lives in a life-threatening situation facing an unknown disease. This study aims to assess how stress due to Covid-19 has affected nurses' personal and professional life.

Methods: A quantitative, descriptive cross-sectional study was conducted on both male and female nurses who are studying for a Bachelor of Nursing at the International Institute of Health Sciences, Welisara. A minimum of 278 nurses were included in the sample.

Results and Discussion: Only 100 responses were gathered during the research. 100% of the respondents were females. The majority of them were married, 66.7% and 55.6% had children. Most of the participants had completed their education up to the diploma level 82%. Only 19.4% did their jobs in medical wards while 15.3% of them worked in surgical wards. Most of the participants, 15.3% , were working in medical wards during the pandemic. Around 59.7% mentioned that they were in psychological distress during the pandemic. As the reason for the distress, a high number of participants mentioned the increased workload (61.4%), and only 15.5% mentioned the lack of PPE kits. The majority of the individuals responded that they haven't met friends or attended gatherings during the pandemic period (81.9%). A minority (40%) of the participants were upset about the unexpected occurrence of the pandemic. Some respondents mentioned that they were unable to control important events in their life (30%).

Conclusion: Based on the results, we concluded that the impact of the Covid-19 pandemic had affected the personal and professional lives of nurses, as well as their psychological well-being.

Key Words: Covid-19, Professionals, Healthcare, Frontline, Pandemic

PP 023

The psychological impact of Covid-19 and its contributing factors on Nurses working attached to Maternity Wards in selected Hospitals in Western Province, Sri Lanka

Sunethra H.K.S.^{1*}, Chathurani B.N.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Mental health is important in responding to the Covid-19 pandemic. The psychological impacts of the Covid-19 pandemic are significant for healthcare workers, including nurses, because of the higher level of exposure. Due to their heavy workloads, lengthy workweeks, and high-risk environments, nurses frequently experience severe psychological stress. The aim of the study was to explore the psychological impact of Covid-19 and its contributing factors on nurses who were working in maternity units.

Methods: This mixed methods research was carried out among 164 nurses, 10 ward sisters and nursing in-charge, working in maternity wards of infected and suspected Covid-19 treated units at Colombo East Base Hospital (CEBH), Base Hospital Homagama (BHH), and De Soyza Maternity Hospital (DMH). Data was collected via a self-administered questionnaire for quantitative part and the telephone interviews for qualitative data. For Quantitative study, data was analyzed using Descriptive and Inferential Statistical Methods and for qualitative study; thematic analysis was done

Results and Discussion: The majority of participants were (98.2%, n=161) females between the age 31–40 years (41.8%, n=69). The result indicated that depression, anxiety, and stress were experienced at various levels by 23.8% (n=39), 51.2% (n=84), and 58.5% (n=96), of the respondents respectively. The finding revealed a significant association with anxiety and having married with pre-psychiatric issues ($r = 0.151$, $P = 0.018$). Team spirit, time management, supervisor leadership, and work performance were correlated with stress ($P < 0.05$). The resources ($r = 0.188$, $P = 0.016$), effective communication ($r = 0.184$, $P = 0.019$), Social support ($r = 0.203$, $P = 0.009$), supervisor motivation ($r = 0.211$, $P = 0.007$), and work performance ($r = 0.218$, $P = 0.005$) were also found to be significantly correlated with the prevalence of depressive symptoms ($P < 0.05$). Fear of contagion was correlated with depressive symptoms, anxiety, and stress ($P < 0.01$). Five key themes emerged. The impact of the outbreak, concerns for families and individuals at risk of contracting the virus, short-term coping strategies, Stigma, inadequate facilities, and inadequate administrative support have increased nurse absenteeism and created barriers to providing adequate patient care.

Conclusion: Some degree of depression, anxiety and stress were prevalent among nursing staff during the Covid-19 pandemic. Early screening and intervention of psychological distress among nurses and provision of appropriate psychological support are required. The perceived needs and challenges are identified. Further research are required and concerns need to be addressed as necessary to alleviate the attributed psychological distress, which, in turn, leads to improved quality, safety, and efficiency of maternal and neonatal care.

Key Words: *Frontline Nurses, Health Climate, Organizational Factors, Covid-19*

PP 024

The prevalence and factors associated with unmet need of modern family planning among Women and barriers faced by Nursing Managers in Negombo MOH

Abeyrama R.S.^{1*}, Chathurani B.N.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: High prevalence of unmet need for modern family planning increased the number of unintended and unplanned pregnancies, which can cause complicated maternal morbidities and end up with unexpected maternal deaths, as well as higher children's mortality and morbidity too; the ultimate result affects the quality of life of the whole family. The general objective of this study was to explore the prevalence and reasoning for unmet needs of modern family planning and its associated factors among ever-married women of reproductive age (15–49) in MOH, Negombo.

Methods: An exploratory, sequential mixed method was used. A community based descriptive correlational study was conducted to explore the prevalence of unmet needs of modern family planning methods and their associated factors among 200 ever married females for a qualitative study. The association was explained with the use of Chi-square, and the qualitative study was conducted to identify the barriers faced by middle level managers while planning and implementing family planning services, with the use of thematic analysis.

Results and Discussion: Unmet Need (UMN) of Family Planning prevalence was 16% (CI: 1.41-1.63) while a prevalence of UMN of Modern family planning was 36% (95%, CI: 1.63-1.96) and for present modern contraceptive uses, 64% (95%, CI: 5.56-6.41) and 20.5% for natural and traditional methods. The elevated risk of unmet needs was found to be significantly associated with only the lack of family planning counselling, while others had no significant association. The barriers that were faced by the nurse managers were identified under supervisory factors, service-related factors, and religious and social barriers, and it was suggested that they be involved as a team and increase the number and quality of supervision.

Conclusion: It is imperative to ensure, prevalence of unmet needs in modern family planning is extremely high, Recommendations include the fact that family planning counselling is very important to develop among communities.

Key Words: *Prevalence, Unmet Need, Family Planning, Barriers, Females*

Factors affecting discrimination of Male Nursing Students in their clinical practices in the Western Province: Perception of Male Nursing Students

Gamage D.M.¹, De Silva A.S.B.^{1*}, Dasanayaka U.D.S.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Gender discrimination is any unequal treatment, including privileges and priority, on the basis of gender. The nursing profession is regrettably not exempt from the issue of gender discrimination, which still exists in the world as a whole. The purpose of this study was to investigate gender discrimination among male nursing students in clinical practice and to investigate methods for promoting equal clinical practice opportunities.

Methods: This was a descriptive cross-sectional study conducted on 37 male nursing students at the Nurse's Training School, Kalutara. The sample was obtained using a convenient sampling method. Data was collected using an online survey. Data analysis was done using Microsoft Excel.

Results and Discussion: Among the 37 respondents, 92.8% (n=14) of students chose nursing as the profession of their self-preference. According to the institutional factors, 77% (n=28) of students disagree with the 5% (n=2) intake of male nursing students by the government and 77% (n=28) of students agree with equal opportunity for male nursing students to practice in the gynecological and obstetric wards as well as in general wards. According to the social factors, 71.6% (n=26) of students agree with society's belief that caring for female patients by male nurses is unethical.

Conclusion: The majority of male nursing students pursued nursing as a career due to personal preference. Therefore, gender discrimination in clinical practices has a minimal impact on personal characteristics. However, gender discrimination in their clinical practices has a greater impact on institutional and societal issues. The findings suggest that both the government's policy about admitting male nursing students and the social stigma associated with men who choose nursing as a career should change.

Key Words: *Nursing, Discrimination, Male Nurses, Students Perceptions*

PP 026

Study on the knowledge, perception, and practice of standard Objectively Structured Clinical Examination (OSCE) for summative assessment of Students Nurses; Sri Lanka, 2021: Stakeholders perception

Hettiarachchi N.H.^{1*}

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Objective Structured Clinical Examination (OSCE) started in 1975 and has widely been used to assess the clinical performance of medical and health profession students. As per the literature OSCE is considered to be an effective tool for assessing clinical competencies. The objective of this study was to inquire about knowledge, perception, and practice on the application of OSCE for student nurses' summative evaluations.

Methods: The stakeholders of this study were nursing students, nurse educators, and nurse managers who are training and practicing in Sri Lanka under the Ministry of Health. Self-administered questionnaires were applied to collect data quantitatively and semi-structured interviews have been done to collect data qualitatively.

Results and Discussion: Nursing students had average knowledge (61.09%, n=288), perception (56.87%, n=269), and practice (52.64%, n=249). Furthermore, nurse educators' knowledge was average (68.5%, n=183), the perception was average (57.7%, n=154) and practice was average (62.5%, n=167). In addition, nurse managers' knowledge was less (50.6%, n=88), the perception was average (56.3%, n=98) and practice was average (56.9%, n=99).

Conclusion: This study showed that the student nurses' and nurse educators' knowledge, perception, and practices were all average, and the perception and practice of the nurse managers were average, but their knowledge was less than average. Hence, it revealed the areas to be improved and expanded.

Key Words: *Knowledge, Perception, Practice, Student Nurses*

Knowledge, attitude, and practices of Nursing Officers regarding Covid-19 prevention at Teaching Hospital, Kuliyaipitiya

Nadeeshani M.K.P.^{1*}, Senarathne S.²

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Researchers have identified that there is a higher risk of infecting covid-19 for healthcare professionals as they are frontline workers. This research study was carried out with the purpose of identifying the knowledge, practices, and attitudes of the nursing officers in Kuliyaipitiya Teaching hospital regarding the prevention of Covid-19.

Methods: Comprehensive literature survey was done to identify different aspects of knowledge, practices, and attitudes in preventing Covid-19. The primary data was collected through a self-administered questionnaire shared among conveniently selected 167 nursing officers at Kuliyaipitiya Teaching Hospital. The collected data were analyzed using IBM SPSS. Relationships between the dimensions were analyzed using cross-tabulation and Chi-square tests.

Results and Discussion: Among the respondents, 91.6% (n=153) were females. According to the findings, the majority (90% n=152) of the participants had knowledge of the causes that spread the virus, the risky patients and their age groups, symptoms of the covid-19 infected people, and the period of quarantine. The majority of the participants believed that the covid-19 can be controlled by the government. Furthermore, the majority of the participants do not practice the health guidelines properly.

Conclusion: The results indicated that the majority of the respondents have a good level of knowledge and positive attitudes. However, they do not have the proper practices to prevent Covid-19.

Key Words: *Knowledge, Practices, Attitudes, Preventing Covid-19*

Quality of Life (QoL) among patients undergoing Hemodialysis at the Teaching Hospital, Anuradhapura, Sri Lanka

Karunarithna R.M.I.C.^{1*}, Hewavitharana P.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Hemodialysis (HD) is one of the renal replacement therapies which improve the Quality of Life (QoL) of patients with End-Stage Renal Disease (ESRD). However, patients undergoing HD therapy may have serious physical, psychological, social, and environmental health impacts. Therefore, this study is aimed to assess the QoL among patients with ESRD who are undergoing HD.

Methods: A Quantitative, descriptive, cross-sectional study was conducted among 188 patients. The QoL was assessed using the World Health Organization Quality of Life (WHOQOL-brief) questionnaire. Four domains including physical, psychological, social relationship and environmental health, and another two elements related to the overall perception of QoL and satisfaction of their health were evaluated through the questionnaire. T-test was used to check the hypothesis and Fisher's Exact Test is used to determine whether or not there is a significant association between demographic variables and QOL.

Results and Discussion: The majority were 35-60 years age group (74.5%, n=140), male (73.4%, n=138), married (84.6%, n=159), and unemployed (85.1%, n=160). As well as a greater part had no income (50.5%, n=95), most participants had suffered from ESRD for 1-5 years (52.7%, n=99) and the majority were under 1-5 years duration of HD (65.4%). Most participants (44.1%, n=83) had poor perceptions regarding their QoL and were neither satisfied nor dissatisfied regarding their health (43.1%, n=81). The physical health domain had given more contribution (56.7781) to QoL among patients with HD than the other three domains. Moreover, a positive correlation with QoL with a statistically significant association. All domains had good reliability as Cronbach's alpha value. Along with the association between QoL and demographic factors, increasing age (≥ 60 years) had poor QoL ($p=0.000$), while good education ($p=0.004$), good income ($p=0.000$), duration of illness (1-5 years) and duration of HD (1-5 years) had good QoL ($p=0.000$). All patients who didn't suffer from any chronic diseases had good QoL ($p=0.000$). However, ethnicity, marital status, employment status, and living arrangement had no statistical significance on their QoL.

Conclusion: The majority of participants had good physical health, social relationships, environmental health, and poor psychological health. Furthermore, age, education, income level, duration of illness, duration of HD, and patients with any chronic illness other than renal disease affected by QoL in such patients. Ethnicity, marital status, employment status, and living arrangement were not affected by the QoL of the patient on maintenance HD.

Key Words: *Quality of Life, Hemodialysis, End Stage Renal Disease*

A study on knowledge and practices of nursing professionals toward infection control measures

Sarojani G.G.S.^{1*}, Hewavitharana P.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Nurses are medical professionals whose profession greatly values keeping an infection-free environment to aid patient rehabilitation. The majority of a nurse's time is spent with patients hence they ought to be well-versed in the knowledge, attitudes, and practices of infection control and prevention in healthcare environments. The study aimed to assess nursing professionals' knowledge and practices regarding infection control measures.

Methods: A descriptive cross-sectional qualitative study was carried out among nurses in general hospitals in the western province of Sri Lanka. The staff nurses working in all medical, surgical, pediatrics, gynecology, and obstetrics units were included in the study. Through simple random sampling, 242 nurses were selected, and data collection was done through a self-developed validated close-ended questionnaire guided by hospital policies.

Results and Discussion: Virtual platform was used to assess 242 nurses during the study, and n=242 participants completed the questionnaires. Most of the participants who completed the questionnaire were female (93.4%, n=227), compared to male participants (6.2%, n=15). Based on the results of the current study, it can be stated that nurses exposed patients to infection-related diseases although having satisfactory practice levels in infection prevention and control and demonstrating excellent thought of infection prevention and control.

Conclusion: Based on the findings of the current study, it can be concluded that, despite performing well in knowledge and showing a positive attitude towards infection prevention and control, nurses had unsatisfactory practice levels regarding infection prevention and control, exposing the patients to infection-related diseases. Strengthening infection prevention and control practices through regular in-service training/workshops, ensuring that staff members receive the proper immunizations regarding infection prevention and control, confirming that resources, such as personal protective equipment, are always available, and observing nurses' practices (hand hygiene auditing and during invasive procedures) and providing response are some of the recommendations.

Key Words: *Knowledge, Attitudes, Practices, Infection Control*

PP 030

Perception of labor pain and its associated factors among Multiparous Mothers in selected hospitals in Ratnapura District, Sri Lanka

Nirosha H.K.^{1*}, Pieris H.C.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Labour is an emotional expression that includes physiological and psychological mechanisms. The pain of labor is severe, even though its retention diminishes with time. The aim of the study was to assess experiences and perceptions regarding labor pain and indemnify factors related to labor pain and experiences.

Methods: A cross-sectional descriptive study was conducted among postnatal multipara mothers to study perception and experiences of labor pain. A self-administered questionnaire was administered among 100 multipara mothers from the selected base hospitals in the Rathnapura district.

Results and Discussion: Participants (76%) who have undergone normal vaginal delivery were recorded as the highest number. About 67% of the mothers waited in the labor room for more than 6 hours. Pain spreading to the body area has been reported by the majority of participants (52%). Most participants received painkiller injections (71%). Mothers' response to pain intensity is taken as no pain (14%), smooth pain (22%), medium pain (36%), and acute pain (28%). Pain remaining a long time is recorded as 68%. The majority of participants had received prenatal education (80%). When considering how mothers feel sleepy after getting painkiller injections, almost one-third of participants (65%) feel sleepy after the painkiller injection. Pain felt during daytime and nighttime had similar findings. The majority of participants responded they have received support during the labor (62%). One-third of participants did not ask for any support (38%). Two-thirds of participants recorded bearing their pain without crying, shouting, or chewing gum (63%). The majority of participants received sufficient information during the labor (67%). One similar number of participants was involved in decision-making during the labor (57%). Possible help from health care workers during labor (55%). The overall perception of mothers regarding labor pain was good (96%).

Conclusion: Mothers' response to pain during labor appears to be at various levels. The administration of different techniques to the pain was observed, but no particular technique was admired among the population.

Key Words: *Perception, Labor Pain, Multi Parameters*

Perceived stress and coping strategies among Nursing Students at two selected Nursing Schools in the Western Province, Sri Lanka

Dammika K.M.D.H.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Individuals might be motivated and energized to address the significant challenges throughout life with a certain amount of stress. Finding the source of one's stress is one of the biggest obstacles to effective stress management. To concentrate, keep the focus on the aspects of one's life that are actually important. High academic and clinical expectations may adversely influence nursing students' health, academic performance, and capacity to adopt appropriate coping mechanisms to reduce stress. The purpose of this study was to evaluate stress levels and coping strategies among nursing students.

Methods: Students from two selected nursing schools in Sri Lanka's Western province who were enrolled in diploma nursing programs were included in this cross-sectional study. They were selected by a convenient sampling technique. A standardized self-administered questionnaire was used to collect the data among 280 nursing students. Nursing students' stress levels and coping mechanisms were evaluated using the perceived and coping scales.

Results and Discussion: There were 280 nursing students who participated in the study; 84.4% (n=236) among them evaluated moderate stress, 3.9% (n=11) high stress, and 11.7% (n=33) low stress. Coping levels were 56.1% (n=157) moderate, 41.1% (n=115) high, and 2.5% (n=7) low. Limitations: The outcomes of this study may have been impacted by several restrictions. The results' generalizability may have been impacted by the use of a convenience sample. Randomization might be a suitable sample technique for further investigations to avoid this restriction. Additionally, just one environment was used for this study and the future. It is crucial that the same sample sizes are used in various settings. because the researcher may compare how people cope with stress in different settings. According to studies, several settings are advised over two settings.

Conclusion: Every individual is subject to stress since it is a universal phenomenon. Being a member of a strong skill training program puts student nurses at risk all the time. This study brings attention to the significant problem of stress and the types of coping mechanisms employed by nursing students. Due to their three years of training, student nurses experienced significant stress. In order to develop stress management strategies that would result in future nurses who are more resilient, the study has helped to identify the major causes that cause stress among student nurses.

Key Words: *Stress, Nursing Students, Coping, Nursing College*

PP 032

Online distance learning practices among Nurses enrolled in post and undergraduate studies during the Covid-19 pandemic in Sri Lanka

Perera W. A.I.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Distance education is teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organization. E-learning recreations are the next step in integrating new technologies into the class, as they provide safe learning environments for learners to discover and practice. This study was conducted to obtain the level of Online distance learning practices among nurses enrolled in post and undergraduate studies during the Covid-19 pandemic in Sri Lanka.

Methods: Descriptive cross-sectional research design was used. Quantitative data was collected from nursing students who still studying and studying in the higher studies institute in Sri Lanka. The online survey was used to collect data from nursing students and nurses.

Results and Discussion: The results showed that nurses used the e-learning method purposefully and successfully to enhance their Nursing knowledge during the Covid-19 pandemic period. In their LMS/VLE systems, the instructor has supported to involve in the e-learning programs effectively.

Conclusion: It is important to ensure the quality of the e-learning systems in Sri Lanka. Recommendations include making more strategies to involve nurses in e-learning and the e-learning program's quality should be increased.

Key Words: *E-learning, Online Learning, Learner Management System, Virtual Learning Systems, Moodle*

PP 033

A study on the perception of reflective practices among Graduate Nurses in Sri Lanka

Chandrasiri W.W.A.S.N.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: The profession's knowledge base is developed and refined in ways that help the practitioner be an effective and informed professional. Reflection has gained increased recognition as a critical component of professional nursing practice and as an educational strategy to acquire knowledge and learn through practice. Reflective practice has prospered over the last few decades throughout various professional practice and education fields. In some professions, it has become one of the defining features of competence.

Methods: Descriptive cross-sectional research design was used. Quantitative data was collected from conveniently selected 280 nursing students who graduated from a selected higher studies institute in Sri Lanka. Collected data were analyzed using Microsoft Excel software.

Results and Discussion: Most of the respondents (66.4% n=186) were in the 26 yrs-40yrs of age range. 49.6% (n=92) of the nurse's practice reflected daily. About 92.1 % (n=171) nurses were using reflection practices when a problem occurs, but 7.9 % (n=15) nurses never used their reflection when the problem happens. 61.4% (n=114) participants said that they do not use any specific model to practice reflection, but 38.6 % (n=71) nurses use specific models to practice Reflection in their life. 36.8%(n=68) practice reflection to support the growth of the profession. The majority of the nurses have identified time management, limited knowledge, training, and skills, and lack of unit support as issues related to their reflective practices.

Conclusion: It can be concluded that most nurses practice reflection daily and when problems arise. The majority do not use a reflective model. Some nurses believe that the reflections support the growth of the profession. Difficulty in time management, limited knowledge, training, and skills, and lack of unit support has been mentioned as issues related to their reflective practices.

Key Words: *Reflective Practice, Perception, Reflective Models*

Evaluating glycemic index of *Caryota Urens* (kithul) based products

Nicholas S.^{1*}, Fernando T.¹, Adikari T.²

¹*University of Wolverhampton, United Kingdom*

²*General Sir John Kothalawala Defence University, Sri Lanka*

Introduction: The glycemic index is a system that categorizes carbohydrates and foods rich in carbohydrates depending on their effect on blood glucose responses. It can be defined as the incremental area under the glucose response curve of an available carbohydrate portion of a test food which is stated as a percentage of the response to the same amount of carbohydrate from a reference food. Traditionally, the young inflorescence of *Caryota Urens* palm is tapped for its sweet phloem sap, which is then used to produce sweeteners (treacle and jaggery) and fermented beverages (toddy). *Caryota Urens* is claimed to possess various health benefits such as antioxidant, anti-diabetic, and many other medicinal applications. The main objective of this study was to determine the glycemic index of the kithul-based products namely kithul sugar and jaggery.

Methods: Ten healthy volunteers aged between 18 – 40 consumed four different types of test meals which consisted of two different types of test food namely kithul sugar and jaggery and the reference food (glucose) which was repeated twice. Fasting capillary blood sampling was done using the finger prick method and within 10 – 15 minutes after the consumption of the test food capillary samples were taken every 15 minutes for the first hour and for every 30 minutes in the second hour. This was done using AccuCheck Active glucometer and Accucheek Active test strips. The incremental area under area and the glycemic index were calculated using the average of the two glucose responses.

Results and Discussion: The mean glycemic indexes for the kithul-based products namely kithul sugar and jaggery were 58.57 and 40.16 respectively. A statistically significant difference was found between the glycemic indexes of the two kithul products.

Conclusion: Thus, it can be concluded that kithul sugar falls under the medium glycemic index food type and jaggery falls under the low glycemic index food type.

Key Words: *Caryota Urens, Glycemic Index, Carbohydrates*

Assessing the Nurses' Knowledge of identifying, preventing, and managing Delirium among Patients in the Colombo District

Perera E.J.S.¹, Fernando W.W.S.M.^{1*}, Sewwandi K.D.C.¹, Amarasinghe T.¹, Nisansala P.K.Y.¹

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Delirium is defined as an acute decline in cognitive functioning, which is common in hospitalized older patients and is known to increase the risk for morbidity and mortality. It is a severe acute neuropsychiatric syndrome, which is a common state of confusion, associated with significant dysfunction and pain. The main objective of this research was to assess the level of knowledge on identifying, preventing, and managing delirium among nurses in the Colombo District and to assess the contribution of working experience to the level of knowledge regarding delirium.

Methods: This study utilized a descriptive cross-sectional research method for 250 nurses in the Colombo district. A simple questionnaire was used to determine the knowledge, prevention, and management methods regarding delirium.

Results and Discussion: About 56%(n=140) of the participants' ages varied from 18 to 29 years. Furthermore, the majority (62%, n=155) were female participants. Most of the participants (70%, n=175) have done other education such as diploma level higher-level studies. The working experience of the study sample varies from 2 to 10 years from different wards (cardiac, medical, GOT, labor room, oncology ward, and placements students). When considering the knowledge, 60% (n=150) of the participants had knowledge regarding delirium. However, 40% (n=100) of the population had less knowledge regarding delirium.

Conclusion: Based on the study results, most of the participants had knowledge with regard to delirium. However, there was a gap identified in the knowledge among a few participants. Thus, knowledge regarding this subject must be increased.

Key Words: *Delirium, Cognitive Functioning, Neuropsychiatric*

PP 036

Knowledge and practice regarding intake of Folic Acid Supplements (FAS) among Pregnant Women who are attending the Antenatal clinic, De-Soysa Hospital for Women (DMH), Colombo 08

Chandrasekara C.M.H.C.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Maternal Folic Acid Supplementation (FAS) during the periconceptional period significantly reduces the risk of neural tube defects. This study investigated pregnant women's knowledge and practice regarding the use of FAS and consumption of Dietary Folate (DF) periconceptionally and during pregnancy.

Methods: A descriptive cross-sectional study was conducted among pregnant women (n=323; age 18+ years) who attended the antenatal clinics, at De-Soysa Hospital for Women. An interviewer-administered, validated questionnaire was used to collect information about socio-demographic factors, details on pregnancy, knowledge, and practice of the FAS and DF. Data were analyzed using SPSS version 23.

Results and Discussion: Among the participants, 60.6% (n=186) were found to be "good practice" and 5.9% (n=18) "poor practice" towards the use of FAS and DF. Among the socio-demographic factors, occupation was statistically significant on knowledge (p=0.037), whereas age (p=0.007) and level of education (p=0.048) showed statistical significance on the practice of FAS. A total of 52.1% (n=160) were knowledgeable about DF, and 96.9% (n=288) were aware that FAS can protect their baby from certain medical conditions. And a total of 50.1% (n=149) knew that FAS should be taken before pregnancy and should be continued for the first trimester of pregnancy.

Conclusion: Most participants in the study had poor knowledge regarding the use of FAS, but they had comparatively good practice using it. Education, age, and occupation have considerable influence on the knowledge and use of FAS. Further research is needed in other parts of Sri Lanka, and awareness programs must be strengthened to ensure periconceptional FAS use.

Key Words: *Preconceptional Folic Acid Supplements, Neural Tube Defects, Periconceptional Period*

PP 037

Knowledge and attitudes of School Teachers towards substance use among Adolescents in Kegalle, Sri Lanka

Thilankanada H.P.D.N.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Adolescent substance use is a global public health concern that persists despite legislative prohibitions. The majority of adolescent substance use habits begin in school. Thus, the purpose of this study was to assess the knowledge and attitudes of school teachers toward substance use among adolescents in Kegalle.

Methods: This was a cross-sectional study conducted among school teachers (n=200) in the Kegalle district, using an interviewer-administered questionnaire. The participants were obtained using a convenient sampling technique. A chi-square test was used to identify associations between variables, and descriptive statistics were used to calculate percentages.

Results and Discussion: The study population had limited knowledge of the behaviors and consequences of adolescent substance use. Although 91% (n=182) were aware of adolescent substance use, only 57% (n=114) were aware of the clinical features associated with it. Furthermore, 61% (n=122) of the boys' schools in Kegalle did not encourage drug awareness training programs. Approximately 43% of teachers in provincial schools have never visited a de-addiction center. In terms of attitudes toward substance use, only 5.5% (n=11) of teachers strongly agreed that students who use drugs have difficulty concentrating in school. And 48% (n=96) of school teachers strongly agreed that parents are to blame for their children's drug addiction. However, the majority of participants (84%, n=168) believed that addicted students should not be neglected. Even so, teachers' knowledge of preventative materials was insufficient.

Conclusion: The findings show that while school teachers were aware of adolescent substance use, they were unaware of the clinical features of drug abuse and its impact on a child's education. Most schools also lacked drug education programs. As a result, it is critical to implement drug awareness and community-based training programs in schools to raise awareness about adolescent drug use and its negative consequences.

Key Words: *Awareness, Attitudes, School Teachers, Substance Use, Adolescents, Kegalle*

Assessing the knowledge of clinical features, causes, and risk factors of Anemia in Pregnant Mothers in the Maharagama MOH area

Wellakage C.S.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Anemia in pregnancy is a decrease in the total number of Red Blood Cells (RBCs) or hemoglobin in the blood during pregnancy or in the period following pregnancy. It involves a reduction in the oxygen carrying capacity of the blood. Furthermore, it is a major maternal morbidity condition in pregnancy and postpartum worldwide, conferring a number of health risks to mother and child. The main aim of this study was to assess the knowledge about clinical features, causes, and risk factors of anemia.

Methods: A descriptive cross-sectional design was used to explore the resonance of knowledge among pregnant mothers in a maternal clinic, Maharagama MOH, in Sri Lanka. Thus, quantitative research was carried out among 100 pregnant mothers. For this quantitative research, data was collected through an interviewer-based questionnaire.

Results and Discussion: The majority of the participants (60%) were between 25 and 32 years old, and a few were between 18 and 25 years old (30%) and 32 to 40 years old (10%). The majority of the participants (90%) were married, and only a minority (1%) were unmarried. Most of the participants (60%) were also graduates, and 30% of them had an education up to A/Ls. There was a minority (6%) of mothers with education up to O/Ls, up to grade 5 (3%), and 1% of those who did not go to school. The majority of participants (85%) were non-anemic. When considering the participants' knowledge of the causes of anemia, most of them (68%) were informed about the causes. Considering the risk factors, more than half of the pregnant women (54%) acknowledged the risk factors for anemia. However, about 37% of the participants did not know about the clinical features of anemia.

Conclusion: When considering the results, most of the participants, on average, knew about the causes, risk factors, and clinical features. However, the knowledge needs to be further improved as it is a major risk factor in pregnancy.

Key Words: *Anemia, Hemoglobin, Maternal, Postpartum*

Assessment of knowledge and description of attitudes and practices on control of Rabies among G.C.E O/L Students in Regional Director of Health Service, Batticaloa

Marasinghe M.C.I.^{1*}

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Human health is highly linked to animal health, and more than half of the agents known to infect humans are reported to have an association with animals. Rabies is a 100% vaccine-preventable and lethal zoonotic viral illness. Dogs are the primary cause of human rabies mortality and transmission. Interrupting transmission is possible through dog vaccination and dog bite prevention. The main aim of this study was to assess the knowledge and practices on controlling rabies among G.C.E. O/L students in Batticaloa.

Methods: A descriptive, cross-sectional study was carried out among 5 schools that included 90 students who were studying in grade 11 as the sample size. A self-administered questionnaire was used to collect data.

Results and Discussion: Results revealed that most of the participants were female (68.9%, n=62). All of the respondents were 16 years old and were either Tamil or Hindu. When considering the knowledge, most of the respondents (62.2%, n=55) knew that rabies is a fatal disease once clinical signs and symptoms develop. All of them were also aware that it could be transmitted through dog bites. Yet, only some of the participants were aware that it could be transmitted through other mammals such as cats (42.2%, n=38), rats (15.6%, n=14), bats (17.8%, n=16), cattle (6.7%, n=6) and squirrels (33.3%, n=30). Most of the respondents (71.1%, n=63.9) have heard about rabies from a variety of sources, among which healthcare systems were the most applicable due to a well-organized rabies control program in Sri Lanka. Furthermore, most of the respondents were knowledgeable (73.3%, n=65.9) about the practices in the control of rabies. When considering the association between demographics and knowledge, the majority of the females (74.2%, n=66.7) and males (71.5%, n=64.3) had good knowledge. Among the selected population, most respondents (95.6%, n=86) had desired attitudes of immediate medical attention following an animal bite. They also had a positive attitude towards registering their own animal (93.3%, n=84), and towards the vaccination of animals (95.6%, n=86). However, only a minor percentage (20%, n=18) had a positive attitude towards impending birth control on their animals. About 37.8% (n=86) had a positive attitude toward euthanizing symptomatic dogs similar to those with rabies, and 93.3% (n=84) had a positive attitude toward euthanizing stray dogs.

Conclusion: It is seen that the majority of the participants had average knowledge about rabies. Rabies is a prevalent problem in Batticaloa, and it is important to have knowledge about this disease. When considering the attitudes, many had a negative attitude towards impending birth control on their animals.

Key Words: *Rabies, Fatal Disease, Vaccination, Mammals*

Assessment of hospitalized patients' trust and satisfaction with hospital care at Base Hospital, Tellippaliala

Herath H.M.D.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Through a variety of efficiency metrics in health, public hospitals have shown improvement over the years. However, the ease of access to information via the internet, and the rise in patient care standards. The Sri Lankan healthcare sector now faces a difficult profile as a result of all these reasons. The study assessed hospitalized patients' trust and satisfaction with hospital care at Base Hospital, Tellippaliala.

Methods: A descriptive cross-sectional quantitative study was carried out on 120 patients over the age of 20 years old coming to the Base Hospital, Tellippaliala. The sample population was invited to participate in a study with their consent. The questionnaire assessed the basic knowledge about individuals' age, gender, and attitude toward the healthcare system based on professionalism, the healthcare system, and their environment. Data were analyzed through descriptive statistical methods using the SPSS 25 statistical package.

Results and Discussion: The responses revealed that 26% (n=31.2) and 24% (n=28.8) of participants were in the 20–30 and 30–40 age categories, respectively. Furthermore, 24% (n=28.8) of the participants were between 50 and 60 years old, while the remaining 11% (n=13.2) accounted for those above 60 years old. The results showed that 52% (n=62.4) were males. Moreover, a majority of the participants (97%, n=116.4) agreed that doctors are helpful, while neither disagreed. Also, 82% (n=98.4) of participants claimed that doctors treat them with dignity and respect, while 8% (n=9.6) disagreed with this statement. A significant number of the respondents (74%, n=88.8) agreed that doctors listen to them. While 19% (n=22.8) disagreed with this statement, the rest accounted for neither. A large extent of the respondents (67%, n=80.4) reported that minor staff did not treat them with respect, and 63% (n=75.6) disagreed with the statement that minor staff was listening to them.

Conclusion: Overall, participants have a positive impression of doctors and a negative one of the minor staff. At the same time, other components, such as cleanliness, give a neutral or positive impression.

Key Words: *Patient Trust, Satisfaction, Efficiency Metrics*

**Knowledge and practices regarding fast food habits among Teenagers in Welimada
Central College, Badulla, Sri Lanka**

Karunarathne Y.S.I.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Teenagers are at risk of making poor food choices, which can lead to serious health concerns. Most teenagers dine in college dining areas with few healthy food options. Furthermore, students' academic or physical performance is affected as a result of inadequate nutrition. The aim of this research was to identify and describe teenagers' knowledge, attitudes, and practices about fast food habits.

Methods: A quantitative, cross-sectional study was carried out, including 122 students at Welimada Central College in Badulla, Sri Lanka. The participants were chosen using a convenient sampling technique. Data were collected using a self-administered questionnaire distributed to students, and data were analyzed statistically using SPSS.

Results and Discussion: The majority were 15-16 years old (24.59%, n=30). Most of the individuals (55%, n=67) agreed that fast food creates health risks. In terms of knowledge, 33.60% (n=41) said fast food causes obesity. Some agreed that fast food could cause cancer (34.43%, n=42) and heart disease (29.5%, n=36). Many teenagers (39.34%, n=48) stated they eat fast food due to busy schedules. A minority stated that fast food has more benefits than risks (24.5%, n=30). About 22.95% (n=28) said that they are addicted to fast food, and 11.4% (n=14) know the health hazards. A relatively high number of individuals agree that fast food tastes good (40.99%, n=50). Many agreed that varieties increase fast food consumption (31.14%, n=38). Around 23.7% (n=29) agree fast food is convenient, and 24.59% (n=30) socialize over fast food. In terms of fast food consumption, most of them consume fast food daily (64.7%, n=79). In terms of practice, most of them (66.6%, n=81) agreed that they consume fast food when hungry. In addition, the majority of the respondents agreed that they consume fast food when they are bored (51%, n=62) and when they are busy (50.81%, n=62). However, the consumption of fast food in restaurants was done only by a minority of the participants (6.56%, n=8).

Conclusion: Based on the overall results, participants had an average amount of knowledge about fast food. Furthermore, the majority of the participants consumed fast food due to their busy schedules, and the variety of fast food. Thus, more awareness raising regarding the effects of fast food consumption must be done through various workshops.

Key Words: *Dietary Habits, Awareness, Teenagers, Fast Food*

PP 042

Factors affecting weight and obesity among Adolescents in Bamunakotuwa MOH area

Jayasinghe A.M.P.N.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Being overweight and obese is a worldwide issue among children of all ages. Calorie intake that exceeds the body's requirements will be deposited in the body as fat, which leads to obesity. Obesity is a serious health issue because it can lead to other complications like cardiovascular diseases, high blood pressure, type II diabetes, etc. The aim of this study was to find out the major factors affecting childhood obesity and use societal changes, and environmental-behavioral synergy to foster the achievement and maintenance of healthy weight among adolescents in the Bamunakotuwa MOH area.

Methods: A cross-sectional study was carried out, including 100 participants between 12 and 18 years of age at Sri Sumangala Central College, Bamunakotuwa. A structured questionnaire was used to collect the data, which was analyzed using the SPSS 25 version.

Results and Discussion: When the South Asian obesity cutoffs were used (overweight ≥ 23 kg/m² and obesity ≥ 25 kg/m²), overweight and obesity were seen in 14.5% and 44.6% (total of 59.1%) of males and 11.9% and 56.3% (total of 68.2%) of females, respectively. It was evident that 43% of adolescents had fatty foods three times per day, and 56% of adolescents had fruits less than once per day. The abdominal obesity prevalence was 40% in males and 66.6% in females.

Conclusion: The results of the study showed that having a family history of obesity, being overweight during childhood, and a lack of physical activity were associated with obesity during adolescence. Adolescent obesity can be tackled at the population level through education, prevention, and sustainable interventions related to healthy nutrition practices and physical activity promotion.

Key Words: *Obesity, Overweight, Calorie, Adolescents*

PP 043

Nurses' satisfaction with their work environment at Base Hospital, Bibile

Edirimanna K.D.S.D.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Job satisfaction is vital to an employee's productivity. For instance, in nursing practice, nurses who are satisfied with their job roles are more inclined to provide the best possible care for the patients. Dissatisfied nurses tend to focus on the simple fulfillment of their responsibilities without considering the quality of care provided. The aim of this study was to determine the nurses' satisfaction with their work environment at the Base Hospital, Bibile.

Methods: A cross-sectional study was carried out, including 150 nurses of different age groups from surgical, medical, pediatric, gynecology & obstetrics, special care units, and other wards in the Base Hospital Bibile. A structured questionnaire was used to collect the data. Convenient sampling techniques were utilized, and data were analyzed using SPSS software.

Results and Discussion: According to the study results, the percentages of nurses who agreed that they received full-time support and guidance from senior nurses were 62.3% (n=93) and 57% (n=86) respectively. Also, 47.7% (n=72) of the nurses claimed they received enough opportunities to enhance their professional and educational skills at the hospital. However, 45% (n=68) of the respondents reported that they have thoughts of resigning from their present careers. Additionally, 42.4% (n=64) reported that they were not very satisfied with the salary they received. Moreover, according to the overall results, most nurses (53%, n=80) were satisfied with their profession and the work environment.

Conclusion: The findings of this research show that the majority of nurses in the Base Hospital of Bibile work happily and satisfactorily in their work environment, although some of them were not fully satisfied with the salary and some claimed that they have thoughts of resigning.

Key Words: *Job Satisfaction, Productiveness, Work Environment, Dissatisfied*

Determining the prevalence and patterns of alcohol consumption and usage of drugs among the Adolescents of the Wathogala G.N Division in the Galle District

Jeewamali K.S.D.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Smoking, alcohol consumption, and drug use are leading causes of preventable diseases, health conditions, and deaths worldwide. The aim of the study was to determine the prevalence and patterns of alcohol consumption and usage of drugs among adolescents of the Wathogala G.N division in the Galle district.

Methods: A descriptive epidemiological study was carried out on a sample of 250 adolescents from the G.N division in the Galle district. Each participant was given a self-administrated questionnaire with the information- sheet and consent form describing the objectives and rationale of the study. Data from the questionnaire were entered and analyzed using the Statistical Package of Social Science (SPSS) 20 version and Microsoft Office Excel 2010.

Results and Discussion: This study revealed that all smokers, alcoholics, and drug users are male students. Furthermore, a high percentage of the adolescents of relevant age groups in relevant areas are non –alcoholics (80.0%, n=200), non-smokers (87.6%, n=219), and non-drug users (94.4%, n=236). The percentage of adolescents who were alcoholics, smokers, and drugs were 18% (n=45), 10% (n=25), and 5.6% (n=14) respectively. When considering the patterns of usage, it was found that a higher percentage of participants smoke when socializing (68%, n=170). However, a minor percentage smoked when they were stressed (28%, n=70), and sad (24%, n=60). Furthermore, a smaller number of participants smoked when they were bored (16%, n=40), and showed heroism (16%, n=40). The types of alcoholic beverages consumed by these alcoholic consumers were mainly Beer (95.6%, n=239) and Wine (75.6%, n=189). However, in a smaller percentage, the alcoholic consumers consumed Moonshine equivalent to Kasippu (8.9%, n=22) and Tequila (11.1%, n = 28). In addition, among the people who use drugs, all of them said that oral intake is the method of drug usage.

Conclusion: The results indicated a high prevalence of non-smokers, non-alcoholics, and non–drug users, which is acceptable. Nevertheless, awareness of the adverse effects of smoking, alcoholism, and drug usage is required among adolescents.

Key Words: *Alcohol Consumption, Epidemiological, Rational Study*

Assessing the knowledge and practice on preventing Catheter-Associated Urinary Tract Infection (CAUTI) among Nurses in General Hospital, Trincomalee

Venuja T.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Catheter-Associated Urinary Tract Infection (CAUTI) has been associated with increased morbidity, mortality, hospital cost, and length of stay. A catheter is a closed, aseptic drainage system consisting of a path from the tip of the catheter inserted into the bladder to the urine collection bag. The purpose of this research was to explore the practice of nurses in General Hospital Trincomalee regarding urinary catheter care.

Methods: This research study used a descriptive cross-sectional design consisting of a self-administered questionnaire and a checklist to collect data on nurses' knowledge, and practice towards CAUTI prevention. The study was carried out within special units and wards in the General Hospital, Trincomalee. The accessible sample consisted of 300 nurses thus, 100 nurses were selected for the research. The collected data was analyzed using Microsoft Excel.

Results and Discussion: Many of the nurses were between 25 and 30 years old (38%, n=114), and 105 nurses were between 31-35 years old (35%). The remaining were 36–40 years old (13%, n=39) and 41–45 years old (14%, n=42). Only a minority (28%, n=84) of nursing staff received full marks for the questionnaire, indicating very good knowledge regarding CAUTI precautions. Furthermore, 26% of nurses got 23 marks (n=78), and 30% got 22 marks (n=90), indicating that more than half of the study's participants were unable to answer all of the knowledge questions correctly. They require additional opportunities to close this gap. In any case, 18 is the threshold for assessing weak knowledge, and no one scored less than 20. As a result, the nurses' total expertise was adequate.

Conclusion: Most of the respondents were unable to receive full marks. However, as 18 was the borderline for poor practice and no participant received below the margin, the overall practice of nurses can be considered average.

Key Words: CAUTI, Catheter, Aseptic, Cross-Sectional Study, Nurses

A study on knowledge, attitude, practice, and risk factors for Non-Communicable Diseases (NCD) among the Adult population between 20-30 years old in Medamulana area in Hambantota District, Sri Lanka

Helshika G.P.W.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Non-Communicable Diseases (NCDs) are a major contributor to the disease burden in developed countries and are increasing rapidly in developing countries. The impact of NCDs is devastating in terms of premature morbidity, mortality, and economic loss. The main objective was to assess young adults' knowledge, attitudes, risk factors, and practices.

Methods: This study was done in the Medamulana area of the Hambantota district. This is a cross-sectional, non-experimental, and quantitative study. The population was adults between the ages of 20 and 30 years. Participants were given a brief summary of the research study, including the procedures to be undertaken, the benefits, and the potential risks of participating. Data were collected using a modified and pre-tested WHO steps questionnaire. The collection was done by the participants taking a self-administered questionnaire. The data were analyzed using Microsoft Excel and SSPS version 22.

Results and Discussion: The total number of participants who responded was 168. The majority (35%, n=59) of the participants were older than 20–22 years old. Furthermore, 55.3% (n=93) of the participants were males. When considering the knowledge, most of the respondents (75%, n=131) had an overall knowledge regarding NCDs. In terms of practice, 36.9% (n=62) were tobacco users, and 47% (n=79) were alcohol consumers. In addition, (19.6%, n=33) practiced the consumption of unhealthy food. Moreover, around 36.9% (n=62) were physically inactive and did not engage in any sports or exercises. Individuals who never checked their blood pressure was 69% (n=115). Furthermore, the number of individuals who never checked for Diabetes Mellitus was 63% (n=106).

Conclusion: Although the participants are well educated on NCDs, the results show that they lead sedentary lifestyles, which could lead to NCDs such as cardiovascular disease, chronic respiratory diseases, cancer, and diabetes easily. So, just as much as education is important, the execution of these practices should also be improved.

Key Words: *Non-Communicable Diseases, Medamulana Area, Cross-Sectional, Sedentary Lifestyle*

Awareness of self-care practices for Diabetic Mellitus (DM) patients who attend the Medical Clinic in Base Hospital, Mahiyangana

Wijayasinghe D.J.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Diabetes Mellitus (DM) is considered a chronic metabolic disease characterized by elevated blood sugar levels and, over time, damages the heart, eyes, kidneys, blood vessels, and nerves. The purpose of this study was to evaluate the knowledge of self-care practices of diabetic patients known at oriental clinics.

Methods: The study included patients who were approached randomly between the ages of 30-60 years with no communication barriers or cultural barriers. Thus, a total of 80 participants were selected for the study. Data were collected through a questionnaire, which was developed by the researcher. The collected responses were analyzed by using SPSS software for manual content analysis.

Results and Discussion: The majority of the patients (55%, n=33) were 33 males. Furthermore, many of the respondents (61.6%, n=49) were within the age range of 50 to 60 years. Additionally, results showed that 61.66% (n=49) of patients had a family history of DM. When considering the self-care practice for the management of DM, 91.67% (n=73) of the participants were recommended to use a glucometer to measure their blood sugar levels. However, only 16.7% (n=13) used a glucometer to assess their glucose levels. Furthermore, a minority (3.33%, n=3) tested their urine to measure sugar levels in the urine. When considering the diet plan, many of the patients (58.3%, n=47) consumed a complex carbohydrate diet. In addition, the majority of the respondents (70%, n=56) engaged in low exercises such as walking.

Conclusion: Based on the responses, the majority of the self-care practices were not up to average. Even though patients have been engaged in low exercise, many did not follow the glucose monitoring and diet plan. Thus, there is a need for awareness programs on diabetes self-management recommendations that emphasize the importance of regular glucose monitoring and diet plans.

Key Words: *Diabetes, Non-Pharmacological, Family History, Mahiyangana*

Evaluating patients' knowledge, attitudes, and practice about Diabetic wound care among Diabetic Patients in the surgical ward, Provincial General Hospital, Badulla

Rajapaksha R.D.D.I.S.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Diabetic wounds carry a great risk of amputation of the affected area. However, only a few patients have knowledge, attitudes, and practices related to diabetic wound care. The aim of this study was to establish the knowledge, attitudes, and practice of diabetic wound care for patients with chronic diabetes in the male and female surgery departments of the provincial general hospital in Badulla.

Methods: A quantitative, descriptive, cross-sectional study design was used for this research. The sample population was chosen within 2 weeks and 100 responses were received. A self-administered questionnaire that was validated was used for data collection. The collected data were analyzed using descriptive statistical methods using the SPSS 25 statistical package.

Results and Discussion: Most patients (31%) were diagnosed with Type II diabetes. Furthermore, 16% of the respondents did not know about the type of diabetes that they had. About 12% of respondents did not have enough knowledge regarding diabetic wound care and only 20% of respondents had complete knowledge of diabetic wound care. In addition, only 48% of respondents knew that hyperglycemia was related to diabetic foot problems. The attitude toward diabetic wound care among the diabetic patients in the survey that was selected was good. Out of 100 respondents, clinical follow-up was 68%, following medication prescriptions were 71%, following prevention methods were 44%, and the attitude toward this disease condition was 67%. Respectively, most patients showed good attitudes toward diabetic wounds. The practice of preventing diabetes is the most important point of this study. Whereas, 81% agreed that feet should be washed daily, 47% of patients had done exercises, and 44% wore footwear when walking. However, they did not practice cutting nails correctly (41%) and 49% of patients did not practice wearing comfortable footwear.

Conclusion: The survey showed that active participation in prevention methods was not sufficient. The results indicate that knowledge of diabetic ulcers was poor. Attitudes and practices of diabetes patients on preventing diabetic ulcers were average.

Key Words: *Knowledge, Attitude, Practice, Diabetic Wounds Care, Surgical Ward*

Perception of Nursing care and patient satisfaction in Trincomalee Hospital

Thuvaraha V.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Nursing care is one of the major health care services. The patient's recovery is greatly aided by it. Patient satisfaction with nursing care is impacted by expectations, perceptions, and previous experiences. Nurses must deliver nursing care in a way that is consistent with a patient's expectations, which must be fully understood by care providers. The aim of this study was to assess the knowledge and perception of nursing care and patient satisfaction in Trincomalee Hospital, Sri Lanka.

Methods: A cross-sectional study was conducted among 255 patients. This study included patients from the surgical wards from July to August 2021, who were older than 18 years old. A self-administered questionnaire was used to collect data. The modified NSNS Satisfaction with Nursing Care Scale was used to evaluate the results, and SPSS 16.00 statistical software was then used to analyze the data.

Results and Discussion: The amount of time a nurse spent with patients was rated at 66.5%. About 67.8% (n=173) of the participants agreed that they were satisfied with how fast the nurses arrived when the patients called for them. The majority mentioned that the nurses were helpful (71.2%, n=160). However, a minority (12.3%, n=31) mentioned that nurses gave a sufficient amount of information regarding their condition and treatment. Furthermore, 16.9% (n=43) of the nurses had helped to put the patient's relatives' and friends' minds at rest. About 16.5% (n=42) of the nurses had listened to patients' worries and concerns. The patients who were in the age category of 18–40 seemed to be the age group that was most satisfied with the nursing care provided to them. The majority had a good satisfaction level with both male (63.3%, n=161) and female nurses (73.8%, n=188).

Conclusion: The results indicate that an average number of participants were satisfied with nursing care. They also had good satisfaction with both male and female nurses.

Key Words: *Nursing Care, Satisfaction, Patients, Hospitals, Trincomalee*

Knowledge and practices towards Exclusive Breast-Feeding (EBF) among Lactating Mothers

Deraniyagala S.W.U.S.Y.^{1*}, Dissanayake D.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The nutrients found in human milk are unique to humans and crucial for the newborn's healthy growth and development. Since exclusive breast-feeding (EBF) provides the child with necessary nutrients, including the mother's antibodies, it is preferable to non-exclusive breastfeeding as it also has a protective effect against both morbidity and mortality. The goal of this study was to identify the factors that influence lactating mothers' knowledge of and practices for exclusive breastfeeding.

Methods: A qualitative study was conducted among 100 lactating mothers from the MOH-Diagama, Lindula clinic. Data were collected from 100 consenting participants via a questionnaire, and the data were analyzed using Microsoft Excel.

Results and Discussion: The majority (98%) of participants mentioned that breastfeeding must be started immediately after delivery. About 55% of participants mentioned that EBF must be given for about 6 months. In terms of knowledge, 35% of participants mentioned that EBF must be given beyond 6 months, and 10% of participants mentioned that EBF should be given for less than 6 months. The majority (97%) of participants had heard about breastfeeding. In terms of practices, it was found that some of them did not practice exclusive breastfeeding in the correct manner. A significant number of mothers (75%) preferred to use EBF for the baby during the first 6 months. Only 25% of mothers preferred to feed breast milk and other food items during this time.

Conclusion: The majority of participants had sound knowledge regarding exclusive breastfeeding and they practice EBF. However, they did not show a high percentage of practices with regard to EBF. The practices towards EBF among lactating mothers must be improved, and guidelines for better support of lactating mothers must be provided within the community.

Key Words: *Breast-Feeding, Practices, Knowledge, Lactating Mothers*

Assessing the impact of Traumatic Head Injury on the patient and family

Gajaluxsi Y.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Every year, an estimated 69 million people worldwide suffer from a Traumatic Brain Injury (TBI) as a result of Road Traffic Accidents (RTA). Patients' and family members' experiences are important indicators of the quality of care and healing aspects for patients with TBI. As a result, the purpose of this research was to evaluate the effects of traumatic brain injury on patients and their families.

Methods: A case study was conducted among 50 head injury patients admitted to the teaching hospital in Jaffna between August and December 2021. A self-administered questionnaire was used to collect information. The data was analyzed using SPSS version 23.

Results and Discussion: According to the findings, RTA (72%, n=36) is the leading cause of traumatic head injuries in the northern province. TBI was more common in males (50%, n=25) aged 20-50 years. More than 74% (n=37) of the participants were cared for by a family member, and the effects of dependency were characterized as anger, helplessness, burden, decreased quality of life, negative family relationships, and somatic disturbances. The injury had a psychological impact on approximately 82% (n=41) of the patients and 76% (n=38) of their family members.

Conclusion: These findings show that traumatic head injuries have a significant physical and psychological impact on the patient and their family members. The psychosocial. The functioning of the caregivers is severely affected, which may lead them to experience psychosocial distress. This then emphasizes the need for better clinical decision-making, healthcare delivery, and the development of future healthcare policies and initiatives to improve services provided to TBI family members and individuals. These findings highlight the significance of future clinical decision-making, healthcare delivery, and the development of future healthcare policies and initiatives to improve the services provided to family members and individuals with TBI.

Key Words: *Traumatic Brain Injury, Road Traffic Accidents, Impacts Of Injury*

A study to assess the knowledge on breastfeeding practices of Postnatal Mothers in District General Hospital, Monaragala

Dilhani R.M.N.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Since ancient times, breastfeeding is considered a basic human activity essential for the survival of neonates and infants. The knowledge, attitudes, and practices toward breastfeeding are influenced by a number of diverse factors. The purpose of this study was to assess the knowledge and attitudes with regard to breastfeeding practices among postnatal mothers.

Methods: This was a cross-sectional study conducted among a conveniently selected 122 mothers of healthy neonates who were being breastfed and born between 36 and 42 weeks of gestation age. A questionnaire was used to collect data. Gathered data was analyzed using Microsoft Excel and descriptive statistics to express results in frequencies and percentages.

Results and Discussion: The majority of the sample (57.3%, n=70) had gone through multiple pregnancies. More than half of the mothers (54.1%, n=66) had completed delivery within 38-40 weeks. More than half of the participants (51.6%, n=63) knew the correct position of breastfeeding their neonates, and 26.2% (n=32) did not have adequate knowledge. A minority of the participants (25.4%, n=30) did not have any limit for breastfeeding. Furthermore, 59% (n=72) chose 20-25min as the time duration of feeding. Most of the participants (83.6%, n=102) agreed that colostrum is the first flow of breast milk and is important to maintain the immunity of the baby. In addition, many of the respondents (61.5%, n=75) knew about the golden hour of breastfeeding. Moreover, a significant number of participants (75.4%, n=92) agreed that breastmilk can provide protection from infections.

Conclusion: It was evident that the mothers had an average knowledge of breastfeeding. However, it is important to provide prenatal education to mothers and fathers on breastfeeding. It is recommended to strengthen public health education campaigns to promote breastfeeding.

Key Words: *Breastfeeding, Postnatal Mothers, Knowledge*

Sleep pattern disturbances and associated factors among post Covid-19 Hospital Staff Members in National Cancer Institute, Maharagama, Sri Lanka

Thennakoon T.M.N.T.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: Sleep is an essential basic need for stabilizing the physical, mental, and emotional well-being of individuals. Recent research studies suggested that there is a prevalence of sleep pattern disturbances in post Covid-19 patients that are related to environmental and physical factors. The purpose of this study was to determine the prevalence of sleep pattern disturbances and associated factors among post Covid-19 patients and to identify the factors associated with sleep pattern disturbances.

Methods: This was a descriptive cross-sectional research study. A total of 100 post Covid-19 patients who were affected by hospital staff members at the National Cancer Institute of Maharagama were selected using a convenient sampling method. An investigator-administered questionnaire was used to collect data. Data was analyzed using SPSS Statistical Software. Descriptive statistics and a chi-square test were used to analyze data.

Results and Discussion: Among the 100 participants, 31 experienced some kind of sleep pattern disturbances, but it had increased to 69% after being affected by Covid-19. Environmental factors such as noise increased from 8% to 14% after Covid-19, coldness from 6% to 27%, and other factors rose from 3% to 14% post-Covid. Physical factors like pain increased from 11% to 35% with the effect of the virus. Additionally, cough was another factor that increased from 6% to 62% with the infection of Covid-19. Further, difficulty in breathing rose from 8% to 34%. Conditions like diabetes, hypertension, and heart disease were identified as associated factors affecting the sleep pattern of post-Covid-19 patients.

Conclusion: Findings revealed that sleep pattern disturbances are common problems among post Covid-19 patients. The study explored that sleep pattern disturbances had a significant relation with the associated physical and environmental factors contributing to this problem. It is recommended to take needed actions to minimize environmental factors and modifiable physical factors.

Key Words: *Sleep Pattern Disturbances, Post Covid, Hospital Staff Members*

PP 054

A study of knowledge and practice among Tuberculosis Patients in Central Chest Clinic, Borella

Amarasinghe P. M.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Srilanka*

Introduction: Tuberculosis remains one of the deadliest infectious diseases responsible for millions of deaths annually across the world. This study has focused on assessing the level of knowledge, attitude, and practice on tuberculosis among registered patients in Central Chest Clinic, Borella.

Methods: A quantitative descriptive cross-sectional study was conducted among 120 registered patients at the Central Chest Clinic in Borella. A validated interviewer-administered questionnaire was used for the collection of data and data was analyzed using descriptive statistical methods with the use of Microsoft Excel.

Results and Discussion: Among 120 participants, 85% (n=102) had good total knowledge regarding tuberculosis signs, transmission methods, prevention, and medication. Out of all participants, 80% (n=96) had good practices regarding the control of tuberculosis. Among participants with a low education level (48.3%, n=58), 29.3% (n=17) had poor knowledge. Among the participants with low monthly income (8.3%, n=10), 48 (40%) had poor practice. Although overall knowledge and practice were good, the low-educated and low-income population showed low knowledge and practice. In addition, almost all participants (99%, n=119) experienced a positive influence from healthcare workers and current clinic setups. The majority of the population (63.3%, n=76) were satisfied with the current health education format while 26.6% (n=32) needed improvement in the program to make it more understandable and 10% (n=12) expected that health education programs needed to be more attractive.

Conclusion: This study highlighted the overall knowledge and practice regarding tuberculosis among patients who are registered in Central Chest Clinic, Borella. The findings revealed that the participants had a high level of overall knowledge and practice, and the areas in which need to be focused in the future.

Key Words: *Tuberculosis, Knowledge, Practice*

Identifying the risk factors for Non-Communicable Diseases (NCDs) among Patients who have been attending an NCD Clinic in Thanamalwila Divisional area, Sri Lanka

Chathurangi W.A.K.G.M.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Non-communicable Diseases (NCDs) have become more prevalent in Sri Lanka in recent decades due to changes in lifestyle. In order to plan, implement, and evaluate NCD prevention and control programs, it is critical to investigate the current state and trends in behavioral and biological risk factors in the country. Thus, the purpose of this study was to identify NCD risk factors in people attending NCD clinics in Thanamalwila Grama Niladhari Division.

Methods: A descriptive cross-sectional study was conducted among patients (n=150; age 18-70 years) attending the NCD clinic. A convenient sampling method was used to obtain the participants and a structured self-management questionnaire was used to collect data. The collected data were analyzed using the SPSS version.

Results and Discussion: Of the 150 participants, 64% (n=96) were female and 36% (n=54) were male. About 12% (n=18) of the men used tobacco and 13% (n=20) consumed alcohol. Of this, 3% (n=4) smoked marijuana and 13% (n=20) drank beer. The majority of the participants (74%, n=111) were physically inactive. Around 19% (n=28) ate junk food once a week, and 47% (n=70) cooked with 500 mL of oil once a week. Approximately 23% (n= 36) of the participants were overweight, with a BMI of 25-29 or higher. Nearly 74% (n=112) of the participants do not exercise daily, and 90% (n=135) spend their free time watching TV. And in terms of the educational level, the majority of the participants (42%, n=63) had 8 passes.

Conclusion: The study emphasizes that physical inactivity and obesity are major risk factors for the prevalence of NCDs. Physical inactivity and overweight/obesity were more prevalent in women and increased among individuals who were more educated. However, increasing education levels in the population decreased tobacco and alcohol use while increasing physical inactivity and obesity. Thus, it highlights the urgent need for multi-sectoral, population-based health promotion interventions, which are essential for effective NCD prevention and control in Thanamalwila's divisional area.

Key Words: *Non-Communicable Diseases, Diabetes, Cardiovascular Diseases, Hypertension*

PP 056

Assessing the knowledge, attitudes, and practices regarding Exclusive Breastfeeding (EBF) among the Postnatal Mothers in the Postnatal Ward, District General Hospital, Kegalle

Kumari M.G.G.^{1*}, Dissanayake D.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Exclusive Breastfeeding (EBF) benefits infants physiologically, immunologically, and psychologically, and it is critical for lowering infant mortality. Positive maternal attitudes toward breastfeeding are associated with longer breastfeeding duration and a higher chance of success. Therefore, the purpose of this study was to assess breastfeeding knowledge, attitudes, and practices among postnatal mothers regarding exclusive breastfeeding.

Methods: A descriptive cross-sectional study was conducted among postnatal mothers (n=120, aged 18–45 years) at the District General Hospital, Kegalle. A validated interviewer-administered questionnaire was used to collect data. The data was analyzed in Microsoft excel using SPSS version 22.

Results and Discussion: According to the research findings, 58.33% (n=70) of the participants had good knowledge of the significance of EBF. Breastfeeding was found to be more convenient, less expensive, and healthier for the baby than formula. Only half of the population (50.8%, n=61) had good practice in terms of EBF positioning and attachment. Regarding attitudes, the vast majority of participants (78.33%, n=94) had a positive attitude toward breastfeeding to continue for up to two years.

Conclusion: Based on the result of the study, the majority of mothers had average knowledge and practice. However, the respondents had a relatively good attitude toward EBF. Thus, it is required that postnatal mothers are given more knowledge and practice guidance. Thus, more awareness programs should be given regarding positioning and attachment when breastfeeding.

Key Words: *Knowledge, Attitude, Practice, Exclusive Breastfeeding, Mother*

Cervical Cancer knowledge and attitudes among Antenatal clinic attendees at the District General Hospital in Hambanthota, Sri Lanka

Wijayanthi B.W.I.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Cervical cancer is a major public health issue worldwide, with 500,000 new cases and more than 300,000 deaths per year. Cervical cancer is one of the most preventable and early detectable cancer forms. This study was carried out to assess the knowledge and attitudes towards cervical cancer and its prevention amongst antenatal clinic attendees in the District General Hospital, Hambanthota, Sri Lanka.

Methods: A descriptive cross-sectional study among pregnant mothers (n=112, age 18–35 years) who attended the antenatal clinic in the District General Hospital, Hambanthota. A self-administrated questionnaire was used to collect data and the collected responses were analyzed using SPSS version 22.

Results and Discussion: Among the participants, the majority (93.1%, n=104), had a certain idea about cervical cancer. Furthermore, approximately half of the participants (40%, n=42) had very little knowledge of the risk factors for cervical cancer. In addition, only 32% (n=36) had heard of Pap Smear Tests. Of the 36 participants who had heard about the Pap Smear Test, 13.8% (n= 5) were too embarrassed to undergo it. Moreover, the knowledge about cervical cancer and the level of education had a chi-square value of 50.07 and a P value of 0.00 (df=6) indicating a statistically significant at p 0.05. Knowledge and attitude towards cervical cancer and its prevention were nearly similar to other studies carried out in Sri Lanka.

Conclusion: The knowledge and attitude on cervical cancer can be considered average. However, knowledge and attitude towards cervical cancer can be improved by conducting awareness programs and campaigns for schoolchildren and young female groups.

Key Words: *Cervical Cancer, Pap Tests, Knowledge, Attitudes*

PP 058

Determining the prevalence and patterns of alcohol consumption and usage of drugs among the Youth of the Wathogala G.N division in Galle District

Jeewmali K.S.D.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Smoking, alcohol consumption, and usage of drugs are the leading cause of preventable disease conditions and deaths worldwide. This can become a habit and eventually become an addiction. The aim of this study was to determine the prevalence and patterns of alcohol consumption and the usage of drugs among 15 to 25-year-old youth in the Galle district.

Methods: This research can be categorized as a descriptive epidemiological quantitative study. Participants were both male and female in the age group of 15 to 25 years in the Wathogala "Grama Niladhari" (G.N) division in Galle district, Sri Lanka. The sample included 250 youths from the selected G.N division in the district of Galle. Each participant was given a self-administrated questionnaire with the information sheet and consent form describing the objectives and rationale of the study. The data was then analyzed using Statistical Package of Social Science (SPSS) 20th version and Microsoft Office Excel 2010.

Results and Discussion: This study revealed that all smokers, alcoholics, and drug users are male students. A high percentage were non-alcoholics (80.0%, n=200), non-smokers (87.6%, n=219) and non-drug users (94.4%, n=236). Present alcoholics, smokers, and drug users are 18% (n=45), 10% (n=25), 5.6% (n=14) respectively. Considering the patterns of alcohol consumption, a higher percentage of the youth smoke while socializing (68%, n=170) when stressed (28%, n=70), sad (24.0%, n=60), bored (16%, n=40) and showing heroism (16%, n=40) being the lowest. The majority of alcohol-related youth are drinking beer (95.6%, n=239) and arrack (75.6%, n=189) compared to kasippu (8.9%, n=22) and tequila (11.1%, n=28). Among the people who use drugs, 100% of the youth use oral intake as the method of drug usage.

Conclusions: The available evidence from this study shows a high prevalence of nonsmokers, non-alcoholics and non-drug users in the selected area. Nevertheless, the awareness of the adverse effects of smoking, alcoholism, and drug usage is low among some of the youth since some of them are in denial and not willing to accept the consequences of their habits.

Key Words: *Prevalence, Patterns, Alcohol, Drugs, Consumption*

Knowledge, attitudes, and practices related to cancerous food consumption among Adolescents in rural areas, Kurunegala, Sri Lanka

Abeyasinghe A.M.S.T.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Cancer has become the most common chronic and non-communicable disease in the world. According to present research, food consumption has been anticipated to have an indirect effect on many cancers in humans. The purpose of this study was to investigate adolescents' knowledge, attitudes, and practices regarding carcinogenic food intake in Kurunegala, Sri Lanka.

Methods: A cross-sectional study was conducted among 160 students between 10 and 19 years of age from Pimburuwellegama Central College, Gonagama, Kurunegala. The convenient sampling technique was used to distribute a self-administered, close-ended questionnaire including three sections: knowledge, attitude, and practice. The collected data were descriptively analyzed using SPSS version 22.0.

Results and Discussion: According to the statistics, the median knowledge score was 11.32 out of 18 or 67.2% (n=108) of the total, the attitudes score was 14.00 out of 21 or 66.6% (n=107) the total, and the practice score was 8.00 out of 16, or 50% (n=8) of the total, with a decreased gradual decline in knowledge, attitude, and practice of 67.2% (n=108), 66.6% (n=107), and 50% (n=80), respectively. For knowledge and attitude, a weaker correlation of 0.232, significant at 0.01 was observed, whereas no association was observed for the knowledge and practice bivariate correlations.

Conclusion: Adolescents had significantly lower levels of knowledge, attitudes, and practices about carcinogenic food eating, as well as the lowest correlation across the three factors. In this regard, planning and implementing novel interventions aimed at promoting significant knowledge and attitudes about carcinogenic food intake would enable the improvement of this situation.

Key Words: *Carcinogenesis, Adolescent, Cancerous Foods*

Awareness of the Non-Pharmacological methods of management for Diabetes Mellitus (DM) among patients who attend the Medical Ward of Galauda Divisional Hospital, Badulla, Sri Lanka

Dissanayaka D.M.S.S.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences Welisara, Sri Lanka*

Introduction: Diabetes is a long-term metabolic disorder. According to the IDF's (International Diabetes Federation) most recent figures, diabetes is on the rise in Sri Lanka, affecting 8.5% of adults in our country. Diabetes affects 1 in every 12 adults today, totaling 1.16 million people. This study aimed to assess people's awareness of non-pharmacological methods for preventing diabetes and its associated factors.

Methods: The study included 100 Diabetes Mellitus patients aged 20 to 60 from the medical clinic and medical ward of Divisional Hospital - Galauda in Badulla. A close-ended self-administered questionnaire was distributed using random sampling. The collected data were analyzed using SPSS.

Results and Discussion: Out of 100 participants, most were females (60%). A relatively high number of individuals were 50-60 years of age (40%). A high percentage of participants were found to have a family history of Diabetes Mellitus (57%). About 32% of the individuals were housewives. The majority of the participants use Insulin (68%) whereas the rest use pill-based Medication. Most of them believed that they could control their diabetes only by taking the medication without controlling their diet, exercise, etc. Most of the respondents did not engage in exercise (75%). A high number of participants did not have healthy eating habits (68%). Only 44% of the individuals had undergone herbal therapy. According to Sri Lankan health records, more than 55 people receive medication without non-pharmacological alternatives. Furthermore, the research differs from these data since the majority of participants in this research site had a poor level of education and lacked knowledge about diabetes mellitus.

Conclusion: According to the overall results, the majority of respondents used pharmacological methods rather than non-pharmacological methods to manage diabetes, indicating a lack of knowledge about non-pharmacological methods. Furthermore, many of the respondents did not engage in exercising or eating a healthy diet. Thus, awareness campaigns can be organized to raise knowledge of non-pharmacological diabetic therapies.

Key Words: *Diabetes, Pharmacological, Insulin*

PP 061

Implications of knowledge towards Tuberculosis (TB) among non-medical staff and other frequent stakeholders of National Hospital for Respiratory Diseases, Welisara, Sri Lanka

Wijayadasa M.P.N.K.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Tuberculosis (TB) persists as a global public health problem of a serious magnitude requiring urgent attention. Alleviating illness, suffering, and death of individuals caused by TB is a major humanitarian concern and calls for a patient-centered approach to TB control. The main objective of this study was to assess the level of knowledge and attitudes towards TB among non-medical staff and other frequent stakeholders.

Methods: The study was designed as cross-sectional qualitative research. Randomly sampled 132 participants over 20 years of age were recruited in the study sample. A self-administered questionnaire was used to collect data. It consisted of 17 questions and the results of 0-5 marks were interpreted as poor knowledge, 6-12 marks, and fair knowledge while participants who received more than 13 belonged to the category of having good knowledge. Captured data was analyzed using SPSS and Microsoft Excel.

Results and Discussion: Among the study sample, 80 participants (60.6%) were females and the majority of the participants (71.9%, n=95) had received education up to 9-12th grade. Further, 80 (60.6%) of the participants visited the hospital 5-7 days per week and 70 (53%) of them stayed 6-10 hours per day in the hospital. According to the responses, the majority of the participants (62.5%, n=83) had good knowledge, and a minority (31.5%, n=42) had a fair understanding. Moreover, 6% (n=8) of the participants had poor knowledge of TB. When considering the demographic association, the age group 31-40 years had the highest percentage (75%, n=99) of good understanding while the 50-60 age group had the lowest percentage (40%, n=53) in the same category. Moreover, participants who visited on daily basis had a remarkably elevated level (90%, 119) of knowledge about TB.

Conclusion: The study showed that the knowledge and attitudes of frequent non-medical stakeholders of the hospital were at a satisfactory level with a 64.5 % overall probability of having good knowledge. It was evident that with increasing age knowledge & attitudes towards TB was decreasing. Thus, it is recommended to conduct focused community-based campaigns to educate people on TB required as part of community engagement for TB control.

Key Words: *Tuberculosis, Non-Medical Staff, Respiratory Diseases*

Knowledge, attitudes, and practices among drivers on First-Aid and Pre-Hospital care in the Boralesgamuwa Police Area

Wijekoon W.M.P.P.^{1*}, Hewawitharana P.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Road traffic injuries are a growing problem disproportionately affecting low-income and middle-income countries. The drivers' knowledge, attitude, and practice about pre-hospital care and first aid are inadequate in Sri Lanka. Therefore, this study aimed to evaluate the knowledge, attitudes, and practice of first aid and pre-hospital care among drivers in the Boralesgamuwa police area.

Methods: This cross-sectional study was carried out among drivers (n=101) in different education categories, different age groups, and different driving experiences in Sri Lanka. A structured questionnaire was used to obtain the data. A simple convenience sampling method was used for data collection. Data analysis was done using SPSS and Microsoft Excel.

Results and Discussion: All participants were males, and 50% (n=51) of drivers were educated up to O/L, 32% (n=32) up to A/L, and 18% (n=18) were higher-educated people. In terms of their knowledge, 33% (n=33) of total drivers had low knowledge, and 17% (n=17) had good knowledge of first aid and pre-hospital care. In terms of attitude, 55% responded by saying they would call an ambulance after witnessing an accident. In terms of practice, a minority (10%, n=10) had driving experience for less than 5 years and 12% (n=12) had driving experience of more than 21 years. Overall, 45% of all drivers had average knowledge, attitudes, and practices regarding first aid and pre-hospital care.

Conclusion: According to the study, the majority of the drivers had a basic understanding of first aid and pre-hospital care. Yet, in terms of practice, only a minority had practice related to first aid. However, by organizing various educational programs for the drivers, pre-hospital care and first aid skills can be increased in Sri Lanka.

Key Words: *First-Aid, Pre-Hospital Care, Drivers, Injuries, Experience, Knowledge*

Evaluating the impact of knowledge and practices on Diabetes Mellitus among Family Medical Clinics: A Case Study in Base Hospital Kiribathgoda, Sri Lanka

Wijerathne A.G.P.^{1*}, Sameera A.G.L.A.¹

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Diabetes Mellitus is a significant concern in modern-day society. There is strong evidence that preventative approaches for diabetes mellitus and its consequences in developing countries are inadequate. Thus, the aim of this study was to evaluate the impact of knowledge and practice on diabetes mellitus among family medical clinics.

Methods: A mixed methodology design was used and data was obtained using a questionnaire analysis based on both primary and secondary data carried out in the study. The sample consisted of 101 patients who attended the Kiribathgoda Base Hospital. Statistical analysis was done using SPSS Version 20.

Results and Discussion: The findings indicated that, of the 101 participants, 60% (n=61) have type 2 diabetes. More than 65% (n=66) of the respondents had been diagnosed with diabetes in less than three years, and more than 57% (n=58) of participants think they are knowledgeable about diabetes mellitus. In terms of the participant's behavioral patterns, 48% (n=48) did not get enough sleep, and over 65% (n=66) experienced high levels of work stress. In addition, 73% (n=74) of the sample's diabetic individuals do not take insulin. Lack of exercise is highlighted as a price concern that should be addressed. Out of the selected participants, merely 27% (n=27) do exercise regularly and over 57% (n=58) stated that they did not exercise at all.

Conclusion: More than half of the respondents were knowledgeable with regard to this condition. However, getting enough sleep, rest, and exercise were not practiced in terms of managing this condition. Furthermore, only the BMI and the years of using diabetes medicine were regarded relevant in determining the blood sugar level under 5% statistical significance after the study developed the regression model from the original descriptive data analysis. This demonstrates the necessity for awareness campaigns to inform and empower these patients so they can adopt healthier lifestyles.

Key Words: *Diabetes Mellitus, BMI, Participation, Exercise, Blood Sugar Levels*

PP 064

The relationship between Employee job satisfaction and their work performance as nurses, assistants, and minor staff in the National Institute of Mental Health (NIMH), Mulleriyawa

Rathnayaka R.M.S.D.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Employees are the most valuable resource in any organization. Innovation cannot be generated without humans. It is very true for an organization; the true assets of an organization are employees. Employee satisfaction is very important to improve productivity in an organization. Employee satisfaction is the extent to which an individual is happy with their job and the role it plays in their life. This study aimed to explore the relationship between employee job satisfaction and work performance.

Methods: A cross-sectional study was carried out among 100 employees selected using a random sampling method at NIMH. A structured questionnaire was used for data collection and Microsoft Excel was used to analyze the data.

Results and Discussion: Half of the staff were nurses, 20% were assistants and 30% were minor staff. The majority of the participants (34%) were females. About 89% of the employees agreed that a high level of salary leads to a higher level of employee satisfaction which leads to higher performance. The study also showed that 90% believe there is a positive relationship between promotion/growth and employee performance. Moreover, 83% of the population stated that good performance feedback improves employee performance. In addition, 91% of the employees agreed that respect received from others will improve job satisfaction, which will lead to improved employee performance. Furthermore, 87% of the respondents also believe that job security increases their performance.

Conclusion: The result of the study showed that salary, promotions, performance feedback, and safety were factors that could improve their performance the most. Having a good opportunity for promotions and growth is also a huge influencing factor to employee satisfaction which influences employee performance. Thus, paying heed to these factors can aid in increasing employee satisfaction which increases employee work performance.

Key Words: *Employee Satisfaction, Healthcare Workers, Employee Performances*

Knowledge, attitudes, and practices on complementary feeding among Mothers of Children aged 6-24 months in Hali Ela MOH

Wickramarachchi W.A.N.P.^{1*}, Dissanayake D.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The nutritional quality of the newborn is directly related to the child's well-being. Malnutrition rates rise between the ages of 6 and 18 months, during the phase of complementary feeding. When a mother's milk is no longer sufficient to supply the nutritional demands of a newborn who is breastfed, complementary feeding is introduced. Understanding mothers' social beliefs, knowledge, attitudes, and practices concerning supplemental feeding is a critical step before developing an intervention plan to avoid child malnutrition. The aim of this study was to assess the mothers' knowledge, attitudes, and practices about complementary feeding.

Methods: This was a descriptive cross-sectional study that included 284 mothers with children between 6 to 24 months of age. Areas with a high prevalence of malnutrition in selected midwives are in Hali Ela MOH. Among the 284 selected mothers, 200 consented to participate in the study, giving a response rate of 70%.

Results and Discussion: The present study showed 171 (60.5%) mothers initiate their breast milk soon after delivery, 26.5% (n=75) 1 day after birth, 18.5% (n=53) 2-3 days after birth; and 3.5% (n=10) mothers had no idea about the initiation of breastfeeding practices. Based on the responses, the initiation of complementary food starts at the age of 8 months, 6 months, and 4-5 months, with 32% (n=91), 52% (n=148), and 16% (n=45), respectively. Among the mothers, 68% (n=193) did not properly clean their children's hands and utensils before feeding. The socio-demographic data shows that the study was done under subcategories such as the age of the mother, mother's religion, mother's occupation, mother's education, etc. In terms of knowledge, 86 individuals (56%) stated that they did not know about adding iodized salt. Furthermore, the majority (43%, n=152) did not know about iron-rich food. In terms of attitudes, about 48% (n=96) had a negative attitude towards a high frequency of food during the illness.

Conclusions: Mother's knowledge regarding the timing of complementary feeding is adequate but practices are unsuitable. The majority of them are not aware of the current recommendations for complementary feeding. It is essential to give accurate information and education about complementary feeding to prevent malnutrition and improve the health status of children. The mothers who took part in the study were well-educated regarding complementary feeding.

Key Words: *Malnutrition, Complementary Feeding, Cross-Sectional Study, Hali Ela MOH*

Assessing the knowledge about preventive practices on Bronchial Asthma among the Garment Factory Workers in Panadura

Subodani W.P.D.^{1*}, Dissanayake D.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: According to the World Health Organization (WHO), asthma is a chronic disease characterized by recurrent attacks of breathlessness and wheezing and occurs in people of all ages. It often starts in childhood, although it can also develop in adults, and affects people of all ages. Worldwide, deaths from asthma have reached over 18,000 a year. According to the latest WHO data published in 2018 Asthma deaths in Sri Lanka reached 6,248 or 4.92% of total deaths. The aim of this research was to assess the knowledge about preventive practices on Bronchial Asthma among industrial workers in a Garment Factory in Panadura District.

Methods: A cross-sectional quantitative study was carried out including 80 employees from a selected garment factory in Panadura. Data was collected using a self-administered questionnaire and quantitative analysis using statistical procedures have been done.

Results and Discussion: The study showed 50% (n=40) of the respondents were aged between 30-39 years. Furthermore, the majority (75%, n=60) of the workers were females. Of the total respondents, 40% (n=32) were educated up to G.C.E O/L. Assessment of knowledge of industrial workers regarding Bronchial Asthma revealed that 43% (n=34) of the workers had the average ability, and 24% (n=19) had poor knowledge. However, 56.2% (n=45) of the workers had average knowledge of preventive practices for Bronchial Asthma while 13.7% (n=11) had poor knowledge of preventive practices, and 30% (n=24) had good knowledge of preventive practices.

Conclusion: According to the results of this study, many individuals had average knowledge regarding bronchial asthma. About half of the individuals had knowledge regarding preventive practices. Thus, the study shows that there should be more awareness programs, and health education programs to improve the knowledge regarding Bronchial Asthma and actions that can be taken to maintain public health for a better nation.

Key Words: *Asthma, Chronic, Breathlessness, Wheezing, Bronchial*

Study on knowledge level regarding Type-II Diabetes Mellitus (DM) and the screening tests among Police Officers in Colombo Crime Division, Colombo 09, Sri Lanka

Pannila S.L.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: DM is a chronic, non-communicable disease that is a significant health issue in Sri Lanka and is growing rapidly. Diabetes control and the prevention of complications rely heavily on people's understanding of the disease and research. Even though many people have diabetes or are at risk of developing diabetes, they do not know how to receive proper treatment or prevent it. This study aimed to determine the level of knowledge among police officers regarding DM and screening tests for DM.

Methods: The study followed a descriptive, cross-sectional study design. The research was carried out among 100 Police Officers from the Colombo Crime Division, recruited using convenient sampling techniques. A pre-tested, close-ended, self-administered questionnaire was used to collect data, and the collected data were analyzed using the Statistical Package for the Social Sciences (SPSS).

Results and Discussion: Among 100 participants, 49% were aged 30–39 years. Most of the respondents (55%) had family members suffering from DM. According to the study, a significant number of participants (95%) had good general knowledge with regard to Type II DM. When considering the overall knowledge with regard to Type II DM, a high number of participants (70%) had an average knowledge of DM. Most of the participants (62%) knew about the fasting blood sugar test. Only 46% of the respondents knew about the Hemoglobin A1C (HbA1c) blood sugar test. Considering the level of knowledge regarding the effect of lifestyle changes, exercise, and food habits on developing DM, 75% of the individuals had good overall knowledge. A relatively high number of individuals (73%) had average knowledge of risk factors for DM. Most of the participants (57%) knew about dietary habits, exercises, and medications that led to maintaining DM. A significant number of individuals did not have much knowledge regarding ways of preventing complications, and 17% also agreed that they did not know about ways to prevent complications.

Conclusion: Participants in this study had average knowledge of DM-related factors and a better overall understanding of DM. Some of the participants were unaware of the screening tests that were done, and they knew less about complications and how to avoid them in relation to DM. The government must act to maintain public health for a better country, and there should be more health education and awareness campaigns to increase knowledge about DM.

Key Words: *Diabetes Mellitus, Dietary, Knowledge*

Impact of parenting on students' academic performance

Premarathna W.P.I.M.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: In an era of exposure, it is difficult to raise individuals who can handle parental attention and care while still providing a successful, wise, and moral future for their offspring. Authoritarian parenting is best suited for the child's academic performance because the child will always work within a certain framework to reduce the impact of external influences on the child's achievement, even though it is acknowledged that parenting is appropriate and best when it comes to parenting. The aim of this research is to assess the impact of parenting on the academic performance of students. It will guide parents to use appropriate parenting to enhance their children's academic performance.

Methods: Convenient sampling was used to assess the quantitative correlational study. A total of 160 participants (80 males and 80 females) attempted the online PAQ questionnaire. However, only maternal parenting was examined in this study. The collected data was analyzed using SPSS.

Results and Discussion: A total of 142 students (88.75%) were from 20 to 25 and 18 to 26 in age. About 29% (n=46) of students stated that they were influenced by free parenting (a parenting style that responds to low demands is very lovable, but the guidance and rules are minimal). Moreover, 30% (n=48) of the student's study was affected by democratic parenthood (a parenting style characterized by joint decision-making, mutual respect, autonomy, and responsibility). In addition, 41% (n=65) were influenced by authoritative parenting (a parenting style where the parents are nurturing, responsive, and supportive, yet establishes limits for children). The independent sample t-test mentioned above revealed that democratic parenting does not differ based on gender. Democracy and the relationship between students' academic work and parenting did not exist (160) = -.045, p = .573.

Conclusion: Based on the overall results, the majority of the students were affected by parenting styles. The majority were affected by authoritative parenting and democratic parenthood. Yet, there was no relationship between democratic parenthood and academic work. In addition, the majority of children with strong academic achievement generally exhibit authoritative parenting styles.

Key Words: *Students, Parenting, Academic Performance*

Knowledge and practice regarding Non-Communicable Diseases

Tharangika U.W.A.T.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences Welisara, Sri Lanka*

Introduction: Non-communicable diseases (NCDs) are chronic conditions that progress slowly and are brought on by a person's habits or lifestyle. Nearly 1 in 5 people in Sri Lanka experience an early death due to non-communicable diseases, which account for more than three-quarters of all deaths. This study aimed to investigate knowledge and practice on NCDs among people aged 18 to 75 in the Kendaliyaddapaluwa East Gramasewa division.

Methods: Using a convenient sampling technique, a descriptive cross-sectional study was carried out among people in the Gramasewa division of Kandaliyaddapaluwa who were between the ages of 18 and 75. An interviewer-administered questionnaire was used to collect data, which was then analyzed using Microsoft Excel 2010 software.

Results and Discussion: Out of 100 residents in the area, the majority of them were 29–50 years of age (60%). Most of the participants (54%) knew about NCDs. Among them, the majority suffered from blood pressure (63%) and diabetes (64%). Many villagers agreed that a healthy diet (52%), physical activity (69%), avoiding smoking or tobacco use (55%), and limiting alcohol consumption (50%) were very important to prevent NCDs. However, a significant number of individuals (80%) were addicted to a daily salt intake of more than 5 g/day. Furthermore, most of the participants (90%) were addicted to cigarettes, and 25% of those individuals had Diabetes Mellitus. In addition, 20% of liquor consumers admitted to having heart disease. The majority of the respondents (67%) were aware of BMI. About 48% of the participants consume instant food, and only 39% of the participants perform exercises twice a week. A high number of individuals (80%) were obtaining clinical services. Furthermore, most of the participants (65%) strongly agreed on doing routine investigations related to NCDs.

Conclusion: According to the study, the villagers had some knowledge of NCDs and their risk factors. However, despite this knowledge, they continued to live their regular lives, which limited their ability to prevent and control diseases. They can contribute to the prevention and control of NCDs, including health education programs, and improve people-centered health care through improved training and community engagement.

Key Words: *Non-Communicable Diseases, Lifestyle, Knowledge, Prevention*

Assessment of contributing factors towards stress among Nurses in the General Hospital in Colombo District, Sri Lanka

Weerathunga G.K.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The World Health Organization (WHO) has considered stress a global epidemic, which has recently been observed to be associated with 90% of visits to physicians. Work-related stress is one of the most important workplace health risks for employees worldwide. Stress can be defined as a physical or psychological stimulus that can produce mental tension or physiological reactions that may lead to illness. The aim of this study was to assess the contributing factors towards stress among nurses in the General Hospital in the Colombo district.

Methods: A descriptive cross-sectional quantitative study was carried out including 311 nurses working in medical and surgical units of the General hospital in Colombo. Data were collected using self-administered questionnaires and were analyzed using SPSS software.

Results and Discussion: The most intense stressors for nurses working in wards were related to workload followed by emotional issues related to death and dying, and problems relating to supervisors. A considerable portion of the participants, 35% (n=109) claimed that they were stressed due to the workload while 16% (n=50) reported that problems with supervisors caused them stress. Also, a fewer number of nurses (12%, n=37) stated that death and dying seen at the hospital were stressful for them.

Conclusion: The study findings illustrated that the most common factor contributing to stress among nurses was the workload. However emotional issues related to death and dying and conflicts with supervisors were also identified as some other factors which made the nurses stressed.

Key Words: *Stress, Contributing, Epidemic, Physical, Psychological, Stimulus*

**Knowledge, attitudes, and practices on hand hygiene among Intensive Care Unit (ICU)
Nursing staff in a Government Hospital in Sri Lanka**

Chathurangika P.D.A.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Hand hygiene practices of nursing staff are effective to measure in preventing hospital-acquired infection. Our study highlights the urgent need for reducing measures to increase the knowledge, attitudes, practices, and facilities available for hand hygiene in the ICUs in the Lady Ridgeway Hospital which may play a very important role in increasing hand hygiene compliance among the ICU nursing staff and reducing cross-transmission of infection among the ICU patients. The aim of this study was to determine the knowledge, attitudes, and practices on hand hygiene among ICU nursing staff.

Methods: A descriptive cross-sectional study was carried out among 80 ICU nursing staff from a government Hospital. Data was collected using a self-administered questionnaire. The collected data was analyzed using Microsoft Excel.

Results and Discussion: Among the participants, 45% (n=36) had received formal training on hand hygiene within the past 3 years. Considering knowledge of hand hygiene, 92.5% (n=74) had good knowledge regarding hand hygiene and recognized the importance of health workers' hands as a route of cross-transmission of harmful germs. However, the majority 70% (n=56) believed that the hospital environment was the most common source of germs responsible for the infection, while only 25% (n=20) believed that germs present in the patient were the main source of infection. Considering attitudes on hand hygiene, only 40% (n=32) always used proper hand hygiene practices. Emergency situations and other priorities made hand hygiene more difficult for 42.5% (n=34) of respondents. Most (60%, n=48) felt guilty if they did not practice hand hygiene. About 75% (n=60) agreed that they skip hand hygiene because they forget or have more important things to do. Considering practices for hand hygiene, the majority 82.5% (n=66) stated that facilities were insufficient for hand hygiene in their line of work. Around 32.5% (n=26) remember to follow hand hygiene due to the infection prevention notice boards, and 47.5% (n=38) could not attend the hand hygiene course due to time pressure. Only 45% (n=36) were satisfied with the facilities that were available for hand hygiene.

Conclusion: According to the study, the majority of respondents had moderate knowledge, approximately half had positive attitudes, and the majority had poor hand hygiene practices. Furthermore, nearly half of the respondents felt that the facilities for hand hygiene were insufficient.

Key Words: *Hand Hygiene, Knowledge, Attitude, Practice, Intensive Care Unit*

The basic First-Aid knowledge among the Parents of Preschool Children in Rathgama Divisional Secretariat of Galle District

De Silva W.A.M.^{1*}, Dissanayake D.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: First aid is the immediate and temporary treatment of a victim of sudden illness or injury while awaiting the arrival of medical aid. This study aimed to assess basic first aid knowledge among the parents of preschool children in the Rathgama divisional secretariat of the Galle district.

Methods: A quantitative descriptive cross-sectional study was conducted by using a convenient sampling technique among 202 parents of preschool children in the Rathgama Divisional Secretariat of Galle District. The respondents were interviewed on a pre-tested structured questionnaire after getting their consent. Following that, a self-administered questionnaire was distributed, and the collected data was then analyzed using SPSS software.

Results and Discussion: Among the participants, 87.6% (n=177) were mothers. The majority (70.8%, n=143) of the participants had education up to the secondary level. Considering first aid for burns, most respondents (94.6%, n=191) were aware that it is essential to wash the burn area with cold running water for at least 10-15 minutes. Only 3.5% (n=7) were aware that applying oil/butte/toothpaste to a burn wound is harmful. Only 4% (n=8) were aware that there are numerous ways fire is generated. A significant number, 95% (n=192) were aware that it is best to cover the burn wound with a clean piece of cloth or gauze. When it comes to the knowledge regarding first aid provided in a case of choking, about 94.6% (n=191) knew that 5 firm back blows should be given between the baby's shoulder blades. A significant number (92.1%, n=186) were aware that it is not accurate to remove any object from the mouth after choking unless it is seen clearly. When considering first aid for head injury patients, many (90.1%, n=182) respondents knew what to be done. Furthermore, most parents (90.6%, n=183) knew that vomiting, diarrhea, and loss of consciousness could be seen in serious injuries. In addition, the majority of the respondents (91.1%, n=184) had good knowledge of first aid for fractures. Furthermore, 88.9% (n=180) were familiar with first aid for poisoning and 91.1% (n=184) for epilepsy.

Conclusion: Based on the results the majority of the participants had only completed secondary education level. However, they had good basic first-aid knowledge regarding burns, head injuries, and choking incidents.

Key Words: *First-Aid, Parents, Preschool Children*

Prevalence of risk factors for treatment default among Tuberculosis (TB) patients of Chest Clinic in National Hospital for Respiratory Diseases, Welisara, Sri Lanka

Wickramasinghe R.D.C.H.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Tuberculosis (TB) remains a major public health threat throughout the world, particularly in developing countries. Evaluating the treatment outcome of tuberculosis and identifying the associated factors should be an integral part of tuberculosis treatment. This study aimed to assess the prevalence of risk factors for treatment default among TB Patients at the Chest Clinic in the National Hospital for Respiratory Diseases, Welisara, Sri Lanka.

Methods: Descriptive cross-sectional study using a standardized self-administered questionnaire was used to collect data. Questionnaires were numbered and consent forms were provided and explained. The questionnaire was distributed among individuals who were diagnosed as positive for tuberculosis. Thus, the sample size of this study was 100 patients from clinics.

Results and Discussion: Half of the respondents (50%) were more than 50 years old and only a minority were less than 30 years old (8%), and between the ages of 30-40 (12%). Only 30% of the participants had education up to O/L and 20% of patients up to Grade 9. There were 40% of patients who had Higher Education and 10% of participants who did not go to school. When considering the factors that affected the treatment default of TB, 16% of the patients lived within 20-40 km. Furthermore, many of the participants (70%) did not have any family member or relative to accompany them to the clinic. In addition, 70% of the patients were affected by social stigma.

Conclusion: Based on the results, there seem to be certain factors that result in treatment default among TB patients. Thus, there is a need to address these issues through workshops and various awareness programs.

Key Words: *Tuberculosis, Chest Clinic, Treatment*

PP 074

Knowledge and practices regarding the usage of Personal Protective Equipment (PPE) in the prevention of Covid-19 infection among Nurses in Base Hospital, Gampola, Sri Lanka

Jayasundara K.P.W.D.^{1*}

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Covid-19 has been reported as a continuing global pandemic since its first appearance in December 2019 in Wuhan City in China. Few local studies were conducted to determine Covid-19 among healthcare workers. According to the studies, protecting healthcare personnel remains an issue in resource-limited situations. The purpose of this study was to determine the level of knowledge about PPE among nurses at Base Hospital in Gampola, Sri Lanka.

Methods: A descriptive cross-sectional study was carried out by including 200 nurses who were working at wards and ICU in Base Hospital, Gampola using a simple random sampling technique. The data was obtained using a closed-ended, self-administered questionnaire. The responses were analyzed with the help of Microsoft Excel.

Results and Discussion: A higher number of participants (44.2%, n=88) were between the ages of 41-50 years. Most of the participants were females (94%, n=188). A substantial number of individuals (90%, n=180) worked in wards, whereas the rest worked in the ICU. When considering the knowledge, many nurses (94%, n=188) had not obtained experience from workshops regarding PPE. About 68.4% (n=137) knew about the indications of PPE. However, when coming to knowledge about the components of PPE, many of the nurses (73%, n=146) did not know them. When considering the practice of the usage of PPE, about 43.8% (n=88) did not follow the correct steps in donning. In addition, the majority of the nurses (52.8%, n=106) did not follow the accurate steps in doffing procedures.

Conclusion: According to the result, most nurses had insufficient knowledge about the components of PPE, and the practice of usage of PPE during Donning and Doffing procedures. To meet upcoming challenges, training programs must be established to increase the knowledge and correct usage of PPE for the prevention of Covid-19.

Key Words: *Knowledge, Prevention, Personal Protective Equipment*

Critical care Nurses' knowledge and practices regarding Total Parenteral Nutrition (TPN) of critically ill patients in Teaching Hospital Anuradhapura

Kumari W.N.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Total Parenteral Nutrition (TPN) is used to administer early nutrition support therapy to critically ill patients. Nutrition helps maintain immunity, and health and is directly related to patient outcomes. It reduces the time a patient spends in the Intensive Care Unit (ICU) and improves their prognosis. It is crucial for nurses to have solid TPN knowledge and experience. The purpose of this study was to determine the knowledge and practices regarding TPN in a critical care setting at the teaching hospital in Anuradhapura, Sri Lanka.

Methods: This was descriptive and quantitative research that was done in the ICUs of the Teaching Hospitals at Anuradhapura. The sample population included 106 critical care nurses with at least six months of experience working in a critical care unit. A non-probability convenient sampling technique was used to approach the sample population. Microsoft Excel was used to analyze the data from the responses gained from the questionnaire that was used as a research tool.

Results and Discussion: The majority of the participants (66.98%, n=71) belonged to the age range of 22–35 years. Furthermore, 28.30% (n=30) participants were above 35–45 years, and 4.71% (n=5) participants were over 45 years. In addition, the majority (93.39%, n=99) were female nurses, and 6.60% (n=7) were men. More than 66 nurses inaccurately answered three questions regarding knowledge. Furthermore, many of the nurses (67.24%, n=73) felt that their understanding of TPN is not adequate and unsatisfactory knowledge of TPN. The requirement for in-service training and additional training sessions related to the TPN have been identified by 65% (n=46) of the participants. About 15% (n=11) of nurses have thought about the practical sessions, and 6% (n=4) have noticed the need for TPN guidelines in their units.

Conclusion: Based on the overall results, the majority of the nurses answered inaccurately related to certain questions. Furthermore, many of the participants had less experience and felt that they had inadequate knowledge and noticed the need for TPN guidelines. Thus, disseminating TPN guidelines including definitions, usage guidelines, warnings, directions for use, daily dosage requirements, and important information is recommended as a solution.

Key Words: *Nurses, Knowledge, Total Parenteral Nutrition, Critical Care And Practice*

PP 076

Drug compliance among Diabetic Mellitus and Hypertension patients

Udeshika H.M.C.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Hypertension and diabetes are well-known risk factors for Cardiovascular Disease (CVD), which is a leading cause of death and disability worldwide. Large-scale clinical trials have shown that pharmacological treatment can reduce the morbidity and mortality associated with CVD and that long-term or lifelong treatment is often indicated. The main aim of this study was to determine drug compliance among patients with diabetes and hypertension in the MOH area of Thihagoda.

Methods: A cross-sectional study was conducted on randomly selected 188 participants who fulfilled the inclusion criteria. Data were collected using a structured questionnaire and patient' chart review. The collected data were analyzed using Microsoft Excel and SPSS data analyzing software.

Results and Discussion: Of the total population 96 (51%) were under treatment for Hypertension and 92 (48.9%) for Diabetes. The results show that there is a significant relationship between age and the rate of compliance based on the contingency test results. All the patients revealed discontinuation of medication for a significant period at some point since diagnosis. However, 42% (n=79) shows good compliance and 56% (n=105) shows partial compliance and 6.3% (n=12) shows noncompliance in this study.

Conclusion: Based on the result, the majority of the patients show partial drug compliance. Thus, there is an urgent need of attention to this aspect, and remedial measures such as proper counseling to the patient, involvement of family members, and use of low-cost drugs for treatment should be sought.

Key Words: *Drug Compliance, Hypertension, Diabetes Mellitus*

Assessing the knowledge, attitude, and practice of breastfeeding among Postnatal Mothers in Bibile Base Hospital, Sri Lanka

Mendis G.G.I.R.K.T.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The well-being of a child is directly related to their nutritional status. Malnutrition rate increases between 01 and 24 days, the period of complementary feeding. Understanding the social beliefs, knowledge, attitudes, and practices about complementary feeding among mothers is an important step before designing an intervention strategy to prevent malnutrition in children. The study aimed to assess the knowledge, attitude, and practices regarding complementary feeding among postnatal mothers.

Methods: This was a quantitative descriptive cross-sectional study. Data collection was done through a face-to-face interview. A prospective study included 284 mothers with neonates between 01 to 24 dates of age in the postnatal ward in Base hospital Bibile. Data analysis was done using Microsoft Excel.

Results and Discussion: Among the selected 284 mothers, 200 consented to participate in the study giving a response rate of 70%. The present study found that 60.5% (n=121) had good knowledge, 32% (n=64) had average knowledge and 52% (104) had poor knowledge. Related to the attitude of mothers, majority 16% (32) had the average attitude of breastfeeding and 68% (n=136) of the mothers were not using knowledge of practice for breastfeeding a newborn baby.

Conclusion: The majority of the mothers had good knowledge of breastfeeding, but they were not practicing the knowledge of breastfeeding. Also, there was no association found in-between knowledge, attitude, and practice with socio-demographic variables. This study suggests that there is an urgent need for community-wide efforts to educate mothers about optimal breastfeeding and complementary feeding practices during antenatal visits and immunization sessions.

Key Words: *Breastfeeding, Mothers, Postnatal, Practices, Nutritional Status, Complementary Feeding*

The pattern of smoking, alcohol consumption, and drug use among Ordinary Level Students in Kegalle District, Sri Lanka

Premajayantha J.P.C.N.K.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Adolescence is defined by the World Health Organization (WHO) as "The transition period from childhood to adulthood". An increase in autonomy, openness to trying new things, and peer pressure during this time span fosters an environment where high-risk choices affecting adolescent health, like substance abuse and smoking, are established. Thus, this study aimed to assess the pattern of smoking, alcohol consumption, and drug use among Ordinary Level (O/L) students in the Kegalle district, Sri Lanka.

Methods: This was a cross-sectional study conducted among O/L students (n=3650) in government schools using a self-administered questionnaire. A weighted prevalence was calculated, and logistic regression analysis was conducted to determine the correlates. Data analysis was done using SPSS version 20 and Microsoft Excel.

Results and Discussion: The prevalence of current alcohol, smoking, smokeless tobacco consumption, and substance abuse, 30 days before the survey, was 3.4% (95% CI 2.6-4.3), 3.6% (95% CI 2.5-5.0), 2.3% (95% CI 1.5-3.7), and 2.7% (95% CI 1.7-4.2%) respectively. Male involvement in physical fighting was independently associated with increased risk in all four substance categories assessed. Multivariate analysis using multiple logistic regression revealed that only the male involvement in physical fighting was correlated for the four substance categories assessed when confounding effects of other variables were accounted. Being in the 16–17 age category, parents' tobacco use and seeing actors consuming alcohol on TV increased the risk of alcohol consumption, smoking, and smokeless tobacco. Suicide attempts were associated with an increased risk of alcohol consumption, smoking, and illegal substance abuse.

Conclusion: This study came to an insightful result that will help researchers better understand the trends in smoking, alcohol use, and drug use among O/L students. Implementing life skills-based interventions at schools is advised as these behaviors are still a problem in Sri Lanka.

Key Words: *Alcohol Consumption, Substance Abuse, WHO, Sri Lanka*

Knowledge and practice regarding Self-Breast Examination (SBE) among Adult Women in the Ella area in the Badulla District, Sri Lanka

Jayasekara E.A.M.N.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Breast cancer is the most common cancer in women worldwide. Finding breast cancer early and getting treatment are the most important strategies to prevent death from breast cancer. Thus, this study aimed to assess the knowledge and practices regarding breast self-examination among adult women in the Ella MOH area in Badulla District, Sri Lanka.

Methods: This was a cross-sectional study conducted among adult women (n=70) aged between 20-70 years, using a self-administered questionnaire. The sample was obtained using a multi-stage stratified cluster sampling technique. Data analysis was done using SPSS version 20.

Result and Discussion: According to the study, 87% (n=61) of participants knew that early detection of breast cancer increases survival chances. A family history of breast cancer was known by only 14% (n=10) of the participants. Furthermore, SBE was known by 63% (n=44) of women, while 10% (n=7) of participants performed BSE monthly. Yet, 29% (n=20) of women have not been screened for SBE for more than one year. A history of breast lump, a family history of breast cancer, and exposure to irradiation was identified as risk factors for breast cancer by approximately 60% (n=42) of the total sample. Of the total sample, 17.1% (n=12) knew how to perform breast self-examination and only 9.4% (n=7) were aware of currently available breast cancer screening services. Knowledge was significantly better among women who had a relative with breast cancer.

Conclusion: The study population had significant deficiencies in knowledge and practices regarding breast self-examination. Programs for raising awareness that is explicitly targeted at this representative population are required.

Key Words: *Breast Cancer, Breast Self-Examination, Clinical Breast Examination, Mammogram*

Assessing the factors contributing towards job satisfaction of Nurses in Base Hospital Bibile, Sri Lanka

Mihirani D.P.P.K.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: Nurses are a vital component of a hospital, and their job satisfaction level is very important to keeping a positive environment in the hospital. However, their job is a very demanding one, and often they struggle with many problems. Thus, this study intends to find out the job satisfaction levels of nursing officers in the base hospital, Bibile.

Methods: This was a descriptive cross-sectional study conducted among Nursing officers (n=100) at the Bibile base hospital. Data was collected using a self-reported questionnaire. A non-probability purposive sampling technique was used to obtain the participants. Data analysis was done using an SSPS version 20 and Microsoft Excel.

Results and Discussion: Mean age of the nursing officers was 31 years. Mean work experience was 5–8 years. Comparison of three nursing schools showed differences in the perceptions of students on CLE. As perceived by student nurses, the determinants of the quality of CLE are the pedagogical environment, and the role of nurse tutor. In addition, other stakeholders perceived the relationship of the student with supervisors, new knowledge in clinical teaching, increased number of students, their attitudes and motivation, the theory-practice gap, curriculum revision, distance to clinical field from nursing school and increased workload for nursing staff as important aspects related to the quality of CLE.

Conclusion: It is imperative to ensure quality of clinical practice for nursing students in Sri Lanka. Recommendations include making strategies to meet challengers identified. Improvements are required for significant modifications to meet nursing schools academic mission focusing on education, practice and research. Some of the nursing schools need more considerations to develop their CLE compared with other nursing schools.

Key Words: *Job Satisfaction, Nurse, Inhibitors, Human Resource, Stakeholder*

PP 081

Knowledge, practice, and attitudes on Diabetes care management among Diabetes Mellitus Patients attending the Medical Clinics of divisional hospital Hopton, Badulla

Navodya E.A.M.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose which leads over time to serious damage to the heart, blood vessels, eyes, kidneys, and nerves. This study aimed to assess the knowledge, practice, and attitudes on diabetes care management among diabetes mellitus patients attending medical clinics of divisional hospital Hopton, Badulla.

Methods: This was a descriptive, cross-sectional study conducted on diabetic patients (n=100) aged 30–70 attending the Hopton divisional hospital, using an interviewer-administered questionnaire. Data were analyzed using the SPSS statistical package.

Results and Discussion: A total of 100 participants successfully participated in the study. In terms of knowledge, 92% of the participants knew that diabetes mellitus is a disease with high blood sugar levels in the body. Around 4% of participants didn't know what important routine checkups for diabetes were, and 41% of the participants did not know the normal range of fasting blood sugar. Only 89% of the participants had a current meal plan, and 23% of participants did not exercise regularly. In terms of attitudes, 85% of the majority of participants do not drink alcohol. In terms of beliefs, 32% of participants believe that herbal therapy helps control blood sugar levels.

Conclusion: The findings indicated that participants' understanding of the risk factors for diabetes mellitus was generally average. Diabetes mellitus can develop into an epidemic and cause life-threatening complications if it is not adequately treated. Therefore, further educational programs are required to raise awareness and knowledge about the management of diabetes mellitus.

Key Words: *Elevated Levels, Blood Sugar, Blood Glucose, Diabetes Mellitus, Patients, Practice*

Knowledge and practices regarding usage of Personal Protective Equipment (PPE) in the prevention of Covid-19 Infection among Nurses

Jayasundara K.P.W.D.^{1*}, Sameera A.G.L.A.¹

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Pandemics and epidemics are not something new to humanity. Covid-19 has been reported as a continuing global epidemic since its first appearance in December 2019 from Wuhan City in China. The current Covid-19 pandemic is the worst in recent history, which until now has impacted more than 186 countries across the globe and shut down almost every business both in developed and developing countries. To date, much is known about the distribution, transmission, prevention, and support but no curative treatment or vaccine has been recommended for Covid-19. This study aimed to determine the level of knowledge and practices regarding PPE among nurses in Base Hospital.

Methods: The descriptive cross sectional design was used to explore the knowledge and practices regarding usage of PPE in prevention of Covid-19. The accessible sample consisted of 200 Nurses who currently work and participants who had maternity leave at Base hospital were excluded. The study was distributed as a self-administration of questionnaire and Data analysis done using Microsoft Excel version.

Results and Discussion: According to the analyzed data, 180 nurses participated from wards and 20 nurses participated from ICUs. About 44.2% (n=88) of the participants were in the 41-50 years age group. The majority 94% (n=188) of the participants were females and most of them completed their education up to the diploma level. The majority 41.3% (n=82.6) of participants get 11-20 years of working experience. The majority 94% (n=188) of participants have not attended a workshop regarding PPE. The majority of participants agreed with correct answers about the indication of PPE. Minority 22.8% (n=46) participants disagreed with correct statements about the indication of PPE while few participants were neutral. Among participants, 45.9% (n=92) most of them agreed uncomfortable, heavy workload is the valid reason for not wearing PPE and most of the 42.8% (n=86) participants had good awareness about storage of PPE.

Conclusion: This study arrived at the valuable conclusion that participants had not had adequate knowledge and practice regarding the usage of personal protective equipment.

Key Words: *Healthcare Workers, Base Hospital, Nurses, Infection, Pandemic, Transmission*

Prevalence and the associated factors of occupational Low Back Pain (LBP) among Nurses in District General Hospital, Nuwara Eliya, Sri Lanka

Damayanthi W.G.N.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Nurses and related medical workers lead all other occupations for risk of herniated lumbar intervertebral discs requiring hospitalization in women. The aim of this study was to measure the prevalence rate of Low Back Pain (LBP) among nurses in District General Hospital, Nuwara Eliya, and to uncover the associated factors and consequences.

Methods: This research was a quantitative cross-sectional descriptive study. The data were collected by an anonymous questionnaire-based survey from the willing nurses who were working at District General Hospital, Nuwara Eliya without disturbances of main routine works within duty hours. All the data was processed via a computer program. The data were analyzed using the Statistical Package for the Social Sciences (SPSS) 25.0 software for windows where descriptive statistical analysis was done to express the independent variables as frequencies and percentages.

Results and Discussion: Out of 220 nurses only 110 participated in this study. Majority of the participants were female nurses 68.18% (n=75). The highest portion in the age of respondents was in the range between 20-30 years 50% (n=55). Out of 110 respondents, around 46.7% (n=51) respondents had below five years' experience and 53.3% (n=58) of respondents had above five years of working experience. When considering the area of practice, 30.6% (n=34) were medical workers. When the nurses were categorized based on their BMI, most of the nurses 51.8% (n=57) were overweight. When considering the prevalence of LBP and work-related factors, only frequency of standing had a significant association (p=0.021). Furthermore, factors such as the frequency of lifting or moving patients in and out of beds, workload, stress were not significantly associated with LBP among nurses. The responses show nurses with more than 20 years' experience (32.7%, n=36) reported the highest LBP. The results indicated that the nurses working in ICU (29.1%, n=32) and HDU (20.1%, n=22) were more likely to report current back pain compared to other units. In addition, most nurses working on shifts (64.5%, n=71) had LBP. When comparing the prevalence of LBP across AM, PM, and nightshifts, 28.3% (n=31) staff working on AM shifts experienced more LBP. The majority of the nurses (64%, n=70) stated that there was an increase in LBP when there was a staff shortage and working six or more-night shifts per month. Moreover, only 16.4% (n=18) had LBP and 68.2% (n=75) had LBP after working in the hospital setting.

Conclusion: This study demonstrated that there was a high prevalence rate of LBP among nurses after working in the hospital setting. Furthermore, the prevalence of LBP increases with the staff shortage and working hours.

Key Words: Nursing, Low Back Pain, Employment Profile, Personal Factors, Work Related Factors

A study to examine the knowledge about disease conditions of Diabetic Foot Ulcer patients who are treated at Base Hospital, Tellippalai, Sri Lanka

Lakmal D.M.S.M.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Diabetes Mellitus (DM) is a group of mental disorders characterized by high blood sugar level over a prolonged period of time. Diabetic foot ulcer, which is a complication of DM, is a debilitating condition affecting up to 50% of patients with both types I and II. In the Sri Lankan setup, it has become the main cause of lower extremity amputations. The aim of this study was to examine the knowledge about disease conditions of diabetic foot patients.

Methods: A descriptive, cross-sectional study was conducted on about 120 DM patients who were medically diagnosed with DM foot ulcers and receiving treatment from Base Hospital Tellippalai from 20th August 2021 to 30th August 2021. The sample was chosen using the convenience sampling method and the first 12 patients from the selected time durations were involved in the study. Data was collected using a self-administered questionnaire and the gathered data was analyzed using the descriptive statistical methods using SPSS 25 statistical package.

Results and Discussion: In the study, the majority were males (64%, n=77) and 37% (n=44) belonged to the age category of 61-70 years. Nearly half (51%, n=62) strongly agreed that regular exercise is important in DM foot ulcers. However, 43% (n=52) disagreed that they can follow a healthy diet most of the time in the routine. Additionally, 18% (n=22) agreed that they have the capability of applying insulin using the correct technique. From the sample, 41% (n=49) agreed that they check their blood sugar levels less frequently. Further, it was accepted by 18% (n=22) that they feel confident in using knowledge about the daily treatment for DM. Moreover, 59% of the sample (n=71) strongly agreed that it is important to take diabetic drugs daily. Furthermore, 20% (n=24) agreed that they believe in their ability to deal with DM and 34% (n=41) were sure that DM treatment does not interfere with their daily routine. A percentage of 89% agreed that they are capable of following the planned treatment for DM even when there are changes in the daily routine.

Conclusion: It was concluded that the respondents had an acceptable level of knowledge about the diet and exercise pattern to follow in the course of DM and foot ulcers. However, the knowledge of patients was found to be problematic in their practical application. Therefore, it is required to make them aware of the importance of putting that knowledge to practical use.

Key Words: *Diabetes Mellitus, Diabetic Foot Ulcer, Knowledge*

Challenges in E-Learning among Nursing Students during the Covid-19 pandemic in Nurses Training School, Matara

Himasha M.M.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The Covid-19 pandemic has caused global disruption, affecting every aspect of human life in many ways. The spread of Covid-19 poses a threat to humanity as this pandemic has forced many global activities to close, including educational activities. Challenges are even greater in this period of pandemic and the nurses have the knowledge and attitudes to provide the care necessary in the different clinical settings that are emerging. This study mainly aimed to assess challenges to E-learning among nursing students during the Covid-19 pandemic in the Nurses' Training School, Matara.

Methods: This was a cross-sectional descriptive study that used an experimental design. The survey instrument was a semi-structured questionnaire. In total, 120 respondents were interviewed. All students were asked to participate in the personal interview survey. The obtained responses were analyzed descriptively.

Results and Discussion: In total, 120 students participated in this study, yet 10 were rejected due to incomplete answers, and 110 student papers were selected. Most participants (93%, n=111) were aged 21–25 years, most were female nursing students, and few were male nursing students. All participants were second or third-year students. The most common level of educational attainment was the Higher School Certificate (71%, n=85), with the remainder having diplomas. The highest percentage of positive responses concerned preparation for E-learning, where (55%, n=66) were prepared most of the time. Most (72%, n=86) participants had separate rooms for studies. Most participants (98%, n=118) reported that they had no previous experience with E-learning. Furthermore, 33 (n=40) participants said that they had low computer skills. A minority of the participants (22%, n=26) had stable Internet Access. Furthermore, the majority (69%, n=83) were willing to communicate, and the majority (86%, n=103) had students technical difficulties during E-learning.

Conclusion: The challenges of E-learning as reported by participants included a lack of privacy, connection problems, and difficulties in communication with instruction. Overall, our findings suggest that students may be reasonably prepared to deal with E-learning technology. Yet, many faced challenges due to computer skills and stable internet access. The findings helped identify the significant challenges and adaptations necessary for future approaches to teaching and learning and how students and staff can best be supported through those transitions.

Key Words: Covid-19, E-Learning, Challenges

A study on the awareness of Depression among College Students in a private Educational Institute in Sri Lanka

Kolonne T.H.^{1*}, Samarasekara K.S.A.R.¹, Kumarasingh M.P.G.H.¹, Dissanayake V.V.¹, Rathnayaka N.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Depression is a common mental health illness that involves a low mood and a loss of interest in activities. It is a prevailing illness as well as a stigmatised issue in society. The first appearances, on average, occur during the late teens to mid-twenties. Most young adults spend their life studying in colleges or universities. Depression in young adults and teenagers who are mostly students is affected uniquely in comparison to how it affects adults. Therefore, this study was conducted to assess the level of awareness and knowledge students have about depression.

Methods: A quantitative, descriptive cross-sectional study was carried out using convenience-sampling methods. The study recruited a sample size of 188 students in the age category of 18-35 from a private institute. Data collected using a questionnaire was distributed as a Google form and analysed.

Results and Discussion: It was revealed that college students got to know about depression via the internet (29.3%, n=55), and friends (20.7% n=39). A substantial number of the participants had a good literacy of the symptoms of depression. Results indicated that the majority (93.6%, n=176) strongly agreed that depression is curable while the rest disagreed. Furthermore, almost all students (97.9%, n=184) neutrally responded that depression could be prevented. It became apparent that all of the students who were majoring in health sciences agreed that there was a sufficient level of student understanding of depression. Meanwhile, few individuals had an in-depth understanding of depression, while few participants failed to recognize the basic signs of depression. One participant's response (0.005%, n=1) that left a bad impression was that depression cannot be treated, which is untrue because there is a proven and medically accepted remedy.

Conclusion: Despite the fact that depression may be a common mental condition, few people are aware of it, and it is stigmatized. Therefore, it is crucial to hosting educational events to raise awareness and teach people how to handle their own and others' symptoms in order to avoid worst-case scenarios. Further, students can then use this knowledge to their practice more and distinguish between the symptoms of depression and those of other diseases.

Key Words: Awareness, Depression, College Students, Private Institute, Sri Lanka

**Attitudes and awareness on eating disorders among students in an educational institute,
Gampaha District, Sri Lanka**

Seneviratne D.B.R.^{1*}, Kaldera H.P.S.R.²

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka.*

²*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: An eating disorder is an unhealthy relationship with food, weight, or attractiveness that interferes with an individual's daily life. Eating habits are not a choice; rather, a result of the combination of a person's genetics, social environment, and psychological health. Teenagers and young adults are particularly prone to developing eating disorders and suffering from their severe physical and mental effects. This study aimed to assess the attitudes and awareness of eating disorders among students in an Educational Institute in the Gampaha District, Sri Lanka.

Methods: This research was a descriptive, cross-sectional study. A convenient sampling method was used to select the study sample which consisted of 100 participants who were above the age of 16 years. Data was collected using a self-administered questionnaire distributed among the participants. The gathered data was analyzed using Microsoft Excel software.

Results and Discussion: A significant number of respondents 74% were females who belonged to the age category of 19-21 years. The weight category of 51-60kg represented the highest number which was 36% of the whole sample. More than half (54%) stated that they have received information about eating disorders previously. Among the participants, 46% mentioned that they have heard about anorexia nervosa before while 38% and 42% stated that they have earlier heard about bulimia nervosa and binge eating disorder respectively. From the sample, 50% chose the correct definition of anorexia nervosa, and the correct explanation for bulimia nervosa was selected by 40%. Additionally, 48% correctly defined the binge eating disorder. The majority (52%) declared that they neither have dieted in the past nor dieted currently. More than half (62%) mentioned that they sometimes followed irregular eating patterns and 52% disliked that their stomach is empty. About 50% stated that they had a fear of getting fat due to their eating habits. Furthermore, 36% were aware of the caloric content of food consumed by them. Moreover, 56% disregarded that they had eaten binges till reaching an uncontrollable level while 52% disagreed with the statement that they felt uncomfortable and guilty after eating. Additionally, medication was chosen by 36% and family therapy was chosen by 34% as the most common treatment modality for eating disorders. A notable number (66%) disagreed that vomiting after eating is a reliable way to eliminate food and 68% disagreed with the statement that laxative utilization is effective was to expel food from the body.

Conclusion: Knowledge of eating disorders among the public is a key factor in influencing public opinion, healthcare practitioners, and institutions, as well as lowering treatment hurdles and enhancing the early detection of affected cases. It is crucial to ensure that necessary actions are taken to enhance knowledge and disseminate resourceful information about eating disorders as it is an emerging problem in society, especially among the younger population.

Key Words: *Eating Disorders, Awareness, Attitudes, Youth*

Psychological and Physical impact on Nurses due to Covid-19 in Sri Lanka

Jayawardana T.^{1*}, Fernando R.¹, Madushani P.¹, Pathiraja K.¹, Dhananjana T.¹, Heenkanda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The Covid 19 is a pandemic that is not only effective for the physical well-being of people but also the psychological aspects but, more than the general population, there is a higher risk when it comes to healthcare workers. Most nurses are depressed due to fear of infection, working long hours in a risky environment, etc. When it comes to the physical aspect, many nurses are facing adverse skin reactions as a result of using PPE, and the incidence of headaches has increased with the use of masks. Therefore, this study aimed to assess the psychological and physical impacts of Covid-19 among nurses in Sri Lanka.

Methods: This was a descriptive cross-sectional study conducted on the Psychological and Physical impact on nurses due to covid-19 in Sri Lanka. It was carried out by obtaining subjective data from both public and private sector nurses through a questionnaire. The accessible sample consisted of 100 participants.

Results and Discussion: Out of the 100 participants, 28% of the nurses worked in the Covid ward and 7% under 18-25 years of age category have experienced as well as 65% of male, 57% of unmarried nurses, 50% have 2-4 years of experience, 9% work in Covid wards and around 87% of the participants had come into contact with Covid patients. Depression, anxiety, and stress levels were higher in female nurses, who were aged 25-34 years. Based on collected information the data were categorized into Psychological and physical impacts. Among the 95 participants, 40% of the nurses worked in the Covid ward and around 80% of the participants had come into contact with Covid patients in terms of the psychological effects on nurses. The majority of the participants had difficulties for several days, while the minority had experienced trouble sleeping, no appetite or overeating, and poor concentration in reading or watching were some of the participant responses nearly every day. Meanwhile, the physical impact had negative feedback due to it draining more of their energy to work as well.

Conclusion: The studies found that frontline nurses' mental health was typically poor, and various impact factors connected with nurses' psychological health were discovered. Most of the nurses felt tired, had trouble sleeping, were stressed, and were less energetic. They complained about not having time for loved ones or for themselves. Nurses are on the front lines every day, caring for Covid-19 patients. They play an important role in public health response to such disasters, providing direct patient care and lowering the risk of infection. Individual nurses, society, and the nursing profession may all suffer substantial immediate and long-term consequences as a result of their experiences providing nursing care in this setting. As a result, it's essential to maintain a healthy balance in both psychological health and physical health.

Key Words: Covid-19, Psychological, Physical, Nurses, Experience

Parental knowledge and attitudes towards Youth's Mental Disorders in Gampaha District, Sri Lanka

Herath H.M.S.U.^{1*}, Imesha W.H.¹, Bhagya H.A.H.¹, Wimarshana M.M.R.¹, Mylvaganam A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Youth might be vulnerable to mental health difficulties due to a variety of physical, emotional, and social changes, such as poverty, abuse, or violence. The knowledge and attitude of parents about mental disorders in children are significant predictors of early detection and treatment seeking for the condition. The aim of this study was to assess the parents' knowledge and attitudes toward youth's mental disorders in the Gampaha district, Sri Lanka.

Methods: This was a quantitative study done on 114 parents in the Gampaha district, using a close-ended questionnaire. A snowball sampling technique was used for data collection. The data analysis was done through SPSS Software.

Results and Discussion: Among the 114 participants, 57.8% (n=66) were mothers. In terms of knowledge, 86% (n= 98) of the participants knew about mental disorders and around 72% (n= 82) knew the causes of mental disorders. Respondents of 57.8% (n= 65) believed mental disorders can be cured, 8.6% (n= 10) maybe it can be cured and 2.6% (n=3) say it cannot be cured. About 76.3% (n= 87) of the parents say that mental disorders can damage the child's health. In terms of attitude, around 89.4% (n= 101) of the parents will definitely care if the child suffers from any mental disorder. Moreover, about 86.8% (n=99) of the respondents say that consultation with a doctor immediately is needed if found to have symptoms of mental disorders, and 50% (n=57) strongly agree on consultation to prevent mental disorders.

Conclusion: This study showed that the parents have an adequate amount of knowledge of mental disorders. It also shows that most parents have a good attitude toward children who have mental disorders. They believed consulting a doctor, taking a child's feelings seriously, and knowing about mental disorders will help their child prevent any mental disorders. The outcomes of this study were heavily dependent on the sample and sample size, making response bias inevitable. Thus, in order to increase the validity of the results, it is necessary to diversify the sampling technique.

Key Words: *Knowledge, Attitude, Parents, Youth, Mental Disorders*

Impact of social media on social relationships among Parents, University and College Students at a selected Private Educational Institute, Gampaha District, Sri Lanka

Perera J.K.A.^{1*}, Fernando W.W.S.M.¹, Deshan H.W.S.¹, Gunatilake H.G.D.²

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: College students in Sri Lanka have significantly increased their use of social media over the past few years. This could be explained by the fact that social media has provided the younger generation with an online forum where they can exchange ideas and information. This study aimed to assess the influence of social media on social relationships among parents and college students aged between 20-25.

Methods: An interviewer-administered questionnaire is used for data collection. Both the parents and child were interviewed. Both a quantitative and qualitative analysis of the data was performed. Excel and SPSS are used to quantify it as the study are currently underway. The parents and college students ages 20 and 25 of IIHS will be selected using convenience sampling. Thirty families (parent and student) were taken as the sample so far and more results are expected.

Results and Discussion: Preliminary results suggest that the total time spent on social media affects social relationships inside families. The study will further indicate that the majority of respondents spent between thirty minutes to three hours each day on average. In addition, the study suggests that teens who use more social media platforms would have a worsening impact on their social connections. Furthermore, it also suggests that the more time an individual spent on social media, the more probable it was that their usage of the platform would harm their family connections, diminishing the quality of those relationships. In addition, statistical analysis will be performed after the totality of the results is gathered.

Conclusion: The overall results suggest that the time spent on social media significantly impacts the time spent in the family. Furthermore, the assumptions of parents and students regarding the time spent on social media will be assessed and compared with the actual time spent.

Key Words: *Social-Media, Social Relationship, Social Networking Sites, College Students*

Social media addiction among Students in a selected Healthcare Institute in Gampaha District, Sri Lanka

Silva E.R.H.^{1*}, De Silva O.S.¹, Fernando W.C.P.D.², Samarakoon D.C.E.¹, Perera K.O.¹,
Perera K.A.N.K.¹, Maddumage S.P.²

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

²*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Psychological and behavioral dependence on social media platforms and an uncontrollable urge to use them is known as social media addiction (SMA). In recent years SMA has had a significant impact on students' academic achievement. Thus, the aim of this study was to assess SMA among students in a selected healthcare institute in the Gampaha District, Sri Lanka.

Methods: A qualitative study consisting of a total of 30 students representing advanced diplomas in physiotherapy, nursing, and biomedical sciences programs were included through quota sampling. Data were collected through semi-structured interviews and analyzed using Graneheim and Lundman's content analysis method.

Results and Discussion: Participants' main reasons for using social media were to connect with friends, relieve stress, and watch trendy materials. The majority of participants spent more than three hours per day on social media, with Facebook and YouTube being the most popular sites. The majority responded that they feel isolated, annoyed, and bored when they cannot use social media. However, some participants stated that they were guilty of using too much social media because it distracts them from academic and occupational work and some also reported that they have had failed attempts to quit or reduce time spent on social media.

Conclusion: Social media addiction had an impact on participants' education, relationships, family life, etc. Thus, it is considered important to conduct further research studies on healthcare students related to the risks caused by the excessive use of social media, the consequences of addiction, measures to overcome addiction symptoms, and the importance of mental health and sleep quality. Moreover, it is essential that university administrations take proactive measures to assist students who are addicted to social media platforms and educate them through seminars about the drawbacks of social media addiction.

Key Words: *Social Media Addiction, Healthcare Students, Sri Lanka*

Study on awareness and challenges associated with online learning in Healthcare Sector Students during Covid-19 at the International Institute of Health Sciences, Sri Lanka

Perera W.M.S.N.^{1*}, Appuhamy B.D.G.J.¹, Perera C.P.¹, Anthony D.G.¹, Sameera M.A.F.¹,
Liyanagamage D.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Since the beginning of 2020, the covid-19 epidemic has had a significant impact on higher education in several ways, including the conversion of in-person instruction to online instruction, the cancellation of actual events and activities, and the development of higher education "normality." The aim of this study was to examine awareness and challenges associated with online learning among healthcare sector students during covid-19 at the International Institute of Health Sciences, Sri Lanka.

Methods: This was a quantitative study where a self-administrated, close-ended questionnaire was distributed among 114 students studying in General Nursing, Biomedical Sciences, and Physiotherapy programs in IIHS. Data was analyzed using Microsoft Excel.

Results and Discussion: Out of the total participants, a little over half of the population (55.3%, n=63) rated online learning as "average." All of the respondents claimed that they have access to a device for learning, but 13.2% (n=15) complained that it does not work well. Most of the participants (94.7%, n=108) reportedly used "Zoom" as their learning platform. Only 26.3% (n=30) stated that the university had been "beneficial" and "extremely helpful" in offering them the resources to learn from home. Although 92.1% (n=105) of students mentioned that online learning has been effective, 7.9% (n=9) of students complained that it is not effective at all. Half of the participants 52.6% (n=60) stated that they enjoy learning remotely, while the other 47.6% (n=54) did not. Some of the challenges faced by participants were that 18.7% (n=21) had concerns regarding privacy, and a lapse in technical knowledge while using platforms was complained about by 26.3% (n=30) of participants.

Conclusion: Covid-19 was the main reason for online learning to take place. This study reveals that certain students enjoy online learning, while some do not. Although effectiveness on some level is said to be present in online learning by the majority of participants, online learning helped healthcare students to stay on track and continue with their studies even during covid-19.

Key Words: Covid-19, Mental Health, Financial, Food Security, Parents, Questionnaire

Impact of Covid-19 on Mental Health among Parents with Children under 10 years in Wennappuwa Divisional Secretariat area, Sri Lanka

Perera W.M.S.N.^{1*}, Silva E.R.H.¹, Rodrigo C.D.¹, Fernando S.N.¹, Balasooriya V.J.L.¹, Wijesinghe M.W.¹, Rahinduwa H.R.B.K.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The Covid-19 pandemic has disrupted millions of individuals causing major changes to their livelihood, health behaviors, and physical and mental well-being. Children under 10 years old are dependent on their parents financially and for their survival. The aim of this study was to describe the changes in mental health during Covid-19 in parents with children under 10 years old in the Wennappuwa divisional secretariat area, Puttalam district, Sri Lanka.

Methods: This was a descriptive cross-sectional study. Data was collected using a questionnaire with closed-ended questions. The questionnaire consisted of questions regarding demographics, financial security, food security, and stress due to Covid-19 from the parents who fit the expected description. Data were analyzed using the SPSS version 25 software and by preparing several descriptive graphs and diagrams according to the gathered data. Microsoft Excel Version 2019 was used to enter the collected data.

Results and Discussion: A total of 206 have responded, out of the total participants, 64.6% (n=133) were females and 35.4% (n=73) were males. More than half of the total participants 77.2% (n=159) were worried about not being able to pay the mortgage, rent, or other bills on time over the next 6 months. While only 54.9% (n=113) were worried about not having enough money to buy food for their family over the next 6 months. There were 64.1% (n=132) out of the total respondents who felt that they are unable to control the important things in life. A staggering 91.7% (n=189) of participants felt as if things were not going their way. On a scale from 1 to 10 where 1 means "no stress" and 10 means "an extreme amount of stress," there were 63.6% (n=131) participants who ranged from 5 to 7 stating that they were stressed, and 13.6% (n=28) out from the total number of participants ranked from 8 to 10 reported to have faced extreme amount of stress.

Conclusion: Covid-19 appeared to have affected mental health according to their reported stress levels, as parents have been forced to worry about financial situations and food security. Further studies are needed to determine the longer-term impact of the pandemic on mental health and to identify effective strategies to support families in the post-Covid-19 context. Covid-19 has had a negative mental health impact on these parents.

Key Words: Covid-19, Mental Health, Financial, Food Security, Parents

Perception on work life balance among Married Female Nurses at the National Hospital of Sri Lanka

Athurupana G.R.S.S.B.^{1*}

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Quality of life of nurses is essential to provide quality service to the clients since they are the largest and most diverse workforce in the healthcare system. Hospitals are known to be both rewarding and stressful places to work. Like most workers, nurses face the challenge of balancing demands and achievements of work with those in their private lives. Aim of this research was to study regarding work life balance among married Female Nurses at the National Hospital of Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 304 married female nurses who were chosen using stratified random sampling technique. The data were collected using a self-administered questionnaire and data was analyzed in SPSS version 23 through inferential statistics and Chi-square test.

Results and Discussion: According to the results, the mean age was 34 years, 60.9% (n=185) of the respondents were grade III nursing officers and 62% (n=188) had a nuclear family system. Among the participants 49% (n=148) had feelings of stress in finding a work life balance, and 36% (n=109) had feelings of “my health is suffering”. The majority (62.9% n=188)) were satisfied with their job. The factors affect work-life balance and family commitment, number of working hours (43.9% n=148), and work on holidays (37.5% n=114)) considered as “affects sometimes” as for the Likert scale. There was a significant association between nurses’ grades between feeling of work life and home life (p=0.02), and family structure between feeling of work life and home life balance (p=0.001).

Conclusion: It can be concluded that many nursing officers have found the work as stressful, but the majority were satisfied with their job. The number of working hours and work on holidays have been identified as factors affecting work-life balance. According to results, there was a significant association between nurses’ grade and perception on work life balance, and between family structure and perception on work life balance.

Key Words: *Work Life Balance, Married, Female Nurses*

The association between the information needs and sociodemographic factors of Pregnant Women at the Antenatal Wards at Teaching Hospital Mahamodara, Galle

Weeramuni N.P.^{1*}, Karunanayaka A.D.S.S.¹

¹*Department of Nursing, Faculty of Allied Health Sciences, University of Ruhuna, Galle, Sri Lanka*

Introduction: Pregnant women require various types of information needs regarding pregnancy. Significant relationships can be found between some demographics, information on pregnancy, and sources of information. The aim of this research was to evaluate the association between pregnancy-related, childbirth, and infant care-related information needs and socio-demographic factors.

Methods: Four hundred twenty pregnant women were selected for this descriptive cross-sectional study by using a convenient sampling method. Data were collected from 420 mothers admitted to antenatal wards at Teaching Hospital Mahamodara (THM), Galle by using an interviewer-administered questionnaire. Information needs were divided into 3 categories pregnancy-related, childbirth, and infant care-related information needs. Data were analyzed by using SPSS Version 25.

Results and Discussion: Age groups were significantly associated with pregnancy-related information needs ($p=0.045$). Age below 30 years needed more information (31.29 ± 13.55). Monthly income was significantly associated with childbirth-related information needs ($p=0.019$). Pregnant women with 50,000 or above monthly family income (8.12 ± 3.55) needed more information. Gravidity was significantly associated with pregnancy-related ($p=0.003$), childbirth-related ($p=0.000$), and infant care-related information needs ($p=0.000$). The number of children was significantly associated with pregnancy-related ($p=0.000$), childbirth-related ($p=0.000$), and infant care-related information needs ($p=0.000$).

Conclusion: Based on the results, young pregnant women needed more information. However, pregnant women needed less information when they got experienced with their pregnancies. Pregnant mothers who were expecting their first child needed more information.

Key Words: *Information Needs, Pregnant Mothers, Socio-Demographic Factors, Antenatal*

A study on skills, knowledge, and attitudes toward Telenursing among Nursing Officers in Sri Lanka

Jayasinghe W.A.M.L.^{1*}, Jagoda E.T.¹

¹*School of Nursing, International Institute of Health Sciences, Sri Lanka*

Introduction: Telenursing is delivering nursing care remotely using information technologies. Nurses engage in telenursing practice to assess patients, plan nursing care, intervene with care and evaluate the outcomes of nursing care, but they do so using technologies such as the Internet, computers, telephones, digital assessment tools, and telemonitoring equipment for their career pathway. The aim of this research was to assess the skills, knowledge, and attitude toward telenursing among nurses in a selected teaching hospital, in Sri Lanka.

Methods: A statistically randomized sample of 430 nurses at Teaching Hospital, Kurunegala, Sri Lanka were selected for the study, and the entire process was directed within a profound ethical framework in order to protect the rights of participants. The questionnaire was pretested for validity and consistency. Data analysis was executed by means of the Predictive Analytics Software program.

Results and Discussion: Throughout the study, 429 Nurses participated in the process. Findings revealed that the high cost of the equipment (68.8%, n=291), lack of user-friendly software (61.1%, n=262), and lack of suitable training to use the equipment (69.6%, n=298) were indicated as the major challenges to improve the skills on telenursing. In addition, the knowledge regarding telenursing was also not satisfied (21.2%, n=91). However, the practice of telenursing among nursing officers is comparatively at a lower level (48.3%, n=207). The majority (94.1%, n=404) agreed that telenursing is appropriate to use due to the current covid-19 condition in the hospital.

Conclusion: According to the study, it was revealed that the use of technology for nursing care in hospitals comparatively lower levels of attitude rather than knowledge regarding telenursing. The nursing training curriculum should be upgraded to include information technology subjects and encourage the nursing officers to improve their knowledge and practice of telenursing in Sri Lanka.

Key Words: *Health Information Technology, Telehealth, Telemedicine, Telenursing*

Determining the water quality parameters in selected brands of bottled water in the Gampaha District, Sri Lanka

Madarasinghe D.^{1*}, Thiran C.¹, Silva S.S.¹, Shiromani S.C.¹, Nicholas S.¹

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: With the industrialization of the world, the quality of water available for consumption becomes questionable. In developing countries like Sri Lanka, it is possible to experience issues with the quality of bottled water due to a variety of reasons. This research examined the conditions of randomly selected bottled water bottles in the Gampaha district, which is a densely populated district in Sri Lanka.

Methods: It is expected to use three water bottles from randomly selected five brands for the research purpose. Three parameters were used to measure the water quality which was pH, BOD (Biochemical Oxygen Demand), and Microbial count. The pH meter will be used to acquire the measurement. Additionally, to determine the BOD, the Winkle method will be used. Further, the spread plate method will be used for Total Plate Count (TPC) and the membrane filter method will be applied to determine the microbial count.

Results and Discussions: It is expected the pH of bottled water be under 6.9–7.5 as recommended by the EPA standards. In addition to that, the BOD value is expected to be within the range of 1-4 ppm. The aerobic microbial count is assumed to be within 1-100 cfu/mL as per recommended by the Libyan Standards. The collected samples of bottled water are expected to be free from microbial contamination. Faecal coliforms and *E. coli* are not expected to be isolated from the collected samples of drinking bottled water. However, it is possible to obtain a microbial count of common isolates which are possible to be detected in water including coagulase-negative *Staphylococci*, *Klebsiella pneumonia*, *Staphylococcus aureus*, *Bacillus* spp., *Micrococcus*, *Enterobacter* spp., and *Citrobacter* spp. as depicted by the previous studies. Moreover, the viable count limit for total microbial count is not expected to exceed 100 CFU per ml of the sample at room temperature.

Conclusion: The study findings are expected to reveal the quality of bottled water available for consumption by the public. It is vital to ensure that drinking water for human consumption is of the proper quality and safety reaching the expected health standards. Therefore, this issue needs to be addressed and required actions need to be taken to maintain the quality of consumable water which is a basic human requirement.

Key Words: *BOD, Microbes, Water Quality, Consumption, Sri Lanka*

PP 098

A study on the knowledge and complications of teenage pregnancy among Pregnant Mothers in the Point Pedro area, Sri Lanka

Rammiya M.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences Welisara, Sri Lanka*

Introduction: Teenage pregnancy between the age groups of 13 and 19 years old is a global reproductive health issue that impacts female teenagers, their families, as well as their communities. Most often, these pregnancies are observed among children who are unmarried and still in school. It is closely related to the high rate of pregnancy-associated problems, which contribute to maternal and newborn morbidity and mortality, as well as social issues. This study is being done to provide an overview of the social, obstetric, and medical problems of adolescent pregnancy, as well as the knowledge of the selected population on teenage pregnancies.

Methods: A descriptive, cross-sectional study was conducted with 100 pregnant mothers, including teenage mothers, from the maternity ward in Base Hospital, Point Pedro, Sri Lanka, using a simple random sampling technique. Out of the 100 participants, 27 were teenage pregnant mothers. The data was obtained using a self-developed, interview-based questionnaire and analyzed using SPSS version 16.0.

Results and Discussion: 60% of the participants were unmarried girls, and nearly 15% of teenage mothers were carrying their second and third pregnancies. Results show that 63% of them have inadequate prenatal care, with 31% of the population having a poor education level. Incidences of Anemia, Pregnancy induced hypertension (PIH), Pre-eclampsia (PET), eclampsia, and Polyhydramnios (POL) in teenage mothers were found to be significantly higher than in other pregnant mothers in the study. Anemia was found to be more common in teenage mothers (34%) with 32% of them affected by PIH. Most of the respondents had gotten an abortion (58%).

Conclusion: Teenage pregnancy raises the likelihood of a negative birth outcome. This finding is in line with the widely held belief that adverse birth outcomes linked with teenage pregnancies are due to low socio-economic status, inadequate prenatal care, and insufficient weight gain. It is recommended for school students to participate in awareness programs to learn about the risks of teenage pregnancies and to acquire knowledge on contraception techniques.

Key Words: *Teenage Pregnancy, Low Birth Weight, Anemia, Pre-Term Delivery, Knowledge*

Factors associated with the choice of Postpartum Contraceptive methods among Mothers waiting for delivery at Polpithigama MOH, Sri Lanka

Weerasekara W.B.M.M.P.^{1*}, Dissanayake D.P.D.S.¹

¹*School of Nursing, International Institute of Health Sciences Welisara, Sri Lanka*

Introduction: Proper family planning is a crucial aspect of health management with the objective of gaining a healthy population and a healthy future generation. Postpartum contraceptive usage is important for the well-being of both the mother and the children. This study aimed to assess factors and choices related to the choice of postpartum contraceptive methods among mothers waiting for delivery.

Methods: A descriptive, cross-sectional study was conducted among one hundred mothers who were waiting for delivery at Polpithigama MOH area, using random sampling. Data were collected using a self-administered questionnaire and descriptively analyzed using freely available open-source statistical software.

Results and Discussion: In the study, all the participants were 18–51 years of age. Nearly half (46%) of the participants were unemployed, at the junior secondary level, and 58% of the mothers were non-employed. 95% of participants had previously heard about contraceptives, and 89% had already used them. The major reason to use contraceptives was to maintain child spacing. Birth control pills were the most popular choice among mothers. Yet, 14% of pregnant women did not prefer to use any contraceptive method and the major reason was husband objection.

Conclusion: The collected data suggested that the choice of contraceptive method was strongly associated with the race, religion, and marital status of the participants. Additionally, all participants preferred to use modern methods of contraception. Even though the knowledge level of mothers was unsatisfactory, they had a positive attitude and were willing to practice proper family planning methods.

Key Words: *Postpartum, Contraceptive Methods, Factors, Choices*

Knowledge and practices regarding Surgical Site Infections (SSI) and among Nurses working in Surgical and Gynecology wards in District General Hospital, Monaragala, Sri Lanka

Udayangani H.M.N.S.^{1*}, Liyanarachchi S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisera, Sri Lanka.*

Introduction: Patient safety is an important concern for all healthcare professionals. Nurses' knowledge, attitudes, and practices play a significant role in controlling infections, which ultimately enhances the quality of patient care. The study aimed to assess the level of knowledge, attitudes, and practices regarding SSIs and prevention among nurses who work in surgical and gynecology wards.

Methods: This study was descriptive and cross-sectional. It involved 100 nurses in the surgical unit and gynecology wards at DGH-Monaragala selected using the convenient sampling method. Data was collected using a validated questionnaire and analyzed using descriptive statistical methods with the help of the SPSS software.

Results and Discussion: The majority (97%) were female nurses and were between the ages of 20 and 60. Additionally, 68% of the selected samples were in the surgical unit, while the rest worked in the gynecology unit. Further, 98% of the nurses had received formal training in wound care management. A significant amount (56%) chose poor perfusion as the prominent risk factor for wound infections. In addition to that, 47% believed that a reddish wound was a sign of surgical infection. The majority (68%) agreed malnutrition and Diabetes Mellitus were causes to reduce host resistance to infections. The vast majority of the respondents (94%) chose CRP as the test used to ensure SSIs. Nearly half of the participants (51%) chose an intact epithelial surface as not being a natural barrier to infections. About 41% disregarded the idea that all patients have a risk of developing SSIs, and 24% agreed that most risk factors for these infections can be avoided. More than half (52%) agreed that hand washing was the most important in preventing SSIs. A significant number (90%) stated that they always assess and monitor surgical site infections, while 82% accepted that they always wash their hands before wearing gloves. Similarly, all the respondents agreed that they always check the sterility date on dressing packets, and use facemasks, and sterile dressing materials when dressing wounds. Besides this, 80% mentioned that they wash their hands before and after changing wound dressings and touching the surgical site. From the sample, 30% accepted that they discard solid materials in proper places after performing dressing. Moreover, 42% indicated that they always clean and disinfect the surface of the dressing trolley with antiseptic.

Conclusion: The findings can be explained by the fact that nurses view the expansion of their knowledge, attitudes, and practice as a positive development, one that enables them to exercise professional autonomy and establish more direct relations with patients while contributing to their ability to respond to their needs. While the threat of surgical site infection remains ever-present, an emerging paradigm of surgical site infection prevention and control has matured.

Key Words: *Surgical, Gynecological, Infections, Nurses*

Awareness and practice towards Oral Cancer prevention and its association among Bus Drivers and Conductors in Jaffna Bus Station

Jayaneththi J.P.I.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Oral and pharyngeal cancers have been rated as the 6th most common cancers in men and the 9th in women on a global scale. It is the most common type of cancer among Sri Lankan men, causing a significant number of deaths annually. This type of cancer is more likely to affect blue-collar workers. The aim of this study was to assess awareness and practice towards oral cancer prevention and its association among bus drivers and conductors in Jaffna Bus Station.

Methods: A cross-sectional study was carried out on 327 bus drivers and conductors who worked at bus stands in Jaffna. Data was collected using an interviewer-administered questionnaire and analyzed using SPSS software. The association between awareness and practice of oral cancer prevention was determined using the chi-square test.

Results and Discussion: Of the 327 participants, 90.8% (n=297) were aware of oral cancer prevention. According to the results of the study, 16.5% (n=54) of participants practiced smoking habits. Also, 33.9% (n=111) of the participants practiced betel quid chewing habits and 30.3% (n=99) alcohol drinking habits. According to the study, the frequency of eating fruits and vegetables, the frequency of tooth brushing, and the frequency of having the mouth screened by a dentist or doctor were significantly associated with the awareness level of oral cancer prevention among bus drivers and conductors in Jaffna station. However, there was no significant association between smoking habits and alcohol-drinking habits and the awareness level of oral cancer prevention among bus drivers and conductors.

Conclusion: The study proved that the majority of bus drivers and conductors were aware of oral cancer prevention, and the majority of them knew about the risk factors for oral cancer. However, many were prone to using carcinogenic substances like tobacco, and alcohol.

Key Words: *Awareness, Oral Cancer, Association*

Knowledge, attitudes, and practices in Dengue prevention and control among Student Nurses in Nurses Training School, Kurunegala

Wijesinghe T.M.D.R.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Dengue fever (DF) is a major public health problem in Sri Lanka. Due to rainfall, temperature, relative humidity, and unplanned rapid urbanization, dengue has spread throughout the tropics with local risk variation. The purpose of the present study was to assess the knowledge, attitudes, and practices of students with regard to dengue prevention and control in the Kurunegala area.

Methods: A detailed, cross-sectional study was conducted with 300 participants from first-, second-, and third-year nursing students studying at NTS, Kurunegala. Data were collected using a pre-tested, self-administered questionnaire that included questions on demographic data, knowledge, attitudes, and practices related to dengue and its prevention and control during their deployment and preparation for health care on the island.

Results and Discussion: Data from 300 respondents was included in the analysis. The average age of respondents was 23.6 years, ranging from 21-27 years. Respondents were selected proportionally from the total population for three different study years. Almost all participants heard about DF (100%, n=300), the most frequently cited source of information on school education. Most of the respondents obtained information from more than one source. Based on the scoring system, satisfactory knowledge of symptoms, primary care or home care, and dengue transmission, only 83% (n=249) were satisfied. The result shows that only (48.55%, n=146) of respondents have gained knowledge on dengue during their NTS education. Furthermore, 84% (n=252) of the participants had a positive attitude, and 61% (n=183) practiced good habits for the prevention and control of dengue.

Conclusion: Participants demonstrated knowledge gaps that could affect the level and frequency of preventive measures. These findings underscore the need for more information and education on dengue prevention and control. Since the respondents are future healthcare professionals who would contribute to the health education of society, they should be given adequate knowledge on dengue at least during their initial years.

Key Words: *Dengue, Cross-Sectional Study, NTS, Dengue Fever*

Assessing the knowledge and risk factors associated with lower Urinary Tract Infections (UTI) among Pregnant Mothers in Udugama Hospital, Galle

Nilukshi N.E.C.^{1*}, Costa S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Lower Urinary Tract Infections (UTI) among Sri Lankan pregnant women are a burning problem. Most mothers have a lack of knowledge about UTIs and tend to present with recurrent lower UTIs frequently. Hence, the aim of this study was to identify the factors that are more commonly correlated with UTIs in pregnant women.

Methods: A quantitative, cross-sectional study was conducted among pregnant patients suffering from UTI in Galle, Sri Lanka. The 120 pregnant patients suffering from UTI who visited the Base Hospital were approached via a simple random technique. A self-administered questionnaire served as the research tool, and data were analyzed using SPSS 25 software.

Results and Discussion: Participants' knowledge and attitudes were assessed using 18 questions, but unexpectedly, despite the fact that 74.6% (n = 89) of participants reported having some form of education, their understanding of lower urinary tract infections was found to be relatively limited. 10 questions were used to probe participants' opinions, and 14 questions were utilized to probe participants' health behaviors. About 80% (n = 96) of participants said menstruation didn't contribute to having a clean urinary tract, while 86.60% (n=103) of individuals used to wash and dry their perineum. About 60% (n=72) or more of the participants who are female and work at least twelve hours per week lack the necessary resources to meet their basic needs. 38.6% (n=46) of individuals with lower urinary tract infections belonged to the age group of 25 to 40. Nearly half of them were employed by the private sector. Despite having a high level of education (49.6%, n=60), these people had very little understanding of and attitudes toward lower urinary tract infections. More than 60% (n=72) of participants practiced healthy behaviors; however, 60% (n=72) of them did not drink even one liter of water daily. Also, 60% (n=72) of workplaces lacked adequate facilities.

Conclusion: Lower UTIs are a major issue for pregnant women in Sri Lanka. This research shows that the majority of mothers are ignorant about urinary tract infections. There appear to be many factors contributing to the high prevalence of lower UTIs among the selected population, despite the knowledge regarding UTIs. Hence, more actions should be taken in order to decrease the prevalence of lower UTIs.

Key Words: *Urinary Tract Infections, Pregnant Mothers, Maternity Ward*

Knowledge, attitudes, and practice regarding Rabies among people at the Outpatient Department in teaching hospital, Anuradhapura District, Sri Lanka

Perera T.K.R.I.G.M.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Rabies is a serious viral infection that affects the brain and nervous system. According to the World Health Organization's global vaccine research, over 30,000 people die every year due to rabies in Asia. This study aimed to identify attitudes, and practices regarding rabies and assess the prevalence of rabies deaths at the outpatient department in the teaching hospital in Anuradhapura, Sri Lanka.

Methods: A descriptive, cross-sectional study was conducted on OPD patients (n=105) at the teaching hospital in Anuradhapura. Convenience sampling technique was used with a self-administered questionnaire with standardized, validated, short-form 35 questions to determine people's knowledge, attitude, and practice. The SPSS statistical package was used to analyze the collected data.

Results and Discussion: The results indicate that, overall, only 56.7% (n=85) had good knowledge of rabies. According to measured preventative knowledge, 96% of the total study population believed that rabies could be prevented with a vaccine. The knowledge status of respondents was associated significantly with their education level. Almost 80.7% (n=121) had a positive attitude, and 72% (n=108) had good rabies prevention practices. The attitudes and practice status of the participants were strongly related to their ethnicity and education level. When considering associations between demographic variables and sources of knowledge about rabies, age is significantly associated with TV and social media ($p=0.05$). When considering the attitude status of respondents, ethnicity is significantly associated with attitude ($p=0.05$). According to the table, the correlation between practice status and both knowledge status and attitude is significant at a 0.05 significance level. But the correlation between attitude status and knowledge is not significant.

Conclusion: Participants' knowledge, attitudes, and practices in the study sample were insufficient to meet a standard level. According to the above-mentioned discussion, recommendations for preventing rabies deaths have been established. To improve knowledge, practices, and attitudes toward the rabies virus, it is critical to design and implement health education and educational training programs.

Key Words: Rabies, Knowledge, Attitudes, Practices

A study to assess factors associated with Sleep Apnea (SA) among snoring patients who are referred to the ENT Clinic of National Hospital, Sri Lanka

Jayathri W.K.N.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: Obstructive Sleep Apnea (OSA) is a common medical condition characterized by frequent episodes of complete or partial upper airway obstruction during sleep, with subsequent oxygen desaturation and sleep disturbance. Severe, untreated OSA has recently been linked to increased cardiovascular mortality. The aim of the study was to assess the quality and the factors related to SA among snoring patients.

Methods: A descriptive cross-sectional study was conducted among 120 snoring patients referred to the ENT Clinic of the National Hospital of Sri Lanka. The participants were selected using the systematic sampling method. Data was collected using an interviewer-administered questionnaire. Responses were analyzed using descriptive statistics such as frequencies, means, and standard deviations, and associations between variables were analyzed via the Pearson chi-square test. Microsoft Excel 2010 and SPSS (version 23.0) were used as statistical tools.

Results and Discussion: Among the participants, the majority were males (80%, n=96) who were 25–44 years old (53.3%, n=64). A significant amount of the sample, 51.7%, (n=62) was included in the BMI category of 25-29.9kg/m². AHI (Apnea Hypopnea Index) was identified as being associated with sleep apnea by a mean value of 32.993. Additionally, the mean value obtained for the ODI (Oxygen Desaturation Index) was 27.172 and 112.07 for apneas. Moreover, obstructive apneas had a score of 106.033 and hypopneas had a mean score of 37.867. Snoring events acquired a mean of 1059.267 as a factor associated with sleep apnea. Study findings depicted that the prevalence of SA among patients was 75% (n=90) and it was higher in men than in women. The majority of the participants (35.8%, n=42.9) suffered from severe OSA, while 20.8% (n=24.9) had mild OSA. Further, 18.3% of the participants had moderate OSA, and 25% did not have this condition.

Conclusion: Findings revealed that AHI, ODI, apneas, obstructive apneas, hypopneas, and snoring events had a significant association with sleep apnea, and height, BMI, duration of sleep, and minimum pulse had no significant association with sleep apnea.

Key Words: *Sleep Apnoea, Factors, Snoring Patients*

PP 106

Social media usage by Advanced Level (A/L) students in Getaheththa, Ratnapura District, Sri Lanka

Sureka R.^{1*}

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Today the world is embracing the advancements in communication technology that have reduced the limitations of communication through "information and communication technologies." This revolution turned the world into a global village; however, it has both advantages and disadvantages. The study aimed to find usage habits for different social media platforms and the amount of time spent by A/L students in Getaheththa, Rathnapura district.

Methods: A descriptive cross-sectional study was carried out among 100 participants in a rural area of Getaheththa. To select the population, a convenience sampling method was used. Data was collected through a validated questionnaire and analyzed using Microsoft Excel.

Results and Discussion: The findings of this study showed that 42% of the sample group used Facebook, while 40% used WhatsApp and 12% used YouTube. Students showed a notable interest in films, songs/music, which was 40% and equal interest in health/lifestyle and technology, which was 12%. The majority of populations' preferred way of engaging in social media was through videos, which was 42%. Pictures were the 2nd most popular engagement method, which accounted for 28% while articles accounted for only 15% of the total. Most students preferred to engage between 3:00 and 5:00 PM, which was about 48%.

Conclusion: The study shows that the majority of students use Facebook and WhatsApp, and they are most interested in films and music categories. It is also shown that the majority of the population prefers videos and pictures, while the population shows poor engagement in articles.

Key Words: *Students, Rural Area, Social Media*

Assessing the knowledge regarding breastfeeding practices among Mothers in the Padukka MOH Area

Ranaweera S.D.H.^{1*}, Rahinduwa B.¹

¹*School of Nursing, International Institute of Health Sciences Welisara, Sri Lanka*

Introduction: Nutritional deficiencies in infants are a crucial public health concern in Sri Lanka. Inappropriate feeding practices have been identified as a major contributor to this issue. Breast milk is uniquely superior as a source of nutrition for infants, and breastfeeding has numerous benefits. The objective of this research was to analyze postnatal mothers' knowledge and practices regarding breastfeeding in the Padukka MOH area.

Methods: A descriptive cross-sectional study was carried out among 170 breastfeeding mothers in the Padukka MOH area selected using the convenient sampling technique. A self-administered close-ended questionnaire was used to collect data. The gathered data were analyzed by using SPSS version 20.

Results and Discussion: The majority of samples were in the age category of 19-29 years (63.6%, n=110). In terms of knowledge, only 8.7% of the mothers agreed that breastfeeding is most suitable for a baby under 6 months. Some respondents strongly disagreed that breast milk provides good nutrients (29.5%, n=51). Further, 31.8% (n=54) of the mothers neutrally responded that breastfeeding provides good immunity. The majority of the participants agreed that they should not continue breastfeeding till the baby is 6 months (60.7%, n=105). Only 5.2% (n=9) of the individuals strongly agreed that colostrum includes more nutrients and agreed that colostrum is good for the baby. A significantly high number of mothers were not aware of the correct positioning during breastfeeding (63.6%, n=110). Moreover, only 4% (n=8) had received knowledge from MOH health education programs, while 96% (n=168) believed they needed to participate in those programs. The mothers aged 19-29 years were found to have 58% knowledge of breastfeeding.

Conclusion: Breastfeeding knowledge among mothers appeared to be average, with 58% knowledge among young mothers. Since breastfeeding has a significant impact on child growth and development, it is recommended that the healthcare sector should take the responsibility for conducting breastfeeding awareness programs for mothers. In addition to that, education programs should be included in all MOH areas in Sri Lanka's prenatal and postnatal clinics.

Key Words: *Knowledge, Practices, Breastfeeding*

Knowledge and attitudes on Diabetic Retinopathy (DR) among patients with Diabetes Mellitus (DM) in Kuliyaipitiya, Kurunegala District, Sri Lanka

Sathkumara S.M.A.P.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Diabetic Retinopathy (DR) is a chronic, progressive disease associated with Diabetes Mellitus (DM) in the retinal microvasculature. DR is the most common complication of diabetes and raises the occurrence throughout DM. The aim of this study was to determine the knowledge and attitude regarding DR among diabetic patients who are attending the Teaching Hospital, Kuliyaipitiya, and to assess the association between the demographic factors and the level of knowledge on DR.

Methods: The study was conducted as a descriptive cross-sectional study including 100 diabetic patients in the Teaching Hospital of Kuliyaipitiya, which was selected using a simple random sampling method. A questionnaire regarding the knowledge and attitude was distributed to the diabetic patients in the diabetic follow-up clinic. Microsoft Excel has been used to analyze data.

Results and Discussion: In this study the majority (62%) of the participants were females. Out of all the respondents, 36% have been diagnosed with DR. A total of 36 patients were aware that Diabetes causes retinopathy. The majority of 50% mentioned that DR caused blindness, 33% mentioned that DR will not cause blindness and 17% of the respondents did not know the effect of DR. Around 27.8% of patients agreed with the statement "If my diabetes is under control, there is no real need", even though the doctors say that diabetic patients should have regular eye check-up. A majority (72.2%) of patients disagreed with this statement, showing that the majority of the participants have a negative attitude toward DR.

Conclusion: The results of the study showed that some of the diabetic patients had some knowledge regarding DR. It was also noted that a majority were aware of the effects of DR. Furthermore, most had a negative attitude regarding DR.

Key Words: *Diabetes Mellitus, Diabetic Retinopathy, Patient Awareness*

A study on the knowledge, attitudes and practices regarding wound care and its associated factors among patients with chronic wounds at Teaching Hospital Anuradhapura (THA) District, Sri Lanka

Chandrasekara C.M.N.S.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of health sciences, Welisara, Sri Lanka*

Introduction: The management of chronic wounds remains a challenging clinical problem. The correct and efficient management of wounds by health professionals as well as the compliance of patients are essential for wound healing. This study was conducted to identify the knowledge, attitudes, and practices of patients regarding chronic wound care and to assess the point prevalence of different types of chronic wounds in the outpatient department and wound care clinics at THA Sri Lanka.

Methods: A descriptive cross-sectional design was followed in the study, and it was quantitative research. A convenience sampling technique was used to recruit 100 participants. Data was collected via a questionnaire about wound care clinics and OPD with a standardized, validated Short Form (SF) containing 32 questions to determine patients' knowledge, attitudes, and practices. The SPSS statistical package was used to analyze the collected data.

Results and Discussion: According to the study, a significant portion of the sample consisted of 57% males, and the age group of 41–60 years represented the majority (41%). From the sample, most of them (34%) had a wound for a duration of 36 months. In addition to that, the lower extremity was chosen as the most common site of wounding by half of the respondents. Further, diabetic wounds were selected as the most common type of chronic wound by 31% of the sample. Moreover, there was a positive correlation between knowledge and physical age ($P=0.003$) and educational level ($P=0.001$). Additionally, a positive correlation existed between attitudes and physical age ($P=0.043$) and educational level ($P=0.001$). There was a positive correlation between practice and income ($P=0.104$) and educational level ($P=0.050$).

Conclusion: The study revealed that there was a positive correlation between knowledge, physical age, and educational level. Additionally, a positive correlation existed between attitudes, physical age, and educational level. There was a positive correlation between practice, income, and educational level.

Key Words: *Chronic Wounds, Knowledge, Attitudes, Practice, Patients*

Knowledge and attitudes regarding Sexually Transmitted Diseases (STD) among Young Adolescents in Wennappuwa Educational Division

Vanderlan S.^{1*}

¹*School of Nursing, International Institute of Health Sciences Welisara, Sri Lanka*

Introduction: STDs are a major issue among young adolescents in Sri Lanka, and with unprotected sex on the rise, awareness must be raised. This study aimed to identify the knowledge of grade 9–11 students in Wennappuwa educational division regarding STIs.

Methods: A descriptive cross-sectional study was conducted with 150 students from Dankotuwa Girls College and Madampe Central College to assess their knowledge of sexually transmitted diseases (STIs). Data were collected using a closed-ended, self-administered questionnaire, and they were analyzed using Microsoft Excel and SPSS.

Results and Discussion: The majority of the participants were females (76%, n=114). A significant number of the students from Dankotuwa Girls College knew about STIs other than HIV (70%, n=105). Most of the individuals knew the modes of transmission of STIs (73%, n=110). More than 75% (n=>113) of the students were aware of Gonorrhea, Syphilis, HIV, and Herpes. The majority of the respondents agreed that parents and family were the sources of knowledge regarding SDIs (74%, n=111). Participants who do not live with their parents showed very low awareness (5%, n=8).

Conclusion: In general, the studies revealed that the majority of people were aware of STDs. On the other hand, young adolescents who do not live with their parents demonstrated a lack of knowledge about STDs. Adolescent sex education is important for STI prevention, and the school setting plays a significant role. In addition to HIV/AIDS, infections such as chlamydia, gonorrhea, and syphilis should be addressed.

Key Words: *Awareness, Sexually Transmitted Infections, Adolescents*

Knowledge, attitudes and practices regarding Catheter-Associated Urinary Tract Infection (CAUTI) among Nurses, at a selected Hospital in Central Province, Sri Lanka

Wickramasinghe N.P.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Patient safety is an important concern for all healthcare professionals as they are all involved in patient care. Nurses' knowledge, attitudes, and practices play a significant role to control infections which ultimately enhances the quality of care for patients. The aim of this study was to assess the nurses' knowledge, attitudes, and practice regarding the prevention of Catheter-Associated Urinary Tract Infection (CAUTI) in General Hospital, Nuwara Eliya, Sri Lanka.

Methods: This was a cross-sectional study that included 150 nurses working in the Surgical and Gynecology wards of General Hospital, Nuwara Eliya, Sri Lanka. The study participants were selected by convenience sampling technique. An adopted questionnaire was distributed among study participants. Data was analyzed using Microsoft Excel software.

Results and Discussion: According to the results, nurses' knowledge, attitude, and practice have statistically significant, and positive relationships regarding the prevention of CAUTI ($p < 0.05$). Hence, there was enough evidence to support the alternative hypothesis (H_{11}), which was accepted at the 5% level ($p < 0.05$). When assessing the knowledge related to CAUTI, 14% ($n=21$) of respondents stated the risk for CAUTI was due to prolonged immobility, 2.7% ($n=4$) of respondents stated the risk for CAUTI was the usage of aseptic techniques during catheter insertion, and 83.3% ($n=125$) of respondents stated the risk for CAUTI was prolonged catheterization. Considering the knowledge of nurses about the symptoms of CAUTI, the percentage of nurses who were aware that fever, headache, and edema were symptoms were 84.7% ($n=127$), 4% ($n=6$), and 11.3% ($n=17$) respectively. Additionally, the current attitude regarding the prevention of CAUTI was at a low level because the overall percentage values of indicators of disagreement were 46.3% ($n=69$). Accordingly, nurses' knowledge, attitude, and practice have a significant positive impact regarding the prevention of catheter-associated urinary tract infections in General Hospital, Nuwara Eliya.

Conclusion: According to the results of the study, the overall knowledge and practices of nurses toward CAUTI were poor. Working experience had a significant association with nurses' practices and knowledge at General Hospital, Nuwara Eliya. Therefore, nurses need to get continuing education and training about CAUTI and prevention that will enhance their knowledge and practices. These findings suggest that nurses need to develop positive attitudes and increase their knowledge of CAUTI in order to improve nursing practice in this area.

Key Words: Knowledge, Attitude, Catheter, Urinary Tract Infection

A study on prevalence and associated factors of occupational Lower Back Pain (LBP) among Nurses in District General Hospital, Nuwara Eliya, Sri Lanka

Nawasinghe W.G.L.^{1*}, Heenkenda H.M.H.S.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Lower Back Pain (LBP) is a major occupational problem, especially among nursing staff. In a healthcare setting, work-related illnesses and injuries have a higher prevalence compared to the general population. The aim of this study was to evaluate the prevalence of LBP and the associated factors of occupational lower back pain among nurses.

Methods: Participants in this cross-sectional study were both male and female nurses in the District General Hospital (DGH), Nuwara Eliya, Sri Lanka, at medical, surgical, pediatrics, obstetrics and gynecology wards, as well as in the ICU and OPD units. The sample included 150 nurses from the DGH Nuwara-Eliya. Each participant was given a self-administered questionnaire with verbal consent. The gathered data was then analyzed using the SPSS 25 statistical package.

Results and Discussion: The present study showed a high cumulative prevalence of LBP among nurses (82.9%). According to the study, the majority of participants were married (76.1%, n=178). Additionally, the results revealed a high prevalence of LBP among married participants (72.9%, n=121) as compared to single and divorced nurses and widows. This study found that nurses working in the surgical ward had the highest LBP prevalence as compared to nurses in the medical ward and other wards, although the difference was not significant. None of the medical factors had a significant relationship with LBP prevalence among nurses, although there was a positive statistically significant relationship between manual lifting of patients and LBP during the last 12 months ($p=0.030 < \alpha=0.05$). According to the correlation results, nurses' knowledge and associated factors have a significant positive relationship regarding the prevalence of low back pain ($p<0.05$). Accordingly, nurses' knowledge, attitude, and practice have a significant positive impact on the prevention of occupational lower back pain at General Hospital Nuwara Eliya.

Conclusion: These findings suggest that nurses need to develop positive attitudes and increase their knowledge of lower back pain and associated factors. Also, this study evidenced the high prevalence of LBP among nurses and brought to light the role of individual and ergonomic physical factors in the genesis of LBP. Such identification permits us to undertake targeted preventive actions. The association between psychosocial factors and LBP was not emphasized.

Key Words: *Prevalence, Knowledge, Factors, Lower Back Pain, Nurses*

Critical assessment of knowledge and attitudes about maternal nutrition among Pregnant Mothers in Rural Area, Galle, Sri Lanka

Madhushani.M.K.C.^{1*}

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka.*

Introduction: Nutrition plays a major role in maternal and child health. Poor maternal nutritional status has been related to adverse birth outcomes; however, the association between maternal nutrition and birth outcome is complex and is influenced by many biological, socioeconomic, and demographic factors, which vary widely in different populations. Understanding the relationship between maternal nutrition and birth outcomes may provide a basis for developing nutritional interventions that will improve birth outcomes and long-term quality of life and reduce mortality, morbidity, and healthcare costs. The aim of this study was to assess knowledge and attitudes about maternal nutrition.

Methods: A combination of descriptive cross-sectional analysis and inferential analysis was conducted, including 105 mothers who attend the maternal clinic in Deddugoda Divisional Secretariat, Sri Lanka. Data collection was done using a self-administered questionnaire, and the collected data were descriptively analyzed using SPSS.

Results and Discussion: Most of the participants (62.9%, n=66) were in the age group of 26–35. Out of them, most had studied only up to grades 6–10 (40%, n=42). Only 4.8% (n=5) had education up to A-levels. The majority of the participants (96.2%, n=101) were married. About 61% (n=64) of the participants had a normal Body Mass Index before the pregnancy. This study found that there is a good relationship between maternal nutrition and vitamin C sources (.885) and iron sources, and a small relationship between protein sources (extremely near to 0). For the attitudes, the R square value is 0.244, which means there is a lower level of relationship regarding maternal nutrition.

Conclusion: The final result of the study shows that there is a small relationship between maternal nutrition and protein sources, but other sources and maternal nutrition knowledge have very little relationship, thus they have no good idea of sources of micro- and macronutrients, and there is no good relationship between maternal nutrition and pregnant mothers' attitudes.

Key Words: *Nutrition, Maternal, Body Mass Index, Mortality, Morbidity*

Assessing the knowledge regarding Adult Advanced Life Support (ALS) among Nurses in General Hospital, Trincomalee, Sri Lanka

Dissanayake D.M.T.P.^{1*}

¹School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Introduction: Advanced Life Support (ALS) has been shown to significantly reduce mortality in medical crises when administered at the right moment. It is vital for medical education that all medical professionals have a solid understanding of ALS, and this knowledge should be kept up-to-date in accordance with the most recent scientific findings. Accordingly, the main objective of this study was to assess the knowledge regarding ALS among nurses in General Hospital Trincomalee, Sri Lanka.

Methods: A descriptive cross-sectional study was carried out by selecting 180 nurses using a stratified sampling technique. A self-administered questionnaire was used to collect data. The data was collected between the 15th of July, 2019 to 5th of January 2019 in order to assess the nursing care provided for patients in medical and surgical wards. Collected data were analyzed using the Statistical Package for Social Sciences (SPSS) version 20, Microsoft Excel 2010, and Mini-tab.

Results and Discussion: The response rate was 106 nurses out of the 180 nurses selected. The majority (83%, n=88) of the participants were males. Around 40.6% (n=43) had 1-5 years of experience in their service. Only 34.9% (n=3) participated in ALS training programs. Most of the individuals (51.9, n=55) followed the algorithm of the European Resuscitation Council for ALS. The majority (84%, n=89) mentioned that there were barriers for ALS. Only 41% (n=44) had knowledge on chest compression. A significant number of respondents (82%, n=87) knew about the techniques. Most respondents (77%, n=82) had first-hand knowledge regarding resuscitation. The majority (86.8%, n=92) of the respondents were familiar with mechanical chest compression, and 70.7% knew the rate of chest compressions. A significant number (77.3%, n=82) had knowledge regarding the application of the defibrillator paddles.

Conclusion: According to the study, most of the participants had not taken part in ALS training programs. However, the majority had average knowledge on how to handle equipment and techniques. Therefore, more training programs for nurses can be offered in order to improve their knowledge and skills in ALS.

Key Words: *Adult, Advanced Life Support, Nurses, Knowledge*

Knowledge, attitude, and practices about Biomedical waste management among Nurses of Base Hospital, Bibile

Dharmasna D.M.L.S.^{1*}, Sameera A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: The waste produced in the course of healthcare activities carries a higher potential for infection and injury than any other type of waste. Inadequate and inappropriate knowledge of handling healthcare waste may have serious health consequences and a significant impact on the environment as well. Thus, this study aimed to assess the knowledge, attitude, and practices of nurses regarding biomedical waste management.

Methods: A cross-sectional study was carried out for 2 months, from January 2022 to March 2022, among nursing staff (n=100) at the Base Hospital in Bibile, Sri Lanka. The participants were randomly selected from the base hospital after getting oral consent from the hospital medical superintendent and written consent from the participants. Data analysis was done using Microsoft Excel.

Results and Discussion: The results revealed that the majority (96.0%) of the participants were female, and the mean age of the respondents was found to be 28.6 (± 9.04) years. The majority (95.0%) of the nursing staff had considered the biomedical waste as different from general wastes, and 90 (90.0%) of respondents agreed with the segregation of BMW at the point of generation. The study showed that 77.51% of study participants knew about various disease transmission through BMW. The overall knowledge of the nursing staff of the hospital (95.8%) regarding BMW was significantly ($p < 0.001$) higher than that of other hospitals.

Conclusion: The study concluded that regular training and supervision are necessary for better healthcare waste management and implementation. The importance of training regarding biomedical waste management needs emphasis; a lack of proper and complete knowledge about biomedical waste management impacts practices of appropriate waste disposal.

Key Words: *Biomedical Waste, Nursing Staff, Knowledge, Attitude, Practices*

Knowledge and attitudes of Parents regarding unhealthy food habits of School-Age Children in the Hanwella Sub-Urban Area, Sri Lanka

Subodani. M.Y.^{1*}, Sameera.A.G.L.A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: A major nutritional problem among school-going children in Sri Lanka is the high percentage of junk food consumption as their breakfast, which results in being overweight and obese, all of which are conditions increasing at an alarming rate. Parents play a major role in establishing healthy eating behaviors in childhood and maintaining them during adolescence. This study aimed to assess the knowledge and attitudes of parents towards unhealthy food habits of school-age children in the Hanwella sub-urban area of Sri Lanka.

Methods: This study was designed to further determine the present level of knowledge and attitudes of 200 parents regarding nutritional requirements. The research design of this study was quantitative, non-experimental, and descriptive design. It consists of collecting data using self-administered questionnaires. The collected data were entered into the Microsoft Excel program, and statistical tests were applied to them for analysis. Descriptive statistics were used to describe the phenomenon.

Results and Discussion: The majority (66%, n=132) of children with mothers were aged 6–7 years, and the majority (86%, n=172) were males. Most of the (80%, n=160) participants have good knowledge about the nutritional requirements of school-going children despite a lack of knowledge about unhealthy food habits and related causes. Among the participants, 6 to 7-year-old, school-going children were more likely to have unhealthy food habits and most of them were males. The majority of respondents (63.5%, n=127) pointed out that lack of family support was perceived as a barrier to maintaining healthy food habits.

Conclusion: The analyzed data highlighted major barriers to healthy food habits, such as inadequate support from family members and difficulty preparing healthy meals at home. According to these study findings, people need to know about the importance of having healthy foods and the influencing factors for having unhealthy food habits. Both school going children and their parents should be knowledgeable about unhealthy food habits.

Key Words: *Sri Lanka, Chronic Diseases, High Percentage, Socio-Economy*

Psychological and behavioral changes in response to the Covid-19 pandemic of the Nursing Staff in selected wards at Teaching Hospital, Karapitiya

Gunathilake V.N.P.T.^{1*}

¹*Department of Nursing and Allied Health Sciences, University of Ruhuna, Galle, Sri Lanka*

Introduction: After the first emergence of Covid-19 in China, there were millions of cases reported worldwide and it became a global pandemic. Nowadays billions of people in the world have experienced any form of lockdown or quarantine due to Covid-19 infection and are very likely to develop psychological stress and disorders such as stress, irritability, depression, and emotional exhaustion. There was a challenge to maintain the quality of patient care provided by the nursing staff because of the impact of Covid-19 on their mental status and behavioral patterns. The aim of the study is to study and assess the psychological and behavioral changes in response to the Covid-19 pandemic among the nursing staff in Teaching Hospital, Karapitiya, Galle, Sri Lanka

Methods: A cross-sectional survey was conducted using a qualitative research approach, with the use of a convenience sampling technique. More than 500 nursing officers were included in the study from different wards, but only 112 respondents showed interest in the study.

Results and Discussion: This research data is from 112 nursing officers in Emergency wards, medical wards, pediatric wards, and Covid-19 wards in Teaching Hospital, Karapitiya, Sri Lanka. The Covid-19 pandemic caused a considerable amount of development of fears in the nursing staff feared visiting crowded places 77.7% (n=87), feared that they will carry Covid-19 to their homes because of the duty 79.5% (n=89), with the majority of the respondents who said “Agree” were from pediatric and medical wards. We discovered that among the nursing staff, the following psychological and behavioral changes have a direct relationship according to the ward they are working in; fear of leaving their house because of Covid-19 (p=0.004), and fear of carrying Covid-19 to their home because of their duty. (p=0.011), being anxious when a family member goes outside the house. (p=0.011), and fear of running out of groceries makes them purchase more groceries (p=0.027).

Conclusion: The study shows increased fear and anxiety levels of nursing officers in healthcare service, and they have experienced certain positive mental alterations, behaviors and as well as negative mental alterations and avoidance behaviors as a result of the Covid-19 exposure.

Key Words: *Pandemic, Coronavirus, Psychological, Pediatric, Emergency*

**Awareness of Lung Cancer among Students of the National Institute of Health Sciences,
Kalutara, Sri Lanka**

Amarasena K.O.^{1*}, Anjalee H.G.Y.¹, Ashani K.K.I.¹, Jayarathna P.B.J.K.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Lung cancer is a leading cause of cancer death worldwide. The majority of lung cancer cases are diagnosed at an advanced stage because of poor awareness of lung cancer. The two most common risk factors are active and passive smoking. Health workers are more prone to getting lung cancer because they work with chemicals and radiation. This study was done to assess the level of awareness of NIHS students about risk factors, signs, and symptoms, and the possible complications of lung cancers.

Methods: This was a descriptive cross-sectional study conducted among students at the National Institute of Health Sciences, School of Nursing, Kalutara. Data was collected using a self-administered online question survey. Convenient sampling was used to select the sample, and the collected data were analyzed using Microsoft Excel software.

Results and Discussions: The sample consisted of nursing students, pharmacy students, Public Health Laboratory Technician Students (PHLT), Public Health Inspector Students (PHI), and midwifery students. Among the participants, 90.9% were female and 86.2% were between 21- 25 years old. The majority of the participants were aware of the risk factors of lung cancer. The majority (66.4%) had mentioned active cigarette smoking, passive cigarette smoking, exposure to asbestos, and air pollution as major risk factors. Around 62.24% mentioned certain chemicals and radiation were also risk factors. Others (31.1%) had mentioned family history, excessive exposure to sun rays (33.19%), physical inactivity (24.89%), and higher mental stress (20.74%) as other risk factors. Of those who were aware of signs and symptoms, more than 50% of the participants mentioned epistaxis, chest pain, respiratory infections, loss of appetite, swelling of lymph nodes, and weight loss as major signs and symptoms. About 45.64% have mentioned hoarseness of voice and bone pain as well as other signs and symptoms.

Conclusion: The study results concluded that there was an average level of awareness among participants regarding risk factors and signs and symptoms of lung cancer. It is further recommended to take the required measures in order to enhance the knowledge with regard to lung cancer among students.

Key Words: Lung Cancer, National Institute Of Health Sciences, Risk Factors, Symptoms

Effectiveness of online learning on Nursing Students of the School of Nursing, Kalutara

Kavinda H.W.C.¹, Sugatharathna M.P.^{1*}, Shanika E.G.D.¹, Perera D.C.A.D.¹, Kumari M.D.N.P.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Nursing training combines theoretical and practical experiences for 3 years. A major component of nursing education is carried out in a clinical environment. However, online education is a form of distance learning that has unlimited participation and interaction with students and teachers from around the world. Due to the increasing threat of the Covid-19 pandemic, all educational institutions have been changing to online learning across the country. Thus, the aim of this study was to assess the effectiveness of online learning on nursing students.

Methods: A descriptive cross-sectional quantitative study was conducted among the 210 third-year nursing students in the School of Nursing, Kalutara. A self-administered questionnaire was used for the data collection. Furthermore, the collected responses were analyzed using Microsoft Excel.

Results and Discussion: The response rate was 100%, while the majority (78.1%, n=164) were between the age of 21-25 years. Moreover, most of the respondents (94.9%, n=199) were females. About 92% (n=193) of the students used smartphones for online learning. However, the majority (98.4%, n=207) faced many difficulties in accessing the internet as needed. In addition, most of the nurses (94.1%, n=198) experienced problems with time management during online learning. Furthermore, 88.3% (n=185) of the respondents faced certain understanding issues when having online lectures instead of physical lectures.

Conclusion: According to the results, most nursing students responded with negative feedback with regard to online learning. The negative impact on their studies showed that online learning is not much effective for their nursing education due to issues in time management, understanding, and difficulties accessing the internet as needed.

Key Words: *Effectiveness, Online Learning, Nursing Students*

A study on Nursing Students' perspective regarding the issues in clinical practice

Savindi K.A.D.H.^{1*}, Samarakoon M.M.¹, Gnarathna G.D.M.S.¹, Erandika¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, School of Nursing, Kalutara, Sri Lanka*

Introduction: The student nurses work to promote, maintain & restore patients' health. The training of nurses is a combination of theoretical and practical learning experiences that enables nursing students to acquire the knowledge, skill, and attitudes for providing nursing care. Hence, the study aims to identify nursing students' perspectives regarding the issues in clinical practice.

Methods: The quantitative, cross-sectional study was conducted among a conveniently selected 94 students of the school of nursing Kalutara. A self-administered online questionnaire was used to collect data. Collected data were analyzed using Microsoft Excel software.

Results and Discussion: A total of 94 students participated in the study. 38.5% (n=36) of students were satisfied with the support from staff nurses. Regarding adequate supervision during the procedure, 46% (n=43) were unsatisfied. 87% (n=81) of the students agreed and the remaining 9% (n=8) students disagreed that the clinical environment leads to stress & anxiety.

Conclusion: The majority of the respondents are unsatisfied with the support from staff and nearly half of the respondents were unsatisfied with the supervision during procedures. Significantly, a majority of the students agreed that the clinical environment is stressful and anxious.

Key Words: *Clinical Practice, Nursing Students, Study Related Problems*

PP 121

A study on the available facilities in boarding houses among Student Nurses of the School of Nursing, Kalutara

Dilshani W.E.P.P.¹, Imalsha A.B.¹, Shashiprabha B.G.A.^{1*}, Premathilaka S.D.A.N.¹,
Thalagala T.R.J.¹

¹*National Institute of Health Sciences, School of Nursing, Kalutara, Sri Lanka*

Introduction: Boarding house is a temporary residence place for a person. The aim of this research was to assess the available facilities in boarding houses, which influence students' training and education.

Methods: This was a cross-sectional, descriptive study done among 143 nursing students of the School of Nursing Kalutara. Data was collected through a self-administered questionnaire distributed as a Google form and descriptively analyzed.

Results and Discussion: Among the 143 respondents, more than two-thirds (82%, n=117) of the participants live in boarding houses with a peer group. The level of satisfaction with the infrastructure facilities such as room facilities, study room facilities, toilet facilities, and adequate drinking water supplements was 87.4% (n=125), 81.1% (n=116), 85.3% (n=122), and 91.6% (n=131) respectively. Most of the respondents (88.8%, n=127) had a calm and peaceful environment to study in boarding houses. The majority of the respondents (91.60%, n=131) reported that the boarding house was secured from physical hazards. A higher number (89.5%, n=128) of students had a proper waste management system in their boarding houses. Most students (93.0%, n=133) believed that the internet facilities available in the boarding houses were not helpful to access the study materials and the Wi-Fi connection. A significant number (87.4%, n=125) of students did not have TV facilities in their boarding houses.

Conclusion: The study shows that the students are satisfied with the room facilities provided in the boarding house and also satisfied with the environmental facilities. But they are not satisfied with the internet and Wi-Fi facilities and TV facilities.

Key Words: *Infrastructure, Boarding House, Facilities, Student Nurses*

PP 122

The student perception of teaching-learning strategies in classrooms of the School of Nursing, Kalutara

Thalagala T.R.J.¹, Shyamalee H.M.R.¹, Lakshani D.M.K.^{1*}, Mataraarachchi S.P.¹, Lochana N.D.L.¹

¹*National Institute of Health Sciences, School of Nursing, Kalutara, Sri Lanka*

Introduction: Clinical practices during nursing training as well as the time spent studying with the teacher in the classroom greatly affect the effectiveness of the student's learning process and the final results. This study was aimed basically to identify the student's perception of how the teacher's teaching method and student's learning method affect the nursing students.

Methods: This is a cross-sectional, descriptive study done among a conveniently selected 100 nursing students of the School of Nursing Kalutara. Data were collected through a self-administrated questionnaire distributed as a google form and data were analyzed descriptively.

Results and Discussion: The majority of the participants (58.4%) stated that the teacher's understanding of the student's mental status is important for effective learning. About 74% of the participants responded that the PowerPoint presentation is the most effective visual aid for lectures. According to the study, the majority of the participants (56.7%) responded that 40 mins were the most effective time period for doing lectures.

Conclusion: According to this study it can be concluded the majority had a good perception of teaching-learning strategies in the School of Nursing, Kalutara. but students suggest morning is the suitable time, 40mins lecture period and PowerPoint presentations are most suitable for learning.

Key Words: *Perception, Teaching Learning Strategies, Classrooms*

Study on the habits of chewing betel among workers in Kalutara Depot

De Silva S.B.P.Y.^{1*}, Dulmi L.S.¹, Gamage S.S.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Betel chewing has been practiced in many countries by people in South Asia countries. Betel chewing is one of the high-risk factors for oral cancer and cardiovascular diseases. The study aims to assess the prevalence of betel chewing among workers in Kalutara Bus Depot.

Methods: This was a cross-sectional, descriptive study done among workers in Kalutara Bus Depot with a total of 193 sample sizes. Data were collected through a self-administered questionnaire distributed as a survey form and descriptively analyzed.

Results and Discussion: All responses were male. The response rate was 70.98% (n=137). The findings showed that the majority (56.2%, n=77) of workers were in 41 to 50 years of age. Out of 137 users, 52.6% (n=72) of users were drivers and 38.7% (n=53) were conductors. According to the findings, most of the (41.6%, n=57) betel quid chewers have used 5 quids per day and from 5-8 years to 57.7% (n=79). The majority of workers (62.8, n=86) chewed betel quids while their shift. Only 47.7% (n=65) of workers used to chew betel at night. None of the workers had kept betel quid in their mouth at sleeping time. Betel, areca nuts, calcium hydroxide paste, and tobacco were used 85.4% (n=117). The majority of them (57.6%, n=79) had gotten betel quid to reduce their tiredness and 27.7% (n=38) had gotten betel quid because of the desire to chew something at every time.

Conclusion: According to the results, most drivers and conductors had more prevalence of chewing betel. Therefore, policies including effective community awareness campaigns for anti-betel quid chewing are strongly recommended.

Key Words: *Workers In Kalutara Bus Depot, Betel, Chewing Betel, Oral Cancer, Areca Nuts, Calcium Hydroxide Paste, Tobacco*

PP 124

Study on the usage of mobile phones among Student Nurses at the School of Nursing, Kalutara

Peiris P.V.S.R.^{1*}, Ranaweera H.P.H.¹, Ranasinghe G.S.S.¹, Thalagala T.R.J.¹, Neranjala A.D.I.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara*

Introduction: Nowadays mobile phones are used for various activities such as communication, information collection, and leisure activities. A student is a person who is studying at a college or university. Studies have shown that students are using mobile phones at a significantly higher level. The aim of this research was to study the use of mobile phones among student nurses in the School of Nursing Kalutara.

Methods: This is a Quantitative study conducted using a self-administered questionnaire. The study sample consisted of 100 students from the 2018 and 2019 batches of the school of Nursing Kalutara. All students who are selected to study have smartphones. The collected data was analyzed using Microsoft Excel.

Results and Discussion: During academic time most of the students used phones on Google searching and after educational time social media. About 83% watched nursing clinical procedures on YouTube. Among them, 87% agreed that watching procedures on YouTube was effective. About 83% used mobile phones after academic time. Among them 38% used phones for more than 2 hours, 6% use more than 5-15 minutes, and 60% used phones for 15-20 hours. The majority (72%) agreed that using phones during academic time was effective and 28% disagreed. Most (86%) of the students used data packages to recharge their phones. A higher number (65%) of the students recharged their phones once a month. Around 52% of the students spent Rs.400/= to recharge per month and 6% spent Rs. 2000/= to recharge per month.

Conclusion: There was a higher usage of mobile phones among student nurses at the school of nursing Kalutara. They used mobile phones for academic purposes and as a leisure time activity.

Key Words: *Usage Of Mobile Phones, Nursing Students*

Knowledge, practices, and attitudes regarding Self-Breast Examination among Women in Kalutara MOH area, Sri Lanka

Tharangani S.D.N.¹, Asmadala S.M.R.D.P.K.¹, Jayarathna D.G.W.H.¹, Thewarapperuma D.R.H.^{1*}, Thewarapperuma D.S.H.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Breast cancer has been identified as the most common cancer and the leading cause of cancer death among women worldwide. The self-breast examination is a screening method used to detect early breast cancer. Furthermore, it can help a person learn how their breasts normally look and feel and notice when changes occur. Thus, the aim of the study was to assess the knowledge, practices, and attitudes regarding self-breast examination among women in Kalutara.

Methods: This was a cross-sectional, descriptive study done among women 16-60 years old in the Kalutara MOH area. This study involved 100 female participants in MOH Kalutara. Data was collected through a self-administered questionnaire and the collected data were descriptively analyzed.

Results and Discussion: More than half of the women (58%) had adequate knowledge regarding the self-breast examination. About 35% of the women have stated that they are performing self-breast examinations. Moreover, 32% of the women had favorable attitudes regarding the self-breast examination.

Conclusion: The findings of this study concluded that the women in the Kalutara MOH area have considerably inadequate knowledge, poor practice, and unfavorable attitudes towards the self-breast examination.

Key Words: *Self-Breast Examination, Women, Knowledge, Practices, Attitudes*

Study on the issues related to home gardening among Nursing Students at the School of Nursing Kalutara, Sri Lanka

Thalagala T.R.J.¹, Erandika H.A.H.¹, Thilakshana M.A.D.¹, Thathsarani W.B.G.I.^{1*},
Wickramasinghe W.A.M.S.¹

¹National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka

Introduction: The economy of Sri Lanka is founded on agriculture. More than 35% of the 20 million people of Sri Lanka engaged directly or indirectly in the agrarian sectors. Home gardening can be taken as a solution to overcome the economic crisis caused by the situation in Sri Lanka. The aims of this study were to assess the basic knowledge and capabilities in home gardening, to identify issues related to the knowledge in home gardening, to identify physical and human resources for cultivating, and to assess practical issues in maintaining home gardening among nursing students at the School of Nursing Kalutara.

Methods: This was a descriptive, cross-sectional quantitative study. A convenient sampling method was used to select 100 nursing students from the population. Data was collected using a self-administered questionnaire. the collected data were analyzed descriptively.

Results and Discussion: The response rate was 100%. Overall participation in home gardening was high with the current situation in Sri Lanka. About 95% of the participants had a basic knowledge of home gardening. Most of the respondents had no ability to get solutions for issues related to knowledge of home gardening (62%). Therefore 90% of the respondents have the inability to fulfill physical and human resources for cultivating home gardening among nursing students' Kalutara. Most of the respondents (78%) have practical issues with home gardening.

Conclusion: According to the results, most nursing students had basic knowledge regarding home gardening. High level of issues for physical and human resources for cultivating. Also, the majority have practical issues in maintaining home gardening among nursing students in SON Kalutara.

Key Words: *Home Gardening, Issues, Nursing Students*

Study on the nutritional-related problems among Student Nurses of Nurses Training School, Kalutara

Kaushalya H.P.A.¹, Pradeepa A.A.N.¹, Kawshalya K.P.^{1*}, Rodrigo S.A.A.L.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Nutritional state is fundamental to maintaining the proper health state of an individual. Thus, maintaining a good nutritional level is very important for students because it increases energy levels, promotes immune system functioning, improves the ability to cope with stress, and increases concentration and performance in clinical and academic settings. Time is a factor influencing dietary habits for students in particular. Availability of healthy options, economic state, and cultural background. So, there is a need to study nutritional-related problems and identify how these causes affect students of Nurses Training School (NTS). Thus, this study aimed to identify nutritional-related problems among student nurses at NTS Kalutara.

Methods: A cross-sectional, descriptive, and quantitative study was conducted among 150 students in the Nurses Training School, Kalutara. Thus, a self-administrative questionnaire was used to collect data. The collected responses were analyzed with the help of Microsoft Excel.

Results and Discussion: The majority (73.2%, n=110) of the students stated that they do not get a balanced diet. Furthermore, 50.3% (n=75) of the students consume food outside. About 61.7% (n=93) are more concerned about taste when selecting foods than concerned about nutritional value. In addition, 66.5% (n=100) state that they are not satisfied with the quality of the food items that they purchase. However, most of the students (91.3%, n=137) agree that they skip meals due to their busy schedules.

Conclusion: Based on the overall results, the majority of the students do not get a balanced diet and skip meals due to their schedules. Furthermore, they seem to be more concerned about the taste than the nutritional value of the food.

Key Words: *Nutrition, Nurses, Balanced-Diet*

Study of the knowledge and practice of Self-Breast Examination among Female School Teachers in the Mathugama MOH area

Jayathilaka H.S.S.^{1*}, Karunarathna S.K.S.¹, Gimhani P.T.¹, Thalagala T.R.J.¹, De Silva U.C.K.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Self-breast examination is a method that can aid in identifying changes in the breast such as lumps, thickening, and abnormal discharges from the nipple, which indicate breast cancer in its initial stages. There is a substantially high number of women with breast cancer globally. Furthermore, more than one million women are estimated to be diagnosed with breast cancer every year. Thus, the aim of this study was to assess the knowledge and practice of self-breast examination among female school teachers.

Methods: A descriptive cross-sectional quantitative study was conducted among 100 school teachers in the Mathugama MOH area. The data was collected via a questionnaire that was circulated as a form on Google. The collected data was analyzed with the help of Microsoft Excel.

Results and Discussion: When considering the knowledge related to a self-breast examination, all the respondents knew that it was the most common cancer among females. Moreover, all the respondents knew that breast lumps are the most common sign of breast cancer. However, only 6% of the teachers did not know that an orange peel-like skin change on the breast is a free sign of breast cancer. About 11.4% of the teachers did not know that inverted nipples are a sign of breast cancer. Furthermore, 8.6% of teachers did not have knowledge about the abnormal changes in the shape of the breast as a sign of cancer. When considering the practices, 54.5% of the teachers did not know that every female above 18 years of age should perform a self-breast examination. Furthermore, many of the teachers (76%) did not perform self-breast examinations monthly. In addition, 51.4% of the teachers were not able to do a self-breast examination as they had forgotten how to perform it.

Conclusion: Many of the school teachers had good knowledge with regard to the signs and symptoms of breast cancer. Yet, the knowledge regarding self-breast examination and practices seems to be average.

Key Words: *Self Breast Examination, Teachers, Breast Cancer*

**A study on the perception of the Nursing profession among Advanced Level Students in
Kalutara Balika National School**

Perera H.M.¹, Vithana N.R.K.¹, Weerasinghe S.P.L.S.^{1*}, Weerawansha H.P.N.M.¹, Thalagala
T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Nursing is a noble profession in the entire world, but the lack of perception directly affects the true image of the nursing profession in society. Hence, this study aimed to assess the nursing profession's perception among Advanced Level students of Kalutara Balika National School.

Methods: A descriptive cross-sectional study was conducted among 120 Advanced Level students in Kalutara Balika National School. A structured self-administered questionnaire was used to collect data. Moreover, the responses were analyzed using Microsoft Excel.

Results and Discussion: From the total respondents, a majority (75%, n=90) had a good knowledge of the nursing profession and the role of nurses. However, 70% (n=84) of the total participants did not like to choose nursing as their future career due to the lack of qualifications, studying in other streams that were not related to biology, duty hours on public holidays, night duty shift, and insufficient salary.

Conclusion: According to the results, most students did not have a good perception of the nursing profession and did not want to choose it as their future career. Thus, it is required to conduct awareness programs and improve the perception of nurses in society.

Key Words: *Nursing Profession, Perception, Advanced Level Students*

Study on the effect of smartphone usage among Nursing Students on their education in the School of Nursing, Kalutara

Perera W.A.D.H.^{1*}, Kothalawala N.P.¹, Chathurangane K.A.H.N.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Smartphones are a rapidly growing technology all over the world. However, with the usage of mobile phones, there are advantages and disadvantages that affect the student's education. It is also seen that many individuals including the youth use it for entertainment purposes, interaction with friends and family, learning purposes, the Internet, etc. Thus, this study was conducted to determine the effects of smartphone usage on student nurses' education in the school of nursing Kalutara.

Methods: A cross-sectional, descriptive study was done among nursing students in Kalutara NTS. Data was collected through a self-administered questionnaire that was distributed as a google form and descriptively analysed.

Results and Discussion: The majority of the respondents (86.2%) were in the age group 22-25 years and were females (94.3%). Most of the participants (99.4%) were Sinhala and Buddhist (98.9%). Among the respondents, 99.4% agreed that smartphones improve their knowledge. About 71% were using smartphones during lectures and among them. Moreover, 65% use smartphones to gain knowledge related to the content of lectures. Nearly half of the respondents, (49.4%) had never used smartphones for recording lectures during lecture times. About 42.9% of respondents were using phones 3-5 hours per day. Furthermore, WhatsApp was mostly (66.3%) a communicative app used among the participants. Many of the participants thought that hobbies decrease due to the usage of smartphones. However, many also thought the knowledge about society has increased due to the use of smartphones. About 59.6% of respondents used smartphones during clinical trials. Among them, the majority of (92%) the respondents used smartphones to search for medical abbreviations. Furthermore, 73% of the participants used smartphones for searching procedures in their practice. In addition, 96% agreed that their SP benefited from gaining knowledge in their nursing life.

Conclusion: Most of the student nurses used smartphones based on the overall results. Furthermore, many participants stated that smartphone usage had a positive impact in terms of gaining knowledge.

Key Words: *Smartphone, Nursing Students, School Of Nursing*

A study on secondary complications following the Covid-19 vaccine among the students at the National Institute of Health Science, Nurses Training School, Kalutara

Nithma A.S.^{1*}, Silva M.S.A.¹, Silva.K.H.K.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Due to the Covid-19 pandemic, vaccines had to be received. Covid-19 vaccination is reliably identified to be very effective in preventing deaths, and serious complications resulting in Covid-19 hospitalization. Even among student nurses, and healthcare professionals' vaccine acceptance has been found to be sub-optimal with doubts about vaccine safety, quality control, and potentially adverse effects given its rapid development. Therefore, this survey would give an inside into the actual adverse effects experienced by the recipient of the Covid-19 vaccine and will help us understand the nature of the adverse effect of these different vaccines. The aim of this study was to assess the discomfort, disability, and complications of the Covid vaccines.

Methods: A quantitative study was carried out among 100 student nurses from the Nurses Training School, Kalutara. It was carried out from June to October among the 1st and 3rd year nursing students. Data was collected by a self-administration questionnaire that was circulated as an online survey. The collected data was analyzed using Microsoft Excel.

Results and Discussion: The majority (82%) belonged to the 21-25 year age group and 18% belonged to the 26-30 year age group. A total of 80% of students received Sinopharm, and 11% of students received Pfizer Biotech. Furthermore, only 9% of students received AstraZeneca/Oxford. When considering the dosage received, the majority (66%) had received two doses of the Covid-19 vaccine and a minority (4%) had received a single dose. In terms of discomfort following the vaccination, the majority (65%) reported that the major discomfort reported after vaccination was fatigue. Furthermore, 28% stated that they had experienced a reduction in sleep. Moreover, 46% experienced headaches, and 45% experienced breathing difficulty. When considering the other complications, 16% stated that they had irregular heartbeats and 11% stated that they experienced decreased blood pressure. About 40% stated that they experienced menstrual irregularities, arthritis (4%), visual impairment (12%), and hearing impairments (8%).

Conclusion: Based on the overall results all participants have gained the Covid-19 vaccine. In terms of discomfort after vaccination, the majority felt fatigued. Furthermore, many of the students experienced headaches, breathing difficulties, and menstrual bleeding.

Key Words: Covid-19, Vaccination, Nurses

A study on the impact of using social media on their studies and day-to-day life among students at the School of Nursing, Kalutara

Muthukumarana H.^{1*}, Nirasha T.M.D.N.¹, Gunathilaka D.N.D.¹, Wimalasiri D.A.P.S.¹
,Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Nowadays many students are spending countless hours immersed in social media such as Facebook, YouTube, and Instagram. At first glance, this may seem like a waste of time. But it helps students to develop important knowledge and social skills to become active citizens who create and share their values. At present whether social media is favorable or not, many students utilize these platforms on a daily basis as they continue to grow in popularity. This study aimed to examine the purpose of using social media, to study the influence of social media on students at the School of Nursing Kalutara, and to identify the side effects of using social media.

Methods: This quantitative, cross-sectional study was conducted among nursing students of the school of nursing Kalutara. Data was collected using a self-administered questionnaire and was distributed using a convenient sampling method. The collected data was analyzed using Microsoft Excel.

Results and Discussion: About 85% of the participants stated that they were using social media in their studies & day-to-day life. Moreover, 92% of students used social media to relieve stress, and 70% to build relationships. The majority (93%) of the students used social media for their nursing education. Furthermore, 75% of students had unhealthy side effects from using social media.

Conclusion: Majority of the nursing students use social media equally for their studies as well as day-to-day activities. Other than those two purposes, students use social media as a coping mechanism for stress and developing relationships.

Key Words: *Social Media, Nursing Students, Studies*

Study on the practices of temperature checking procedures among Student Nurses in the School of Nursing, Kalutara

Chamika H.K.T.^{1*}, Jayasumana M.A.Y.S.¹, Jayathissa M.S.K.¹, Thalagala T.R.J.¹, Kumari M.D.N.P.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Temperature is a vital sign of the human body. Changes in body temperature can be identified as a precursor to some disease conditions. Temperature can be monitored from several sites. The axilla usually measures temperature. Measuring temperature is a simple but very accurate procedure. The purpose of this research was to study the gap between teaching and performing the temperature checking procedure in practice in nursing care.

Methods: This was a cross-sectional, descriptive study done among a conveniently selected sample of 150 students at the school of nursing Kalutara. Data were collected through a self-administered questionnaire sent as a Google form. Collected data were descriptively analyzed using Microsoft Excel software.

Results and Discussion: The majority (97%, n=146) of the participants were using the Axillary method for measuring the temperature in the wards. Furthermore, 91.9% (n=138) stated that, when a thermometer has been accidentally broken in the ward, they would inform the ward sister and write in the condemn equipment book and store it in a yellow bag. In addition, many of the participants (93.2%, n=140) checked the quarter-hourly temperature at the correct time. However, 38.5% (n=58) agreed on the support they receive from staff in this procedure.

Conclusion: Based on the overall results, the majority of the nursing students had good knowledge about temperature checking procedures and correct documentation.

Key Words: *Documentation, Knowledge, Practice*

Study on the influence of mobile phones on Mental Health, among Student Nurses in the School of Nursing, Kalutara

Madushani K.P.^{1*}, Wettasinghe D.G.M.¹, Subasinghe H.P.I.N.¹, Premathilaka S.D.A.N.¹,
Thalagala T.R.J.¹

¹*School of Nursing, National Institute of Health Sciences, Kalutara, Sri Lanka*

Introduction: Mental health is the state of emotional, psychological, and social well-being. Mobile phones are the most effective communication device in the modern world. The Covid-19 pandemic situation has led to an increase in the use of mobile phones by all professionals, school children, and youth. The aim of this research was to study the influence of mobile phones on the mental health of nursing students in the School of Nursing, Kalutara.

Methods: This was a cross-sectional, descriptive study done among a conveniently selected 200 students at the School of Nursing, Kalutara. Data was collected through a self-administered questionnaire distributed as a Google form and descriptively analyzed.

Results and Discussion: All of the approached nurses responded to the questionnaire. The majority of respondents (92.9%, n=186) were between the age of 23-26 years and females (88.7%, n=177). Furthermore, many of the participants (61%, n=122) listened to music with mobile phones. About 27% (n=54) of respondents used YouTube or Facebook to reduce their stress. Moreover, most of the students (97.9%, n=196) agreed that mobile phones affect the eyes and sleep. In addition, over half of the respondents (55.3%, n=111) agreed that they played mobile games to reduce stress. A minority (33.5%, n=67) spent their leisure time using mobile phones. The majority (92.9%, n=186) agreed that mobile phones help to reduce stress

Conclusion: According to the results, many of the nursing students used mobile phones. More than half of the respondents stated that they use mobile phones to listen to music to reduce stress levels. Furthermore, the majority stated that the usage of mobile phones affects their sleep.

Key Words: *Mental Health, Mobile Phones, Nursing Students, Stress*

A study on the factors affecting Nursing Students in the Clinical Learning Environment

Haputhanthiri H.G.S.^{1*}, Thalagala T.R.J.¹, De Alwis D.W.L.¹, Subhani D.I.¹, De Silva D.C.J.C.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Clinical learning is considered the main part of nursing education. Students' exposure to a clinical learning environment is one of the most important factors affecting the teaching-learning process in the clinical setting. Identifying challenges encountered by nursing students in the clinical learning environment could improve training and enhance the quality of planning and promotion of the students. This study aimed to identify the challenges related to knowledge, support from the patient, and support from the hospital staff.

Methods: This was a quantitative, descriptive cross-sectional study conducted among a conveniently selected 200 first-year and third-year students of the school of nursing, Kalutara. Data was collected through a self-administered questionnaire distributed as a google form and the collected data was descriptively analyzed using MS Excel software.

Results and Discussion: The findings depicted that the majority (61%, n=122) of students belonged to the 21-24 years range. In addition to that, 46% (n=92) of the participants agreed that they do not obtain a proper level of knowledge in clinical procedure demonstrations. Further, 61% (n=122) of students agreed that the lack of instruments was the main problem in the clinical environment. Moreover, 54% (n=27) of students accepted that the lack of cooperation from the staff affects their clinical environment in a negative manner.

Conclusion: This study concluded that the inadequate knowledge level, lack of cooperation from the hospital staff, and scarcity of instruments were factors that affected the learning process of student nurses in the clinical learning environment. Therefore, it is vital to address the above issues and take action in order to build an effective learning environment to make the learning process productive.

Key Words: *Student Nurse, Clinical Nursing Environment, Factors*

A study on factors affecting academic performance among Nursing Students at Nurses Training School, Kalutara, Sri Lanka

Lenora R.D.D.¹, Abechandra W.I.S.^{1*}, Amanda K.K.¹, Sewwandi K.L.Y.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: The academic performance of student nurses is defined by the ability to demonstrate the performance of professional skills or behaviors. That particular performance can be affected by several factors, either intrinsic or extrinsic. The aim of this study was to identify factors affecting academic performance among nursing students.

Methods: A cross-sectional quantitative research was conducted among conveniently selected 100 nursing students of Nurses Training School, Kalutara. A self-administered questionnaire was used to collect data. The gathered data was analyzed using Microsoft Excel software.

Results and Discussion: The majority of the respondents belonged to the age category of 20-25 and 97% were females. One of the major factors that affected academic performance was the unbearable high theory content and the gap between theory and practical, as mentioned by 57%. Additionally, 66% agreed that their nutritional needs do not interfere with their performance since they could easily fulfill the need. Further, 44% stated that involvement in extracurricular activities does not interfere negatively with their education. It was declared by 50% that they felt comfortable with adhering to the rules & regulations of the institute. Moreover, 50% stated that the distance and high accessibility to their training school from their residence place affects their academic performances.

Conclusion: Participants have identified the gap between theory and practical, the ability to fulfill their nutritional needs during the training period, involvement in extracurricular activities, rules & regulations of the institute, and less distance and high accessibility to their training school from their residence place are the major factors affect the academic performance among nursing students at the Nurses Training School, Kalutara. Therefore, it is vital to pay attention to these issues in order to enhance the academic performance of students.

Key Words: *Academic Performance, Nursing Students, Factors*

Factors affecting Nursing Students' performance in theory examination at the Nurses Training School, Kalutara

Nishawi L.G.D.^{1*}, Bandara M.G.P.N.S.¹, Thalagala T.R.J.¹, Madawala S.G.M.L.¹, Oshani B.A.K.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Examinations improve the student's overall personality, memory, and revision skills. Three years nursing diploma is provided by Nursing Training Schools in Sri Lanka. The aim of this study was to assess the factors of nursing students' performance in theory examinations.

Methods: This descriptive, cross-sectional study was conducted among 120 third-year students at the School of Nursing Kalutara. The study was done by using a simple random sampling technique. Data were collected through a self-administered questionnaire and distributed as a Google form. The collected data were analyzed using Microsoft Excel software.

Results and Discussion: The findings showed that the majority (73.3%, n=88) of the students were in the 24-25 years age range. According to the results, there were significant factors affecting their performance in theory examinations such as psychological status (82.5%, n=99), and physical health (84.1% n=100). Furthermore, they also stated the sleeping pattern before the exam day (76.7%, n=92), infrastructure facilities of the exam hall (69%, n=82), and sound outside the exam hall during the exam (62.5%, n=75). The majority of the students (68.3%, n=80) stated that changes in the structure of the paper negatively affect the exam results and the clear guidance for exam preparation by academic staff positively affects the same. In comparison, the majority of the students (74.1%, n=90) agreed that lack of allocated time for subject matter affects negatively.

Conclusion: Third-year nursing students believe that their physical and psychological status, infrastructure facilities in the exam hall, changes in the structure of the paper, guidance from academic staff, and allocated time for subject matter affect their performance in theory examinations.

Key Words: *Theory Examination, Nursing Student's Performance, Factors Affecting*

A study on the personal factors affecting Student Nurse's successful achievement of a Diploma in General Nursing Certificate

Ranathunga I.P.D.N.^{1*}, Ariyawansa A.G.R.N.¹, Abeysingha C.D.¹, Erandika.H.A.H.¹,
Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Personal factors refer to internal factors that contribute to the well-being and functioning of an individual. Currently, nursing students' academic failure is a phenomenon of growing interest because of its economic impact and its negative effects on the availability of future nurses in different healthcare systems. The aim of this study was to identify personal factors affecting student nurses' achievement in nursing diploma courses.

Methods: This was a descriptive cross-sectional study done among a conventionally selected sample of 100 students at the nurse's training school (NTS), Kalutara. Data were collected through a self-administered questionnaire distributed as a google form. The data analyses were done using Microsoft Excel.

Results and Discussion: All of the approached nursing students (100%) responded to the questionnaire. The majority of respondents (82.1%) were between the ages of 24 and 26 and were females (93.4%). The majority of respondents (62.9%) were in the proper range of BMI. Of the respondents, 85.9% did not have any chronic illnesses. Around (61.3%) of the respondents were able to manage their stress levels. Approximately 79.2% had good problem-solving abilities and 50.9% were happy with their current lifestyle. Of the respondents, 75.5% had maximum involvement in study hours of nursing school, with 55.8% of them studying for 1 to 2 hours after leaving NTS and another 33.3% studying for 2 to 3 hours. Approximately 49.1% read extra references to improve their knowledge. The majority of the participants, 77.4%, worked with self-motivation, and (69.8%) had efficient English knowledge. Of the respondents, 80.2% are confident in their studies and life challenges.

Conclusion: Overall, the personal characteristics of nursing students, including their physical and psychological well-being, self-discipline, and character traits, were rather favorable. These factors significantly impact the academic performance of student nurses. Thus, the findings are important since they can be used by administrators and school officials to develop and carry out intervention programs aimed at enhancing academic performance among student nurses.

Key Words: *Personal Factors, Student Nurse, Achievement, Diploma*

A study on the satisfaction regarding the inventory management system of Student Nurses at Teaching Hospital, Kalutara

Thalagala T.R.J.¹, Perera P.R.I.U.¹, Perera K.N.M.¹, Premalal K.M.J.^{1*}

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Inventory control is a scientific system that indicates what to order when to order and how much to order, and how much to stop. An inventory management system is key in the healthcare system. There are 4 inventories: surgical, linen, hardware, and cutlery and crockery inventory. The aim of this research was to identify the instrument availability, maintenance issues, and students' attitudes regarding student inventory maintenance.

Methods: This was a cross-sectional, descriptive study among a conveniently selected 150 nursing students at the School of Nursing Kalutara. Data were collected through a self-administered questionnaire distributed as Google forms and the data was analyzed using Microsoft Excel software.

Results and Discussion: The response rate to the questionnaire was 100%. The majority of respondents (82.1%, n=123) were in the age group of 23-25 years and were females (92.7%, n=139). Regarding the availability of instruments, 50.3% (n=75) were satisfied regarding the available space in the inventory. Most of them (59.6%, n=89) were satisfied regarding the linen amount of the inventory. Additionally, 52.3% (n=78) were satisfied regarding the surgical items in the inventory. According to the maintenance problems of inventory, 74.8% (n=112) were satisfied regarding the instrumental support of nursing sisters. Furthermore, 57% (n=86) were satisfied regarding the condition of available instruments, and 57.7% (n=87) were satisfied regarding the lock and key of the inventory. According to the student's attitudes towards maintenance, 68.9% (n=103) were satisfied regarding the replacement of the inventory items. While 64.8% (n=97) were satisfied regarding the exclusion of dirty linen 94.6% responded that inventory checking was essential for each shift.

Conclusion: According to the results of this study, most of the nursing students were satisfied with the availability of instruments in the inventory and students had a positive attitude toward the maintenance of the inventory.

Key Words: *Inventory Control, Instrumental Support, Inventory Management*

Factors influencing student satisfaction with hostel facilities among Students in the National Institute of Health Sciences, Kalutara

Kumari H.W.G.S.K.^{1*}, Mekala P.K.S.¹, Morawaka M.D.D.¹, Madhushanka M.S.D.¹,
Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Student housing is said to include facilities such as bedrooms that can serve the dual purpose of study and sleeping, bathrooms and toilets, recreational areas, and internet services as this further enhances the study learning experience. The aim of this study was to explore the factors influencing student satisfaction with hostel facilities among students at the National Institute of Health Sciences, Kalutara.

Methods: A cross-sectional study was carried out including 100 hostel students from NIHS, Kalutara. The data was collected using self-administered questionnaires which were distributed as google forms. The collected data was analyzed using Microsoft Excel software.

Results and Discussion: According to the responses, the majority (79%) of students agreed that they could not get a balanced diet from the hostel. Furthermore, about 54% of students responded that the home wardens' attention and support were satisfactory. When considering privacy, 57% stated that they were able to maintain their privacy in the hostel. However, 48% of the students complained about the inadequate power supply in the hostel and 43% of students complained about being disturbed by mosquitoes and rats while sleeping at night.

Conclusion: According to the results, most of the respondents stated that they had good facilities in terms of diet and privacy. However, when it comes to the facilities related to electricity, they require to be improved.

Key Words: *Students, Satisfaction, Hostel Facilities*

A study on perception of morning assembly among the students at the School of Nursing Kalutara: A cross-sectional study

Attygalle D.S.V.¹, De Silva U.C.K.¹, Sumanasekara J.A.N.P.K.¹, Balasooriya B.A.N.D.¹,
Pathmasiri D.K.S.M.^{1*}, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: The morning assembly is a platform for students' performances. It has greatly influenced student development. Morning assembly is conducted daily in the school of nursing Kalutara. Therefore, this research aimed to assess the effectiveness of morning assembly in the School of Nursing Kalutara.

Methods: This was a cross-sectional, descriptive study and convenient sampling was used. Selected 207 first-year and third-year students from the school of nursing Kalutara. Data were collected through a self-administered questionnaire sent as a google form. Results were analyzed using Microsoft Excel.

Results and Discussion: The response rate was 100% (n=207). Among them, 92.2% (n=191) were females and 7.8% (n=16) were males. The majority of the respondents, 94.1% (n=195), agreed that morning assembly helps to reduce their stage phobia. According to 93.7% (n=194) of respondents, it was found that they improved their voice control when delivering a speech. The majority (92.6%, n=192) agreed that they improved their personality and presentation skills through morning assembly. Most agreed (92.2%, n=191) that they increased their subject knowledge. The majority (84.8%, n=176) agreed that it increased their stress level when the chance came to deliver a speech. Most said (79.7%, n=165) that environmental barriers were less to conducting morning assembly. More than half of the respondents 57% (n=118) agreed that morning assembly interfered with study hours and 43% (n=89) disagreed with it.

Conclusion: Based on the overall results, the majority stated that there are positive effects in the morning assembly. However, a minority stated that the morning assembly was time-consuming and interfered with the study hours. Hence, it can be recommended to reassess and revise the objectives of the morning assembly.

Key Words: *Morning Assembly, School, Effectiveness, Nursing Students*

PP 142

A study on the effects of Senior Students' support towards the progression of Nursing Education among Junior Students in SON, Kalutara

Jeewanthi P.R.D.^{1*}, Karunarathne K.I.D.¹, Kanchana K.K.P.¹, Attygalle D.S.V.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: School of nursing conducts three years nursing diploma course. Usually, the program includes three years for completion. The aim of the study was to assess the effects of senior students' support towards the progression of nursing education among junior students in SON Kalutara. It also aimed at further assessing the support given in education, clinical practice, and personal adjustable problems.

Methods: A cross-sectional survey was conducted among 150 students from 2018 and 209 batches in SON Kalutara nursing programs. Data was collected through an administered questionnaire in the form of a google form. The collected data were analyzed descriptively.

Results and Discussion: Out of the total respondents, 62.7% (n=94) were third-year students and the remaining were first-year students. More than three-quarters (96%, n=144) of the students stated that seniors motivated them to learn while inspiring them. Furthermore, the analysis showed that 95.3% (n=143) of the students agreed that seniors help them solve various issues they encounter during clinical. The results also showed that the majority (98.6%, n=148) of the students gained help from the seniors when they are sick. In addition, 94% (n=141) of the students stated that they get seniors to support in developing management skills by handling inventories.

Conclusion: According to the results, most of the students gained support from the seniors regarding academics, problems, and clinical. Thus, it can be said that the seniors' support helps in the progression of the junior's educational learning system.

Key Words: *Nursing Students, Progression Of Education, Senior Students*

Research on the stressors and management methods during the quarantine period of Covid-19 among Nursing Students in Nurses Training School, Kalutara, Sri Lanka

Rathnasekara D.D.D.S.¹, Menike K.M.A.I.^{1*}, Athukorala S.S.¹, Colombohewage G.D.¹,
Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Since November 2019 the novel Coronavirus has started to develop as a worldwide health phenomenon afflicting diverse communities and imposing panic among millions of people. The rapid spread of Covid-19 has incentivized the world including Sri Lanka to take extreme actions such as imposing social, quarantine, mandatory curfews, closing the airport, and closing private and public institutions including schools and universities. These measures have accentuated the daily life demands on student nurses of the School of Nursing Kalutara. Thus, the aim of this study was to assess the stressors and management methods during the quarantine period among student nurses.

Methods: This was a qualitative research study with the use of a convenience sampling technique. Thus, this sample population included 100 participants. Data was collected through a self-reporting questionnaire that included three sections that assessed the stressors, emotional reactions, and coping mechanisms during the pandemic. The collected data were descriptively analyzed.

Results and Discussion: The majority of the participants 93.9% were females. About 72% of the respondents were third-year students. According to the quarantine places, 57.3% were homes, 28.1% were boarding houses and 14.6% were quarantine centers. When considering the stressors, 85.4% felt anxious about the positive PCR screening results. Furthermore, 83.7% were worried that the family was contaminated and 88.8% were worried about their missed academic activities. Furthermore, 78.6% of the participants felt lonely due to quarantine. Moreover, 81.6% of the participants are worried about the symptoms during the quarantine period, and 66.3% fear death due to the pandemic. When considering the emotional reactions, a minority 17.3% were angry with their family members, and 37.8% cried alone. Furthermore, 38.1% refused food, and 10.2% threw things on the floor angrily. About 32.3% stayed aside without talking to anyone during their quarantine period.

Conclusion: The study's findings provide insight into the overall stressors and management methods during the quarantine period in Covid-19 among Student Nurses in the School of Nursing, Kalutara. Accordingly, some of the key stressors were feeling anxious about the PCR results, worrying if the family was contaminated, worrying about their academic activities, feeling lonely due to quarantine, and worrying about their symptoms.

Key Words: Covid-19, Quarantine, Pandemic

PP 144

A study on satisfaction factors among final-year Nursing Students at the School of Nursing Kalutara on their Diploma program

Pushpakumari K.K.S.^{1*}, Wijewardene P.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Student satisfaction with their educational experience is crucial for any educational program to be successful. The level of student satisfaction with nursing programs is directly affected by several significant factors and they help to determine the quality of training received by student nurses. In the Sri Lankan context, nursing service and education are under scrutiny because nurses are more concerned about their professional roles, education, and status. Therefore, the study aimed to determine the factors affecting satisfaction among final-year nursing students at the School of Nursing-Kalutara in their three years diploma program.

Methods: A descriptive cross-sectional quantitative study was conducted among 235 final-year student nurses in the School of Nursing-Kalutara. A self-administered online questionnaire was distributed as a Google form to collect data. The collected data were analyzed by using SPSS version 20.

Results and Discussion: Overall student satisfaction was categorized as poorly satisfactory and satisfied only. About 51.5% (n=184) of students were satisfied with the nursing diploma program. The mean overall satisfaction score was 78.5. The study also indicates the mean satisfaction scores in organizational factors 18.9 (SD +/-3.6), in teaching factors 21.2 (SD+/- 3.4), in learning factors 19.5 (SD+/-3.4), and in clinical factors 17.7 (SD+/- 4.2). In total satisfaction, the factor's mean satisfaction score was 21.2 (SD+/- 29), while the median score was 19 with a range of 463 in satisfaction score, regarding the total satisfaction factors.

Conclusion: The study reveals an obvious need to improve satisfaction with their three-year diploma program through successfully changing and developing each contributory factor.

Key Words: Nurse, Nursing Student, Satisfaction

Nursing Student's perception of Unit Ending Test in School of Nursing, Kalutara

Gunarathna K.A.R.W.^{1*}, Siriwardhana K.A.D.N.S.¹, Tharangi V.P.Y.¹, Thalagala T.R.J.¹, De Silva U.C.K.¹

¹*National Institute of Health Sciences, School of Nursing, Kalutara, Sri Lanka*

Introduction: A unit-ending test is an academic approach that tests a unit - the smallest piece of code that can be logically isolated in a system, and it is used to increase retention of the subject matter directly. Furthermore, unit-ending tests can also help train students to answer questions and discover their own areas of weakness in knowledge, guiding them to re-study the material in a purposeful way. This study aimed to identify the student nurses' perception of unit-ending tests in the School of Nursing Kalutara.

Methods: A descriptive cross-sectional quantitative study was conducted among 217 student nurses in the School of Nursing, Kalutara in 2022. A specifically designed self-administered online questionnaire was administered with demographic data, perception, advantages, and challenges of unit-ending tests.

Results and Discussion: Among 217 respondents most are female 95% (n=206). An approximately equal number of students were studying in 1st year 49.8% (n=108) and 3rd year 50.2% (n=109). According to student's perception, students participate in unit-ending tests to assess their knowledge 98% (n=213), as a pre-preparation for final exams 78% (n=169), and to achieve merit level in the final exams 90% (n=195). In addition, 95% (n=206) of students agree that paper discussion is another successful manner of achieving the same goals. Furthermore, the data reviewed shows that a lack of time management skills 94% (n=204), and a lack of interest in the subject matter 86% (n=187) are the most common challenges for students to face unit-ending tests. Language barriers 75% (n=163), and lack of self-confidence 83% (n=180) also affect their participation in unit-ending tests. Further students perceived that gaining maximum marks 89% (n=193) & having clear ideas about the final paper 90% (n=195) as additional advantages of unit-ending tests.

Conclusion: The majority of nursing students participated in unit-ending tests mainly to improve their knowledge and achieve merit in the final exam. However, they identified language, and lack of self-confidence act as barriers to participating in unit-ending tests.

Key Words: *Unit Ending Test, Perception, Student Nurses*

The knowledge and perception of enteral feeding of a paralyzed patient among Nursing Students

Thalagala T.R.J.¹, Pushpakumari K.K.S.¹, Fernando M.K.P.¹, Wasana W.K.S.¹, Tharaka W.G.D.^{1*}

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Enteral feeding is defined as the intake of food directly into the gastrointestinal (GI) tract. Enteral feeding tubes can also be used to administer medicines. Patients who may require enteral feeding include those who are unconscious, those with neurological swallowing disorders, upper GI obstruction, GI dysfunction, or malabsorption. Nursing is a caring profession defined by holistically treating all people, and focusing on meeting the patient's basic needs, values, and experiences. Thus, this research aimed to identify the nursing student's perception of paralyzed patients' oral feeding and nasogastric feeding.

Methods: This was quantitative research done among 203 third-year nursing students of the school of nursing Kalutara. Data were collected through a self-administered questionnaire distributed as a Google form. Data was analyzed using Microsoft Excel.

Results and Discussion: Among the 203 respondents, (96.5%, n=196) were females and 3.5% (n=7) were males. Most of the participants (60%, n=122) strongly agreed that assessing swallowing reflexes before oral feeding is important. Around 63% (n=128) of the participants strongly agreed that the prop-up of the bed before oral feeding is important. Furthermore, 58.5% (n=119) agreed that a balanced diet is as important as medication when caring for a paralyzed patient. Most participants (80%, n=162) strongly agreed that checking the proper placement of the NG tube is essential before each feeding. Moreover, 70.8% (n=145) of participants strongly agreed that avoiding the accumulation of air inside the NG tube is important for continuous fluid flow. Most participants, 66.2% (n=134) strongly agreed that correct documentation of the feeding is important to prevent overfeeding. Finally, around 64.6% (n=131) of participants strongly agreed that checking the cleanliness of the equipment before and after NG feeding is vital.

Conclusion: The perception of third-year nursing students at the School of Nursing Kalutara regarding enteral feeding of a paralyzed patient is within a satisfactory level. However, increasing the optimal nutritional care of the intensive care patient in conjunction with systematic documentation could improve knowledge and awareness of responsibilities even further.

Key Words: *Perception, Enteral-Feeding, Paralyzed Patient*

A cross-sectional study on the Self-Study methods among Students at Nurses Training School, Kalutara

Sepali K.V.N.^{1*}, Serasundara K.N.B.¹, Sewwandi M.D.N.¹, De silva U.C.K.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Choosing the correct study method is a crucial part of the learning process that is too often skipped over by students. Study methods can be used for learning in a simpler or less expensive way. Student nurses maintain good performances by engaging in self-study methods except for their formal educational hours. Therefore, this study aimed to assess the self-study methods that are used among student nurses in Nurses Training School, Kalutara, while identifying advantages and challenges faced by them during self-study.

Methods: A cross-sectional study was carried out among 146 student nurses in Nurses Training School, Kalutara, in 2022. A specially designed self-administered online questionnaire was used to assess study objectives.

Results and Discussion: Among the 146 respondents, more than two-thirds (67%, n=98) of participants used a self-learning method as their study method and 51% (n=74) spend 2-4 hours per day for their self-learning after working hours. According to responses, all the students expected to gain high marks. Furthermore, most students (98%, n=143) agreed that self-studying makes them feel confident while facing exams and guides them to achieve educational goals. In addition, the majority (97%, n=142) enjoyed engaging in self-study methods and 98% (n=143) mentioned that it acts as a self-motivator toward achieving educational goals. Moreover, 98% (n=143) agreed that they are motivated by academic support and peer support toward engaging in self-study methods.

Conclusion: In conclusion, the study results showed that the majority of students follow self-learning, and all the respondents expected to gain high marks through it. They also enjoyed engaging in self-study methods, while being encouraged by the support.

Key Words: *Self-Study Methods, Nursing Students, Formal Education*

The perception of drug usage among School-Age Children

Thalagala T.R.J.¹, Deraniyagala N.V.M.D.¹, Kumari V.G.A.I.U.^{1*}, Perera K.C.T.¹,
Shyamalee H.M.R.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: High drug usage is a main social problem in current society. The purpose of the study was to identify the knowledge regarding possible causes of drug usage and identify the knowledge regarding health-related problems of drug usage and social problems of drug usage.

Methods: Quantitative research was conducted, and a sample was taken. The data was collected from the grades 12 and 13 students in Kalutara Vidyalaya. The results were then analyzed using Microsoft Excel.

Results and Discussion: In this research, the response rate was 67.3%. The majority of the participant's age range was 19 years. About 86.1% of the population did not use the drugs and 30.9% were using the drugs. The percentage of peers who used drugs was 64.4% and those who do not use drugs was 35.6%. The population is also aware of cannabis, cocaine, ice, and heroin as drugs. In addition to the above drugs, the participants know thool, cigarettes, tobacco, alcohol, and babul. Most of the participants used more than one drug. When considering the places where they gained drugs, the majority (53%) stated near shops and 49% stated through friends. About 64% of students did not know drug addiction is a major problem in the Kalutara area. However, most students seemed to know the impact of drug addiction and how it influences a family.

Conclusion: Finally, this study identified that only an average amount of individuals used drugs. However, when considering the knowledge regarding the possible causes of drug usage many had the knowledge. Thus, more attention should be given to increasing awareness of the possible negative effects of the usage of drugs with the help of workshops.

Key Words: *Perception, Drug Usage, School Adulthood*

The knowledge and practice on the over usage of Junk Food (JF) among Grade 12 Students in Gnanodaya Maha Vidyalaya (M.V.), Kalutara

Geeganage L.G.N.S.¹, Kavishani P.G.M.^{1*}, Kaushalya U.A.¹, Thalagala T.R.J.¹,
Colombohewage G.D.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Junkfood (JF) is rich in fats, sugar, salt, and calories. However, JF consumption in an unhealthy adolescent nutritional habit and its consequences has become a major public health issue. The aim of this study was to assess factors affecting over usage of JF among adolescents, to identify the food habits of adolescents, to determine the awareness level about health hazards, and to identify the cost per week usage for JF.

Methods: A descriptive cross-sectional quantitative study was conducted among the 100 students in grade 12 Kalutara Gnanodaya M.V. through a randomly selected sampling method. A self-administered questionnaire was used for the data collection and was analysed using Microsoft Excel.

Results and Discussion: 65% of students were females and 35% were males. Among them 7% were overweight and 7% were underweight. 15% of respondents closest relatives are overweight and 43% of respondents closest relatives suffer from NCDs. The majority, 76%, stated they got JF because it is a great opportunity to gather with peer groups. Furthermore, 50% said that they get JF for at least more than 1–2 days. About 50% also stated that 50% get JF at school intervals. The majority (84%) of the respondents knew about health hazards due to JF. In addition, 79% stated they spend an average of Rs.500/= per week for JF.

Conclusion: According to the above data the majority of students consume JF for at least more than 1-2 days and they are already aware of the health hazards involved in it. It may be a huge health risk in the near future.

Key Words: *Junk Food, Non-Communicable Disease, Adolescents, Over Usage*

Study on the methods of solving educational problems among Advanced Level Students in a public school in Kalutara

Imaya K.G.H.^{1*}, Maduwanthi A.K.D.I.¹, Gunathilaka K.G.U.K.¹, Thalagala T.R.J.¹, Kumari M.D.N.P.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Problem-solving ability is a mental process that is part of a larger problem process that includes problem identification, shaping, and achievement of a final goal. A problem is any situation in which you can make a difference. While participating in educational activities, students face numerous challenges. As a result, they come up with strategies, make different decisions, and utilize various resources. Therefore, there is a need to investigate students' efforts to make the right decisions with assistance. The purpose of this study was to identify methods for dealing with educational problems among students.

Methods: A cross-sectional descriptive quantitative study was conducted among 100 Advanced Level students in Gnanodaya Vidyalaya in Kalutara District by using the self-administrative questionnaire in September 2022.

Results and Discussion: The majority (n=58%) of the respondents who answered the questionnaire were females. When solving problems most of the students (33%) considered their parents as the first resource person in solving their educational problems. In addition, most students (86%) sought advice from their senior colleagues to solve their problems. A larger number of students (93%) agreed that the extracurricular and co-curricular activities helped solve their educational problems. Most of the students (75%), agreed that their leadership roles in school help to solve their educational problems.

Conclusion: Based on the results, the majority sought their parents and seniors to help in solving their educational problems. Additionally, students positively perceive extracurricular and co-curricular activities to solve their educational problems.

Key Words: *Educational Problem, Advance Level Students*

PP 151

Study on the effect of clinical workload on Nurses' personal life in Base Hospital Horana, Sri Lanka

Pramodi P.G.P.¹, Premarathna H.A.N.M.^{1*}, Rajapaksha K.U.S.¹, Thalagala T.R.J.¹, Lenora R.D.D.¹

¹*National Institute of Health Sciences, Nurses Training school, Kalutara, Sri Lanka*

Introduction: The nursing profession has a high workload, which is associated with poor health. Thus, it is important to get a proper understanding of the working situation and to analyze factors that might be able to mitigate the negative effect of such a high workload. This may affect the personal life of nursing officers in Sri Lanka. The goal of this study was to identify the factors affecting clinical workload and staff nurses' personal life.

Methods: A quantitative non-experimental descriptive design was used and data were collected from nursing officers who are working in various units in Base Hospital Horana, using a self-administered questionnaire, convenient sampling method was applied. Data were analyzed by using the descriptive analysis method.

Result and Discussion: The majority of respondents were female, married, over 45, and had more than 21 years of experience. Almost all nurses 98%, agreed that they work in an overburdened environment. More than half (75%) stated that they frequently work overnight and have a weekly 24-hour shift. Half of them (53%) are dissatisfied with their salary, and most (75%) prefer overtime pay. A large number of people (63%) stated that they do not have time for themselves or family bonding. A total of (58%) agreed that they work in an inconvenient environment and that they (72%) sometimes struggle to control their stress. According to 93% of respondents, nursing helps them maintain their social status as a profession.

Conclusion: This study identified that the majority of staff nurses have a negative effect on their personal life. Almost all the nurses agreed that they work in an overburdened environment, and more than half of the nurses are dissatisfied with their salary and that they would prefer overtime pay and more time for them to spend with their families. Therefore, the clinical workload on nurses' personal life should improve.

Key Words: *Effect, Clinical Workload, Nurses' Personal Life*

Factors affecting the self-directed learning of Student Nurses at clinical practice in the School of Nursing, Kalutara

Shihara M.I.¹, Lakmali W.D.M.^{1*}, Madhushani S.M.S.P.¹, Dilrukshi K.T.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Self-directed learning is an important skill that students need to possess during their learning period. Anyone can turn into a self-directed learner; however, the level of their self-directed learning ability depends on many factors such as motivation for learning, self-confidence, conscience, experience, and intelligence which are collectively called readiness for self-directed learning. The factors that can affect self-directed learning readiness are internal factors and external factors. This study aimed to examine the factors affecting the self-directed learning of student nurses in clinical practice.

Methods: This study was conducted at Nurses Training School, Kalutara, which included approximately 100 third-year nursing students. It was carried out with the help of a self-administered survey-based questionnaire using a convenient sampling method from 210 students. Data analysis was done using Microsoft Excel.

Results and Discussion: Most of the respondents (69%, n=145) believed that they did not have enough knowledge to initiate self-directed learning in clinical practice. Among the students, 86% (n=125) agreed that they were stressed during clinical practice due to the staff. Most of the students (67%, n=141) said they had enough guidance, and supervision from tutors. A majority of students (80%, n=168) thought they had adequate clinical hours and 86% (n=181) of students have enough peer support. In addition, 80% (n=168) of students said that they had enough peer evaluation.

Conclusion: This study demonstrated that a majority of students do not practice self-directed learning as they believe that they do not have the knowledge to do so. However, they believe that they have enough peer evaluation.

Key Words: *Self-Directed Learning, Student Nurses, Clinical Practice*

**Communication skills and attitudes among Nursing Students at the College of Nursing,
Anuradhapura**

Perera J.K.I.P.M.¹, Vidanage I.S.M.H.¹, Devindya P.S.S.N.¹, Dissanayake P.G.C.M.¹,
Chathurika P.G.T.¹, Wijayasundara W.M.S.K.^{1*}, Shantha K.A.S.¹

¹*National Institute of Health Sciences, Nurses Training School, Anuradhapura, Sri Lanka*

Introduction: Communication is a basic tool in nursing and a crucial element for providing effective and high-quality patient care including better utilization of health care, better patient compliance, higher social support, and improved clinical outcomes and prevention. Communication skills and attitudes towards communication skills among nursing students are important due to the close relationship between an individual's attitudes and behavior in social situations. This study aimed to investigate the communication skills and attitudes towards communication skills among nursing students at the College of Nursing, Anuradhapura.

Methods: A quantitative, cross-sectional, descriptive study was applied. The data collection instrument was a questionnaire that included validated tools; the Communication Skills Inventory (Ersanli & Balci, 1998) and Communication Skills Attitudes Scale (Rees et al., 2002). Data were collected among randomly selected 167 first-year and third-year nursing students at the College of Nursing, Anuradhapura. Data analysis was done using SPSS 26 version for descriptive and inferential statistics. Significance was set as < 0.05 .

Results and Discussion: The response rate was 80%. The majority of the participants that formed the sample were female (97.6 %). Most of them were 24 to 25 years (67.1%), in their first year (61.1%). The mean score for communication skills was 60.59 (SD- 8.82) while the majority reported an average level of skills (86.2%). The mean score for positive attitude was 45.84 (SD=6.84) out of 65, and the mean scores for negative attitude were 36.51 (SD=5.54) out of 60. Significant mean differences in communication skills were found for the academic year ($p= 0.039$) and the age of the participants ($p=0.034$). The significant difference in positive attitudes towards communication was with gender ($p=0.040$) while negative attitudes were with gender ($p=0.028$) and academic year ($p=0.001$). There was a positive, significant moderate relationship between communication skills and attitudes towards communication skills ($r= 0.317$, $p=0.000$). The level of communication skills was predicted by 10.4% from attitudes toward communication skills.

Conclusion: Nursing students had an average level of communication skills and attitudes toward communication skills. Gender, academic year, and age of the participants were significant factors. communication skills and attitudes towards communication skills had positive significance relationships. The results of this study can be used to better prepare teachers and their students for their classroom environment and increase effective communication

Key Words: *Communication Skills, Attitudes On Communication Skills, Nursing Students*

PP 154

Student Nurses' perception of nurse-patient relationship in Nurses Training School, Kalutara

De Silva Y.W.D.¹, Rajapaksha S.U.¹, Samarasinghe D.V.P.A.^{1*}, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: A student nurse is an entry-level professional nursing career that maintains patients' health in a healthcare environment. A strong nurse-patient relationship facilitates cooperation and provides greater opportunities to learn about a patient's unique health needs and this affects the level of satisfactory care. This enables nurses to connect patients better with the treatment and resources to improve overall health. The aim of this study was to identify the soft skills which help to continue nurse-patient relationships.

Methods: A descriptive cross-sectional study was done among 108 first-year and third-year student nurses of Nurses Training School, Kalutara. A structured self-administered questionnaire was used to collect data, during the month of September 2022. Data analysis was done using Microsoft Excel.

Results and Discussion: The result of the study was that 97.2% (n=105) of students could cope with harassing patients known to have a mental illnesses. Amongst them, 97.2% (n=105) of students can care for patients like their own families. However, 12% (n=13) of students felt uncomfortable when working with the healthcare team in the clinical setup. A majority of students, (96.2%, n=104) like to listen to patient prognoses.

Conclusion: According to this study, students believe they have good relationships with their patients, which helps them provide quality care. Yet, they feel uncomfortable when working with the healthcare team in a clinical setup.

Key Words: *Student Nurse, Patient, Nurse-Patient Relationship, Soft Skills*

**Perceived stress and sleep quality among Nursing Students at the College of Nursing,
Anuradhapura**

Somasiri H.G.A.M.¹, Madhushani R.K.N.¹, Kumarawansa R.P.D.D.¹, Wanninayake
W.M.D.L.¹, Hansika B.K.P.¹, Wijayasundara W.M.S.K.^{1*}, Shantha K.A.S.¹

¹*National Institute of Health Sciences, Nurses Training School, Anuradhapura, Sri Lanka*

Introduction: Sleep is essential for the body, mind, memory, and learning. Sleep quality and perceived stress of nursing students affect both their personal health and nursing care. However, the relationship between sleep quality and stress has not been sufficiently addressed in the literature. The aim of this study was to assess the quality of sleep and psychological stress among nursing students at the College of Nursing, Anuradhapura.

Methods: This cross-sectional study targeted nursing students in their first year and third year at the College of Nursing, Anuradhapura. Randomly selected students were asked to complete the self-administered questionnaire comprising the Pittsburgh Sleep Quality Index (PSQI) and Perceived Stress Scale (PSS) developed by Cohen et al. (1983). Descriptive and inferential statistics were used with the help of the SPSS 26 version. The significance level was set at < 0.05 .

Results and Discussion: The majority of the study sample was represented by females (91.2 %), 24 to 25 years group (75.5 %), and the students in the first year (59.9%). The majority of them had 6 to 7 hours of sleep (47.6%). The mean score for perceived sleep quality was 6.35 (SD 3.23) while the mean score for perceived stress was 27.11 (SD 7.17). Half of the students' sleep quality can be considered low sleep quality (57.82%). Among the participants, the majority reported moderate levels of stress (49.7%). Female students' perceived stress levels were reported more than males ($p = 0.003$). However, there was no statistically significant difference between female students and male students in terms of total PSQI scores ($p=0.083$). Moreover, the significant mean differences in perceived sleep quality with sleeping hours ($p=0.05$). There was a positive, significant moderate relationship was found between perceived stress and sleep quality ($r= 0.377$, $p=0.000$). The level of perceived sleep quality was predicted by 10.1% from the perceived stress level of the participants.

Conclusion: Study revealed that nursing students had low sleep quality and a moderate level of perceived stress. Female students have more stress and the students who sleep 6-7 hours per day less have a better quality of sleep. Perceived stress and perceived sleep quality had a positive significant relationship. Nursing students should be encouraged to develop healthy sleeping habits and skills to deal with stress.

Key Words: *Perceived Stress, Sleep Quality, Pittsburgh Sleep Quality Index, Nursing Students*

PP 156

Student Nurses' satisfaction regarding skill lab facilities in the School of Nursing, Kalutara

Dananjani P.S.¹, Lakna D.L.A.S.¹, Hansani R.D.B.^{1*}, Kumari W.D.A.N.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Skill laboratories refer to specifically equipped practice rooms functioning as training facilities offering skill-based training for the practice of clinical skills prior to their real-life application. It also allows the student to do procedures repetitively under supervision until the desired competency level is achieved. This study aimed to explore the student nurses' satisfaction regarding skill facilities in nursing school.

Methods: A quantitative, descriptive, cross-sectional study was conducted. Data was collected through a self-administrated questionnaire. The study consisted of 100 nursing students from the first year and third years in the school of nursing Kalutara. The collected data were analyzed using Microsoft Excel.

Results and Discussion: All the nursing students responded to the questionnaire (100%). Females represented 84.3% and males were 15.7%, and those aged 21-25 (64.3%) were the majority. Third-year student nurses' participation was 59.8% while first-year students participated by 41.1%. There were 50% of students satisfied with the environmental facilities while 54.4% of students were satisfied with the physical facilities. As we get the satisfaction of learning facilities in the skill lab, most of the students (87.8%) were unsatisfied while 46.6% of students were satisfied.

Conclusion: Based on the overall results, half of the respondents were satisfied with the environmental facilities. Furthermore, the majority were satisfied with the physical and skilled lab facilities.

Key Words: *Satisfaction, Skill Laboratory, Nursing School*

The effects of usage of mobile phones among School Children in Kalutara District, Sri Lanka

Upeksha J.S.D.I.^{1*}, Perera K.L.W.¹, Upeksha W.D.D.¹, Premathilake S.D.A.N.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Usage of mobile phones is a widely used mechanism for various activities such as communication, data collection and leisure time activities. With the technological advancement, the incorporation of mobile phones in to diverse areas is becoming prominent. The aim of this study was to assess the effects of usage of mobile phones among school children.

Methods: This study was a cross-sectional, descriptive study done among a conveniently selected 100 schooling students aged between 15-18 years in the Kalutara District. Data was collected through a self-administered questionnaire distributed as a survey form. The gathered data gathered was analyzed using Microsoft Excel software.

Results and Discussion: According to the results of the study, 41% of school children used mobile phones for educational purposes. In addition to that, 40% of children used mobile phones for linking to social media. Further, 14% of them used mobile phones for playing video games. When considering the advantages of mobile phone usage, 56% claimed that it increased social knowledge and 43% agreed that it helped increase social relationships. When considering the disadvantages of mobile phone usage, 55% reported that increased mobile phone usage results in decreased reference of additional books. It was also found out that 27% of students had visual impairments and 30% of students suffered from frequent headaches. A majority (53%) of students agreed that mobile phones are a distraction to education. However, 71% of students stated that they were not addicted to mobile phones.

Conclusion: According to the results of this study many of the students used mobile phones for the purpose of socializing. They were also aware of both the advantages and disadvantages of mobile phone usage. It was evident that mobile phones are widely coming in to use and are being incorporated in the daily lives of school children rapidly.

Key Words: *Mobile Phones, Usage, Children, Effects*

**Nursing students' satisfaction with infrastructure of the Nurses Training School,
Kalutara, Sri Lanka**

Hansika B.M.S.^{1*}, Hemanath R.H.¹, Kumari K.P.N.A.¹, Neranjala A.D.I.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: The infrastructure in educational institutes mostly affects the mental and physical well-being of its students. The study environment has an impact on the nursing students' enthusiasm for education negatively and positively. The aim of this study was to identify the nursing students' satisfaction with the infrastructure of the Nurses Training school, Kalutara. Here we considered environmental factors, classroom facilities, and sanitary facilities of the school of nursing, Kalutara premises.

Methods: A cross-sectional quantitative study was carried out including 150 third-year nursing students in the school of nursing, Kalutara. A specially designed self-administered questionnaire was used to collect data from the participants. Data were analyzed using Microsoft Excel software.

Results and Discussion: Among 150 participants, a significant number (76.3%, n=114) of respondents answered that the number of chairs in the classroom was not adequate. Around 72.8% (n=109) of participants were not satisfied with the number of washrooms in nursing school. Also, 65.4% (n=98) of respondents claimed that the sounds and multimedia provided by the nursing training school were not enough for their studies. Additionally, 64.8% (n=97) of participants reported that the dining hall facilities were not sufficient. A majority (62.3%, n=93) of them were not satisfied with the ventilation of the classrooms. Furthermore, 61.5% (n=92) of the participants answered that indoor & outdoor ground facilities were not enough. A significant number of the participants (67.5%, n=101) reported that the cleanliness of nursing school premises and washrooms was not at a satisfactory level. However, more than 50% of respondents reported that the water supply, color of the classroom, and water drainage were adequate.

Conclusion: According to the results of this study it was found that the nursing students were not satisfied with most of the infrastructure in the nursing school of Kalutara.

Key Words: *Infrastructure, Enthusiasm, Education*

**Study of the factors affecting overweight among Adolescents of Thissa Central College,
Kalutara, Sri Lanka**

Pushpakumari K.K.S.P.¹, Sathurusinghe S.A.D.P.^{1*}, Peris K.H.S.S.¹, Bandara N.A.D.M.¹,
Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Being overweight is one of the major problems faced by adolescents around the world as well as in Sri Lanka. It is a major cause of diabetes, high blood pressure, anxiety, and depression among adolescents. It can be a threat to their quality of life. Changes in lifestyle are the suggested form of treatment. Real-world data, however, indicate that most adolescents do not lose weight permanently and are averse to taking part in lifestyle changes. The aim of this research was to determine socio-economic, nutritional, and lifestyle factors that affect adolescents' weight gain.

Methods: The study was a cross-sectional, descriptive, and quantitative study done among a purposefully selected 100 students from Thissa Central College, Kalutara. A structured self-administered questionnaire was used to collect data. The collected responses were analyzed using Microsoft Excel software.

Results and Discussion: About 45% of the participants were aged 13–15, 43% were in the age group of 10–12 years, and the remaining 12% were in the age group of 16–19 years. Out of the total participants, 52% were males. The majority of participants (65%) were in the 25–27 range of BMI. A significant number of respondents (75%) used to buy cooked meals from outside at least once a week. Among them, 52% of participants used to take dinner from outside. About 40% of respondents used to drink sweetened beverages, while exactly half of the population (50%) skipped their breakfast often. About 50% of the population's monthly income was around Rs.25000-Rs.50000. About 36.4% traveled to school via personal vehicles. While most of the participants (56%) engaged in some kind of sport, 60% of the population used to exercise regularly.

Conclusion: According to the results of the study, most of the population is overweight, while the most significant compromising factor for adolescents' overweight is improper food habits. Not being able to afford nutritious food is also a compromising factor that escalates the overweight of adolescents.

Key Words: Adolescent, Overweight, BMI, Balance-Diet, Nutrition

PP 160

Study on the satisfaction level of clinical placement of special units in Teaching Hospital Kalutara, Sri Lanka

Talagala T.R.J.¹, Attygalle D.S.V.¹, Shanika J.A.H.^{1*}, Kumari P.G.U.M.S.¹, Jayani H.H.M.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Nursing training is a combination of theoretical and practical experiences. A large part of nursing education is carried out in a clinical environment. The aim of the research was to identify the level of satisfaction of clinical placement in special units at Teaching Hospital Kalutara and the satisfaction level of support obtained from the special units in clinical placement.

Methods: This was a descriptive cross-sectional study done among conveniently selected 210, third-year nursing students at the School of Nursing, Kalutara. Data were collected through a self-administered questionnaire distributed as a google form and descriptively analyzed.

Results and discussion: The response rate was 76% (n=160), the majority of respondents (95.6%, n=153) were female and (4.4%, n=7) males students needed more time in the ICU, ETU, OT, and OPD training period should be increased up to 4 weeks. A significant number of (88.1%, n=141) students responded training of STD, BB & Skin wards time duration was enough. Only 50.6% (n=81) responded that 5 days were required. The majority of the participants (94.4%, n=151) chose daytime. Most (72.2%, n=116) totally agreed that supervision by the nursing tutors was very essential in special units. Additionally, 78.1% (n=125) agreed that they were satisfied regarding the supportiveness of the nursing managers and nursing staff. Only 44.4% (n=71) agreed to the supportiveness of medical officers & 51.2% (n=82) while accepted the supportiveness of colleagues. Furthermore, 53.1% (n=85) agreed while 30.6% (n=49) disagreed to satisfy with the knowledge gained.

Conclusion: Based on the results, allocated daytime especially for ICU, ETU, OT, and OPD gaining experience in special units should be increased. Clinical supervision by tutors is essential while in special units students are satisfied with the support from nurse managers, nursing staff, and colleagues. Allocated time for special units was at a satisfactory level.

Key Words: *Satisfaction, Clinical Placement, Special Unit, Nursing Students*

An investigation into the factors influencing customer satisfaction among students of Business Management; Survey on Private Institutes of Higher Education in Colombo district, Sri Lanka

Canistan A.^{1*}

¹School of Business Management, Northumbria University, Newcastle Upon Tyne, United Kingdom

Introduction: The market attractiveness in the Sri Lankan Higher Education industry (private sector) has been immense in the past few years due to ever-growing non-pecuniary and pecuniary gains. As a result, the competitiveness of the industry has forced Sri Lankan private institutes to be more focused on student recruitment than student retention. However, past literature suggests that ultimately the corporate and academic success of a private education institute majorly relies on relationship marketing which requires a deep understating of customer retention through customer satisfaction. This process demands constructed analysis of factors influencing student satisfaction in the education industry.

Methods: An in-depth review of customer satisfaction, retention, loyalty, and recruitment was conducted via an electronic search of Journal articles, newspapers, websites, and also physical books were referred to in the process. Further review of the literature identified the factors influencing customer satisfaction in the educational industry. Data was collected from 60 students from 3 various private institutes. These business management students rated the factors influencing their learning experience on a 5-point scale. Using logistic regression with the mean value of the factors, the impact of each factor on customer satisfaction and their relative importance were documented to understand the perspective of employees of the education industry, Marketing staff were interviewed from 3 various private institutes and the results were presented in qualitative method making the study mixed research.

Results and Discussion: The study concluded by suggesting that administrative support and teaching personnel play a major role in student satisfaction. The descriptive analysis of the subfactors under these two major elements exposed how the factors are connected to each other and led to the proposal of practical and robust recommendations to improve relationship marketing.

Conclusion: The research study concluded that the employee perspective of student satisfaction is the key to identifying the gap between student expectations and their experience. Therefore, special attention needs to be paid to address this issue.

Key Words: *Customer, Student, Satisfaction, Customer Retention, Loyalty, Education Industry*

Assess the perception of the economic crisis among Nursing Students and its relation to educational activities in the School of Nursing, Kalutara, Sri Lanka

Prabodhani K.L.D.S.¹, Perera W.A.S.S.¹, Poornima D.A.A.S.¹, Kumari M.D.N.P.^{1*},

Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: The fight against the coronavirus disease of 2019 (Covid-19) remains ongoing in Sri Lanka and around the world. The Covid-19 pandemic has immensely affected all aspects of society. Due to the impact of the Coronavirus, there was an economic crisis in Sri Lanka as well as in the world. That economic crisis has affected the daily activities and education of all students in Sri Lanka. Therefore, this study aimed to assess the perception of the economic crisis among nursing students and its relation to educational activities in the School of Nursing Kalutara in Sri Lanka.

Methods: A cross-sectional study was carried out among student nurses 140 in the school of nursing, Kalutara, in September 2022. A specially designed self-administered online questionnaire was used to collect data.

Results and Discussion: Out of the total participants the response rate was 98.5% (n=137) of which 98.6% (n=138) were females. Most nursing students (67.3%, n=94) believed that the economic crisis of the country was temporary. A majority of students (94.2%, n=132) stated that their personal expenditure in all aspects has increased due to the economic crisis. Most of the nursing students disagreed (52.8%, n=74) that their monthly allowance is enough to adjust to this economic crisis. Further, 97.1% (n=136) agreed that the cost of meals was increasing rapidly while 94.9% (n=133) agreed that the cost of transport is increasing. Furthermore, 76% (n=106) also agreed that the cost of stationery is increasing while the cost of internet facilities (96.2%, n=135) was also stated to be increasing rapidly. In addition, most of them agreed that the economic crisis decreased extracurricular activities by 81.5% (n=114) and co-curricular activities by 82.6% (n=116) in the school of nursing Kalutara due to the economic crisis. Most students (68.1%, n=95) limit their home visits Whereas 92% (n=129) skipped their extra snacks, reducing their participation in extracurricular activities in the school of nursing Kalutara, and 86.2% (n=121) students reduced their expenses.

Conclusion: The study demonstrates that although student nurses' monthly allowances are not enough to compensate for the economic crisis, they use different strategies to manage their educational life by compensating for the present economic crisis.

Key Words: *Pandemic, Perception, Nursing Student*

Effectiveness of Self-Learning for academic performances among Third-Year Nursing Students of the School of Nursing, Kalutara

Rodrigo S.A.N.W.^{1*}, Silva S.D.P.P.¹, Silva E.L.H.R.K.¹, Thalagala T.R.J.¹, Dilrukshi K.T.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Self-directed learning is the process where individuals take a primary change of planning, continuing, and evaluating their learning experiences. Self-directed learners are needed to maintain lifelong learning and to obtain essential knowledge for professional growth. This research was done to measure the effectiveness of self-learning for academic performances across the training years to determine the perception of nursing students.

Methods: A quantitative study was done among 100 third-year students of the School of Nursing, Kalutara. Data was collected by filling out a self-administered questionnaire. The collected data were descriptively analyzed through Microsoft Excel.

Results and Discussion: The majority of respondents were in the age group of 24-26 years (73.7%). Only 28% of students used the self-directed method for studying. Most of the individuals used both self-directed and lecturing methods (63%). About 46% of the participants used the reading method as their self-direct learning method. A significant number of individuals spent between 1-3 hours on their study work (85%). They mentioned that self-learning includes the benefits of gaining search information details, the self-confidence of the subject, identifying learning needs, managing time, improving critical thinking, and improving interest in self-motivation.

Conclusion: The majority of the participants used self-learning for their academics. The participants stated that self-directed learning is more effective. and the majority of the respondents were engaged in self-learning. They also had perceptions that there were many advantages of self-learning.

Key Words: *Self-Learning, Academic, Performance*

PP 164

Factors influencing attendance to Well Women Clinic (WWC) among females between 35-45 years in PHNS area Nagoda, Sri Lanka

Udakandage G.A.^{1*}, Udeesha B.A.I.¹, Lakmini A.W.J.D.¹, Madusanka M.S.D.¹, Thalagala T.R.J.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: WWC is designed to make it easier for women to access diagnostic and treatment services. In this study, researchers hope to explore the physical, psychological, and socio-economic factors affecting attendance at WWC.

Methods: A descriptive cross-sectional study was done, including 100 women between ages 35 and 45 in the PHNS area of Nagoda. A structured self-administered questionnaire was used to collect the data, and the questionnaires were collected after one month. The collected data were analyzed using Microsoft Excel.

Results and Discussion: The majority (56%) of the participants attended the WWC. All the participants accepted that WWC was conducted at NIHS Kalutara. Half of the individuals mentioned that Covid-19 affected their attendance. The majority of the participants (74%) preferred to participate in WWC. However, only 28% did not participate due to their fear of procedures. Most of the participants (50%) did not attend due to waiting. Furthermore, 34% had missed the date, and 32% could not attend because of their job and busy schedule.

Conclusion: Most of the participants attended WWC in the PHNS area of Kalutara. Everyone was aware that WWC was happening, but some still had low attendance due to factors such as Covid-19, fear, and busy schedules.

Key Words: *Attendance, Clinic, Factors*

Efficacy of whey water in the management of Melancholia from the perspective of the Unani system of Medicine: A systematic review

Bushra M.A.F.^{1*}, Rifna M.R.F.¹

¹*Institute of Indigenous Medicine, University of Colombo*

Introduction: The Unani system of medicine is based on the humoral theory which consists of four humors known as sanguinous, phlegm, yellow bile, and black bile. Unani physicians have mentioned several treatment modalities in the management of sawdavi amraz. Maul jobun (whey water), a popular dietary supplement nowadays, has been prescribed by Unani physicians since ancient times for melancholic disorders. Hence, this study was conducted to collect information of modern clinical studies carried out on therapeutic effects of whey water in the management of psychiatric disorders to correlate with Unani concept in the management of sawdavi amraz.

Methods: The study equipped 35 peer reviewed articles on therapeutic and pharmacological effects of whey water published during 2012 to 2022 were searched by search engines. PubMed, Mendeley and GoogleScholar were selected and scrutinized along with Unani classical texts Al hawi fitibb, Kulliyath e Qanoon, Introduction to Al- Umoorathabayya. Studies conducted on whey water except therapeutic effects were excluded.

Results and Discussion: According to Unani system of Medicine, Melancholia is known to be a cold and a dry disease. Hence, the whey water belonged to cold and moist temperament, considered as refrigerant, recommended for melancholic disorders as a dietary supplement. While recent studies revealed that whey water consists of chemical constituents such as B-Lactoglobulin, A-Lactalbumin, Bovine serum albumin, Immunoglobulins, Lactoferrin and Lactoperoxidase which act as tranquilizers, anti-hypertensive, and induce sleep. It also poses antimicrobial activities, anticarcinogenic activity, antioxidant activity, immunomodulatory activity, antifungal activity, opioid activity, and antithrombotic activity. Opioid activity can be correlated with symptomatic treatment for somatic pain in Melancholia. Also, it acts as transporter of retinol, palmitate, vitamin D, cholesterol, fatty acids, and triglycerides and helps in synthesis of lipids and lactose. Vitamin D plays Major role in the treatment of psychiatric related disease

Conclusion: It was concluded that even though there were lack of studies on whey protein related to psychiatric disorders. The studies on chemical constituents and therapeutic actions are evident that the whey protein is an effective dietary supplement for melancholic patients. However, it requires further clinical studies.

Key Words: *Maul Jobun, Melancholia, Psychiatric Disorders, Unani*

Quality of Life (QoL) and self-efficacy on health-promoting behaviors among Nursing Students: A cross-sectional study conducted at College of Nursing, Anuradhapura

Senavirathna D.P.U.¹, Senavirathna W.M.C.P.¹, Dilhani H.M.¹, Navarathne A.H.¹,
Chandrasiri N.C.T.A.¹, Wijayasundara W.M.S.K.^{1*}, Shantha K.A.S.¹

¹*National Institute of Health Sciences, Nurses Training School, Anuradhapura, Sri Lanka*

Introduction: Nursing students are vulnerable to stressful learning environments and poor working conditions in clinical rotations. Hence, assessing the QoL of nursing students is important to determine if they have excellent well-being levels as they go through the learning process. Health-promoting behaviors in nursing students and their self-efficacy for health practices are important in providing better services to patients and clients. Therefore, this study investigated the nursing students' quality of life and self-efficacy in health practices at the College of Nursing, Anuradhapura.

Methods: The cross-sectional descriptive design was implemented with randomly selected 121 students studying for the basic nursing diploma program at the College of Nursing, Anuradhapura. The QoL questionnaire developed by Ruiz & Baca (1999) and the Self-Rated Abilities for Health Practices Scale (SRAHP) (Becker et al., 1993) were used to measure the quality of life and self-perceived ability to implement health-promoting behaviors. Data analysis was done with the SPSS 26 version for descriptive and inferential statistics. Furthermore, the significance was set as < 0.05 .

Results and Discussion: The majority of the participants in the study sample were female 89.3% (n=108). Most of them were 24 to 25 years 47.3% (n=57) and in their third year 51.1% (n=62). Among them, the majority belong to the normal level of BMI 72.5% (n=88). The mean score for QoL was 90.3 (SD=17.2) while the majority reported an average level of QoL of 42% (n=51). The mean score for self-efficacy in health-promoting behavior was 87.2 (SD=16.52), with an average level of self-efficacy of 59.5% (n=72). Significant mean differences in quality of life were found for victims of chronic disease ($p=0.039$). There was a positive, significant relationship found between quality of life and self-efficacy on health-promoting behavior ($r=0.633$, $p=0.000$). The level of quality of life was predicted by 40.1% (n=49) from self-efficacy for health practices.

Conclusion: Nursing students had average levels of quality of life and self-efficacy in health-promoting behavior. The victim of the chronic diseases of the participants was a significant factor. QoL and self-efficacy in health-promoting behavior had positive significant relationships. In planning to promote high levels of well-being and health-promoting behaviors in students, it is essential to pay special attention to enhancing self-efficacy for health practice.

Key Words: *Quality Of Life, Perceived Health Practices, Nursing Students, Academic Environment*

The contraceptive practices among Muslim Women in MOH Kalutara

Gunasinghe P.H.D.^{1*}, Harischandra R.D.H.¹, Madhurangi M.T.I.¹, Thalagala T.R.J.¹, Perera D.A.C.D.¹

¹*National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Family planning allows individuals and couples to anticipate and attain their desired number of children and the of their births. It is achieved through the use of contraceptive methods and the treatment of involuntary infertility. The aim of this study was to assess contraceptive practices among Muslim women in the MOH Kalutara area.

Methods: A descriptive qualitative study was conducted in the MOH Kalutara among 110 Muslim women aged 16-45 years. The study included Muslim women who can read and understand Sinhala or English. Unmarried women were excluded from the study. A self-administered questionnaire was used to collect data.

Result and Discussion: Out of 110 Muslim women, 92.7% (n=102) responded. The majority of respondents (49.01%, n=50) were aged 30-40 years. Most of the women (66.6%, n=68) used contraceptive methods. The most commonly used method included oral contraceptive pills (20.58%, n=21) while 17.64% (n=18) used condoms, jadelle (17.64%, n=18), depo injection (13.23%, n=13), IUD (4.11%, n=4), LRT (26.47%, n=27). Considering knowledge regarding contraceptive usage and practices 26.47% (n=27) maintained an age gap between children. Around 58.82% (n=60) gave a productive life to the children. Only 8.82% (n=9) maintained the good health condition of the mother and 5.88% (n=6) used it because they did not want children. According to practical issues regarding contraceptive usage and practices 17.64% (n=18) did not use due to their husband's insistence. Further, 8.82% (n=9) were not due to religious influence, 14.70% (n=15) because of lack of knowledge, 26.47% (n=27) due to side effects, and 32.35% (n=33) because they did not want children.

Conclusion: The study concluded that the majority of Muslim women in MOH Kalutara use contraceptive methods. There was a diversity in the range that was observed in the usage of contraceptives among the selected population.

Key Words: *Muslim, Contraceptive Methods, Practices*

**Pregnant women's knowledge, attitudes, and practices regarding Infant Immunization:
A cross-sectional study**

De Silva J.^{1*}, Liyanage S.¹, Thalagala T.R.J.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Immunization is a proven tool for preventing and eradicating life-threatening infectious diseases, saving between 2 and 3 million lives each year. Nonetheless, incomplete vaccination remains a public health concern in Sri Lanka. As a result, the primary objective of the research is to assess pregnant mothers' knowledge, attitudes, and practices regarding infant immunization at an MOH clinic in Balapitiya, Sri Lanka.

Methods: A quantitative, descriptive, cross-sectional design was used. A convenient sampling technique was used to obtain information from pregnant mothers (n=100, aged 15–54 years) at the MOH clinic in Balapitiya. A self-administered questionnaire was used to collect data, and only 88 responses were considered for analysis after consideration of inclusion criteria. The SPSS statistical package was used to analyze the collected data.

Results and Discussion: Of the 88 participants, 90% were aware of the vaccines that would be administered to their children. However, only 52% of the mothers strongly agreed that they were well informed about the necessary vaccinations for their children. 56.3% of children were immunized with all vaccination doses, but less than half of the children missed one or more doses. The total knowledge-practice scores ranged from zero to 20, and the result showed an average of 12.28 (SD=2.95), with a median score of 12. The study found a significant association between immunization completeness and total knowledge and practice groups ($p<0.05$). A higher percentage of parents with adequate knowledge and practice were found for children with complete immunization (71.7%) and partial immunization (59.5%) than others.

Conclusion: There is a need to increase awareness and knowledge about the benefits and importance of vaccination, as well as the harmful consequences of non-complete immunization among pregnant women. A planned educational program is needed, and the educational level of the parents needs to be taken into consideration when the program is planned, especially as regards those with a lower educational level.

Key Words: *Immunization, Vaccination, Infant, Illness, Knowledge*

Attitudes and knowledge among healthcare students about the Covid-19 vaccine in Sri Lanka

Botheju S.V.¹, Sooriyaarachchi D.K.^{1*}, Munaweera V.R.¹, Pathirannahelage U.V.¹
Maheepala T.N.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Introduction: Identifying factors that support vaccine acceptance are needed to implement contextualized education and policy implementation to control the major global impact created by Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2). However, according to previously conducted researches it has been shown that depending on the culture and context there are various attitudes perceived by individuals regarding the vaccination process, the safety of vaccines, their importance and effectiveness for Covid 19. The aim of this study was to assess the attitudes and knowledge about Covid-19 vaccine among healthcare students in Sri Lanka.

Methods: A descriptive cross-sectional study conducted through a sample of healthcare students who have been studying for a minimum of one year in Sri Lanka. The snowball sampling technique was used to distribute a self-administered, open-ended questionnaire. The collected data were descriptively analyzed using Microsoft Excel.

Results and Discussion: Participants included 60.7% (n=37) females and 39.3% (n=24) males. The vast majority have heard of the Covid-19 vaccine (98.4%, n=60), and most agree that the Covid-19 vaccine is effective (88.5%, 54). Moreover, the majority agreed on the need of a vaccine (80.3%, 49) and preferred the Covid-19 vaccine (86.9%, 53). Despite the vaccine (88.5%, 54) a relatively high proportion of participants thought that other preventive measures were also important. Most participants think the new Covid-19 vaccine is safe (82%, 50). Relatively a high number of participants think that the vaccine is not the only solution for Covid-19 (65.6%, 40). Finally, vast majority of the participants preferred natural immunization (60.7%, 37).

Conclusion: The quality of life of non-institutionalized older people is better than that of institutionalized older people. One possible reason for this observation is that the social support perceived by non-institutionalized older people is higher than that of institutionalized older people. Social support systems available for institutionalised older people should be strengthened to improve their QoL.

Key Words: Vaccine, Healthcare, Immunization, Immunity

Level of physical activity, sedentary behavior, and quality of sleep among students of a selected healthcare institute in Welisara, Sri Lanka

Babapulle L.A.G.^{1*}, Thadallage I.I.¹, Gunasekara K.W.C.K.¹, Sooriyaarachchi D.K.K.¹,
Maddumage S.P.¹

¹*School of Physiotherapy, International Institute of Health sciences, Welisara, Sri Lanka*

Introduction: Physical Activity (PA) and quality of sleep directly affect the health status of college students. But the majority of youth across the globe are failing to meet recommended levels of PA. Thus, the aim of this study was to identify the PA level, sedentary behavior, and quality of sleep among students in a selected healthcare institute in Welisara, Sri Lanka.

Methodology: An online survey was conducted among the potential participants. International physical activity questionnaire (IPAQ) – short form and sleep quality scale (SQS) were used as study instruments. Statistical analysis of data was performed using SPSS Version 25.0

Results and Discussion: A total of 107 (Mean age=22.01±4, n=39, 36.4% male, n=68, 63.6% (female) students participated in this study. The mean BMI of the sample was 22.60±4.43 kg/m². The majority were normal weight (n=55, 51.4%) while 18.7% (n=20) and 6.5% (n=7) were overweight and obese respectively. The underweight category had 23 (21.5%) participants. The average level of PA of the sample was 2653.41±3002.87 MET-minutes/week and males (3779.30±3418.47) had significantly higher (p>0.05) PA levels compared to females (2007.67±2545.02). Moreover, students (n=25) from urban areas (3026.37±3286.60) had higher PA levels (P<0.05) compared to those (n=82) who were from rural areas (1430.09±1155.85). The students spent an average of 7.39±3.55 hours per day in sitting. The majority (50%) reported that poor sleep makes them forget things, feel tired at work more easily, and lose the desire for all things.

Conclusion: In order to improve students' overall health, it is necessary to consistently take action to promote physical activities at the university level such as planning and promoting awareness initiatives, as well as providing appropriate sports facilities and infrastructure.

Key Words: *Physical Activity, Sedentary, Healthcare Students, Sleep Quality*

Study on factors affecting the self-confidence in performing Peripheral Vein Cannulation procedure among Nursing Students of School of Nursing (SON), Kalutara

Dilshara H.H.^{1*}, Chaudri G.D.S.¹, Deshanjalee T.S.R.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Peripheral vein cannulation is one of the most frequently performed and most important invasive procedures in caring for patients around the world. Peripheral vein cannulation is also one of the main procedures taught in the final year of the general nursing diploma programs in Sri Lanka. The purpose of this study was to identify factors influencing nursing students' self-confidence in cannulation procedures at SON Kalutara.

Methods: This was a quantitative cross-sectional study that was carried out among third-year nursing students at the school of nursing, Kaluthara. The data was collected through a questionnaire and the responses were analyzed using Microsoft Excel.

Results and Discussion: The response rate of the nursing students who were approached responded to the questionnaire. Most of the students were affected by their personal factors for self-confidence in the cannulation procedure. Most students (98.1%) stated that their self-confidence in cannulation was influenced by their personalities. A significant number of individuals (97.1%) agreed that caring attitudes influenced their cannulation self-confidence. Some students were affected by institutional factors that affected their confidence. The majority of students (98.1%) agreed that their peers' encouragement influenced their confidence in cannulation practice. Students stated that their self-confidence in cannulation practice was affected by some clinical factors. Most of the respondents (99.1%) agreed that the helpfulness of the patients and the amount of time given for clinical practice affected their self-confidence in cannulation.

Conclusion: There are several factors that affect self-confidence in cannulation practice among nursing students. Furthermore, the supportiveness of the patient is highly affected by the cannulation practice. In addition, personality, and time allocation for the clinical practice were also identified as factors affecting.

Key Words: *Nursing Students, Confidence, Peripheral Vein Cannulation*

Study on the level of acceptance of the Covid-19 vaccination among Pregnant Women in the Kalutara MOH (Medical Officer of Health) area

Dilrukshi K.A.P.^{1*}, Fernando K.S.¹, Tharushika U.P.H.¹, De silva U.C.K.¹, Thalagala T.R.J.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: The Coronairus pandemic is spreading all over the world, including Sri Lanka. To fight against the Covid-19 pandemic, it is necessary to achieve herd immunity by vaccinating the global population as quickly as possible. Pregnant women are at increased risk for preterm birth as well as ICU admission, mechanical ventilation, and death. Pregnant women react differently to the Covid-19 vaccine in terms of its effect on the placenta, fetus, and physiological changes during pregnancy. Therefore, the study was conducted to investigate the acceptance level of the Covid-19 vaccination among women in the MOH area.

Methods: A quantitative cross-sectional study was conducted in Heenatiyangala, Bombuwala, Dediawala, and Nagoda PHMar areas in the Kaluthara MOH area. A specially designed self-administering questionnaire was used to collect data from 104 pregnant women.

Results and Discussion: The majority of pregnant women (42%), were in their first pregnancy, and 34% were in their second. Despite the fact that the majority of women had an uncomplicated pregnancy in their previous pregnancies, 16% experienced miscarriages. Among all respondents, 32.7% of pregnant women accepted to take the Covid-19 vaccine. The Covid-19 vaccine was used by 44% of pregnant women to protect themselves, and 35.3% of pregnant women used it to protect their babies. The Covid-19 vaccination was refused by 67.3% of pregnant women because they were concerned about the vaccine's side effects (72.8%) and the safety of the Covid-19 vaccine for pregnant women or their unborn babies was unknown. 41%).

Conclusion: Based on the results, most pregnant women refused the Covid-19 vaccine during their pregnancy because they were concerned about any side effects and because the vaccine's safety for pregnant women or their unborn babies was unknown.

Key Words: *Pregnant Women, Vaccination, Covid-19, Kalutara MOH*

The factors affecting the theory-practical gap in clinical procedures among Student Nurses in the School of Nursing (SON), Kalutara

Fernando M.N.U.^{1*}, Madhubhashini G.A.C.¹, Madhushani H.T.¹, Thalagala T.R.J.¹, De Silva U.C.K.¹

¹*National Institute of Health Science, Nurses Training School, Kalutara, Sri Lanka*

Introduction: The goal of nursing education is to produce competent and independent nurses who can work in a variety of settings. Hence, the main purpose of every institution of nursing education is to improve the health field of the country by providing high-quality, standard patient care through upgrading the knowledge, attitude, and practice of the students. Students are taught both the theories and the practicals of nursing. The aim of this research was to assess the factors affecting the theory-practice gap in clinical procedures among student nurses.

Methods: A descriptive cross-sectional study was conducted on a convenient sample of 100 students from the Kalutara School of Nursing. Data was collected using a self-administered questionnaire sent as a Google Form and descriptively analyzed using Microsoft Excel.

Results and Discussion: Out of the respondents, the majority (90%) of the students agreed with the difference in the environments between the skill lab and ward setting. They mentioned that it affected their self-confidence and practice with procedures. Most (85%) of the students stated that the institute provided enough educational opportunities and promoted self-confidence. Considering the questionnaire results, it was clear that there needed to be more correlation between learning the procedure and performing it. When performing procedures in the skill lab and in the clinical setting, 80% of students experienced fear and confusion. Considering the above data, there was a gap between learning the procedure and performing it in the ward. The reason for that was the difference between the skill lab and clinical setting, along with the lack of equipment. As a solution, the staff's support to perform proper procedures under supervision can be increased.

Conclusion: The study assessed student learning, practice, and the causes of gaps between theory and practice. There was a gap between classroom instruction and clinical training, and students' self-esteem was low. There is a need to recognize the significance of integrating theory and practice.

Key Words: *Theory, Practical, Equipment, Self-Confidence, Clinical Setting*

Prevalence of dysmenorrhea and its' effects on academic performance among Nursing Students

Thalagala T.R.J.¹, Kumari M.D.N.P.^{1*}, Kumari.K.K.S.P.¹, Dissanayake H.A.D.¹,
Athukorala A.R.S.M.¹, Paranaheewa P.P.T.M.¹

¹*School of Nursing, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Dysmenorrhea is a major problem in women at adolescence age which have a negative impact on academic and daily activities. The aim of this study was to evaluate the prevalence of dysmenorrhea and its effects on academic performance among the nursing students of the school of Nursing Kalutara.

Methods: This was a cross-sectional, descriptive study done among conveniently selected first-year and third-year nursing students at the school of nursing Kalutara. The data were collected through a self-administered questionnaire that was circulated as a Google form and descriptively analyzed.

Results and Discussion: The response rate was 75% as 150 individuals out of 200 answered the questionnaire. Over half of the respondents (76.4%, n=115) stated that they had painful menstrual cycles. Furthermore, 17.4% (n=26) of them always experienced dysmenorrhea. However, a minority (6.3%, n=9) had never experienced it. The majority of respondents (49.3%, n=25) stated that they have moderate pain and 16% (n=24) had severe pain. The most identified problems related to dysmenorrhea were back pain (90.2%, n=135). About 59.7% (n=90) experienced nausea, and 42.7% (n=64) experienced vomiting. In addition, 54.2% (n=81) had heavy bleeding, and 84% (n=126) had body weakness. When considering the effect on academic performance, 90.2% (n=135) were in uncomfortable situations due to dysmenorrhea. Furthermore, the majority (94.4%, n=142) had problems with maintaining concentration. About 52.3% (n=78) got absent from work.

Conclusion: Based on the results, many experienced painful menstrual cycles. The most identified issues related to dysmenorrhea were seen as back pain, heavy bleeding, and body weakness. Furthermore, many

Key Words: *Dysmenorrhea, Academic Performance, Nursing Students*

**A study related to the causes and coping techniques of stress among Student Nurses in
School of Nursing, Kalutara**

Thalagala T.R.J.¹, De Alwis D.W.L.^{1*}, Lakshani H.S.¹, Lakmali H.D.S.¹,

Wijewardhana K.W.I.A.¹

¹*School of Nursing, National Institute of Health Sciences, Kalutara, Sri Lanka*

Introduction: Nursing training is a combination of theoretical and clinical experience. This large curriculum can develop stress among students. They use different techniques to reduce and try to tolerate their stress. This study aimed to identify the most effective techniques to relieve stress.

Methods: This was a cross sectional, descriptive study done among 100 students who were conveniently selected from the school of nursing Kalutara. Data were collected by self-administered questionnaire distributed as handout form and analysed.

Result and Discussion: All of the approached nursing students responded to the questionnaire (100%). Majority of the respondents (80%) were in the age group of 23-26 years and 98% were females. The majority of the respondents (79%) agreed that clinical experiences are most stressful in the student period. Many of the respondents (98%) agreed that examinations and evaluations are most stressful. Moreover, 80% of the respondents stated that they get stressed when they live alone. The majority of respondents (89%) stated that their stress levels increased with examination and evaluation. In addition, 99% agreed that engaging in religious activities aids in relieving stress. Many of the respondents (96%) agreed that using social media relieves stress. Furthermore, 96% of respondents also stated that they engaged in sleep to relieve stress.

Conclusion: Based on the overall results, many of the students were stressed due to examinations and evaluations they faced. When considering the techniques used in managing stress many engaged in religious activities, slept, and used social media to relieve stress.

Key Words: *Stress, Coping techniques , Nursing students*

**The sleeping pattern disturbances among final-year Nursing students in the
School of Nursing, Kalutara**

Samodha A.S.^{1*}, Sewwandi M.A.A.¹, Sewwandi M.M.P.¹, De Alwis D.W.¹, Thalagala
T.R.J.¹

¹*School of Nursing, Nurses Training School, Kalutara, Sri Lanka*

Introduction: Sleep is a vital part of students' performance and inadequate sleep can negatively impact their daily functioning, particularly their performance. Therefore, this research is aimed to investigate the incidence of sleeping disturbances among nursing students and its effect on their academic performance.

Methods: This was a cross-sectional, descriptive study done among the conveniently selected 100 students at the School of Nursing Kalutara. Data were collected through a self-administered questionnaire as a Google form and descriptively analyzed.

Results and Discussion: About 48.1% of the students stated that they slept for 4-6 hours and 47.2% stated that they slept for 6-8 hours. Moreover, 56.6% of the students were satisfied with their daily sleeping patterns. However, 25% of the respondents had poor sleeping patterns and were feeling sleepy during the daytime while working. The majority (61.1%) of the students got continuous sleep. When considering the reasons for sleep disturbances, 34.3% of students stated it was due to academic assignments and 31.5% of students had excessive daytime activities. A minority (10.2%) of students had a noisy environment and 6.5% of students had insufficient food and personal problems. In addition, 43.5% of the students changed their sleeping routines on the weekends and weekdays to reduce sleep pattern disturbances.

Conclusion: When considering the results, many of the participants were satisfied with their sleeping patterns. However, a minority had poor sleep time and not enough continuous sleep. The causes for the sleep pattern disturbances were identified as insufficient food, personal problems, a noisy environment, and academic assignments.

Key Words: *Sleeping Disturbances, Sleeping Pattern, Nursing Students*

The knowledge, practice, and factors affecting the hand hygienic practice among the Nursing Students in Nurses Training School, Kalutara

Pathirana M.I.N.¹, Peiris E.A.T.V.¹, Samaraweera S.A.H.¹, Dhammika A.¹, Thalagala T.R.J.¹

¹National Institute of Health Sciences, Nurses Training School, Kalutara, Sri Lanka

Introduction: Hand hygiene is a simple and effective infection control intervention in health care settings. The aim of this study was to examine the factors affecting the practice of hand hygiene of the nursing students in Nurses Training School, Kalutara.

Methods: This was a descriptive study done among a conveniently selected 150 nursing students in Nurses Training School, Kalutara. Data were collected through a self-administered questionnaire distributed and descriptively analyzed.

Results and Discussion: Out of the respondents, 88% (n=132) were females and 12% (n=18) were males. Amongst the students, 99.3% (n=149) had received formal training on hand hygiene and 98% (n=147) knew the six steps of effective hand washing. All students (100%, n=150) knew the five moments of hand hygiene. Most of the students (96%, n=144) agreed with both effective hand washing and hand sanitizing. While 80% (n=120) agreed that hand rubbing is more rapid than hand washing. Furthermore, 54% (n=81) agreed that hand washing is more effective than hand rubbing against germs. A majority (99.3%, n=149) claimed that hand rubbing causes skin dryness, while 55.3% (n=83) agreed that at least 20 seconds is needed for hand rubbing. According to the attitude regarding hand hygiene, almost all participants agreed that effective hand hygiene is to protect themselves. A majority (94%, n=141) followed all the steps while doing hand washing in clinical settings, but 78% (n=117) only followed hand sanitizing. According to barriers to proper hand hygiene, 85% (n=128) had enough cleaning areas in a clinical setup. Moreover, 76.7% (n=115) agreed that they can easily reach the hand washing areas during their work. However, 73.3% (n=110) agreed that inadequate knowledge prevents effective hand washing and 82% (n=123) stated that emergencies in the ward interrupt effective hand washing.

Conclusion: The majority of nursing students had good knowledge, and positive attitudes related to effective hand hygiene. This study also highlights the factors affecting the practice of hand hygiene of the student nurses in the Nurses Training School, Kalutara.

Key Words: *Knowledge, Attitudes, Barriers, Hand Hygiene, Student Nurse*

REFLECTIONS

PP 178

Reflection on the clinical practice of maintaining nurse-patient relationships during the procedure done by the student nurses

Thalagala T.R.J.¹

¹*School of Nursing, National Institute of Health Science, Kalutara, Sri Lanka*

Description: Reflective practice is linked to learning from experience and is regarded as a critical strategy for health professionals who want to continue learning throughout their careers. Gibb's reflective cycle provides a framework for evaluating experience, especially among healthcare professionals, and its cyclic form allows it to span six stages of the experience being evaluated. I was clinical supervising the students in the Teaching Hospital, Kalutara. I have noticed several students engaging in patient care in various units in the hospital. I observed and inquired about the patient's details and condition. Most of the students had not known even the patient's name and condition of the patient.

Feelings: Initially, I felt so happy by seeing that student nurses were engaging in patient care. I noticed, most of the students were performing nursing care for bedridden patients. Other students assisted staff nurses to complete routine activities of the ward. But, after further observation, I found students missed a very important part of a procedure. The lacking part was building a nurse-patient relationship. Though they follow technical steps correctly, an empathic approach could not be visible. Paying less attention to forming effective nurse-patient relationships made me worried. I was angry about not knowing the patient's name and condition and also unsatisfied with the student nurses' level of performance in regard to the nurse-patient relationship.

Evaluation: Student nurses should follow the correct techniques of each nursing procedure, especially need to understand the underline principles of each procedure step. The positives of the event were that I got a chance to observe their procedures. So, I was able to reflect on the issues which are met in clinical training and our education system. Students got a chance to practice nursing procedures while caring to patients. They are able to gain experience for their professional career. However, the lack of good nurse-patient relationships may negatively affect a professional image. When a student nurse is unable to build a good rapport with patients during procedures, the patient does not give support to fulfill the task successfully. It would affect to the dissatisfaction of both patients and staff. Effective nurse-patient relationship enhances trustworthiness toward staff.

Analysis: This event helped me to understand the shortcomings in the clinical competencies that nurses should develop. Utilization of the nursing process would be more fruitful while providing care to the patients in the dynamic, complex world of patient care. While using the nursing process, critical analyzing skills play a vital role to plan the care needed for patients with multiple comorbidities. Further analyzing, I notice though students learn the importance of the nurse-patient relationship in the classroom, only focus the task completion in clinically rather than considering an empathic approach.

Conclusion: The gap between theory and practice has always been a challenge for novices in any field. This event is an ideal example of such an event. Lack of practice can lead to students' level of performance as well as the level of patient and family satisfaction.

Action Plan: Emphasis to focus more on an empathic approach during return demonstrations and evaluations in clinical supervision. Scenario-based discussions are scheduled to be discussed. Further students are advised to write a reflection report whenever they missed these soft skills during caring and to submit it to the relevant supervisor. Soft skill development workshops are needed to initiate.

PP 179

Reflection on nursing students' communication skills exhibited at the final practical examination

Attygalle D.S.V.¹

¹*School of Nursing, National Institute of Health Sciences, Kalutara*

Description: I got an opportunity to participate as an examiner for the practical examination of final-year students at one of the schools of Nursing. The final practical exam was scheduled to be conducted as OSCE in school. In this exam, dressing procedures based on case scenarios and management scenario-based communication skills events were planned. Each student had to do both practical events. In the management case scenario, a patient who was professionally an accountant who works in a hospital was afraid and anxious about being undergone amputation of the right lower limb due to a chronic wound caused by Diabetic Mellitus. Though it had not been planned to do such surgery according to the case scenario, the patient was suspected of amputation as he had been planned to transfer to a surgical ward. The student was expected to address how to reduce the fear and anxiety of the patient.

Feelings: I was really unsatisfied with the students' attitudes and communication skills regarding case management. Students didn't consider the patient's dignity. Attentive listening, responding to inquiries of patients, expressing reassuring statements, and practicing nonverbal communication skills were lacking in their performances. As I felt, students consider amputation is just a simple thing. I thought if this happened in the actual clinical setup, what would the patient think and how much he would be satisfied. I felt sorry about the patient. Some responses made me shy.

Evaluation: Due to being participated as an examiner, I was able to observe how students tackle such case scenarios. Further got an understanding of their weakness, strengths, and lacking practices. Most of them misinterpreted the facts. As a health educator, I was not content with students' performances. Further investigating, students in our school also performed similarly to that students. The majority of examinees did not understand what they were expected to do. Building rapport between the patient and the staff is an essential component prior to any procedure. Students should offer due respect for the patient by addressing his name in a respectful manner. But students were unable to fill that.

Analysis: Lack of reading is one of the reasons for their poor performance. Without reading properly the case scenario, they jumped to manage it. Due to the Covid pandemic, students learned online. They get used to digital technology. They didn't get sufficient clinical experience. So, in actual setup, they didn't meet such issues and had no chance to practice. Though they learned soft skills, practice is poor in the clinical field. On the other hand, a lack of role models and supervision in the field are also may affect this situation.

Conclusion: Communication is an essential component of nursing. Most of the time patients are unsatisfied due to communication errors. So, students need to develop essential skills for putting into practice. As nursing educators, we should assist them to develop their soft skills.

Action plan: Scenario-based case management will be increased. Sample Video-based teaching can be utilized. I planned to discuss one case management weekly. Also ask students to bring their experiences related to communication issues with patients to discuss. After discussing with the principal, he insists on including scenario-based case management for MOCK exams. Also, increase clinical supervision.

PP 180

Reflection on the importance of wearing PPE in Healthcare

Herath T.E.¹

¹*School of Nursing, International Institute of Health Sciences, Welissara, Sri Lanka.*

Description: A 29-year-old, female, pregnant patient was brought to the theatre for an LSCS (Lower Segment Caesarean Section). When the patient was prepared to administer Spinal Anesthesia (SA), halfway through the procedure, after most of the anesthesia was withdrawn into the syringes but had not yet been administered to the patient, the anesthetist noticed a few strands of hair in the spinal pack. The anesthetist confessed that she did not know if it was there when she initially opened the spinal pack or if it fell in the middle of the surgery and that a similar incident had once happened in the past with another spinal pack.

Feelings: I was happy, at first, when I was asked to help with the procedure and was confident since we knew how to help. Once the hair strand was noticed, I was curious and confused as to how it ended up there. Later, I got anxious if my colleague and I could have been given the blame. When the problem was solved, I was relieved, and happy but conflicted.

Evaluation: When evaluating the incident, the good experiences include, the hair strand being noticed in time, we learned the consequences of not wearing Personal Protective Equipment (PPE) properly again, and my colleague nor I put the blame even if it was not our fault. The bad experiences include, that the spinal pack had to be disposed of along with the drugs and there was a delay to start the surgery.

Analysis: In a study carried out on “PPE uses among health care providers”, out of a total of 1060 Health Care Providers (HCP) taken for the study. It was found that only 156 (18.1%) of the 862 HCPs working outside the Operating Room (OT) and Intensive Care Unit (ICU) used proper PPE. In another research evaluation, 14 studies with 11,746 HCWs were considered. The estimated total prevalence of adverse outcomes due to incorrect PPE usage among HCWs was 78%, with studies ranging from 42.8% to 95.1%.

Conclusion: When reflecting on this event and my experience, I realized that a simple act of carelessness can create many consequences such as a waste of time, equipment, and other items while also increasing costs. It is therefore all healthcare workers’ responsibilities to follow the proper instructions when working.

Action Plan: Regular inspections should be conducted to detect worker’s infection control practices and malpractice. Methods such as posters etc. should be used to increase awareness of proper PPE usage. Carry out workshops to educate workers about infection control. Have CSSD workers double-check the packs before sterilization.

PP 181

Reflection on the consequence faced when incorrect sample labeling occurs in a laboratory

Weerakkody I.N.¹

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: Where the incident took place at a leading hospital in Sri Lanka. It was a Wednesday, and the first set of samples that were delivered to the biochemistry unit. Two plain blood samples were received from the same patient from the same ward (ICU) at the same time in the biochemistry unit. However, the end result was different.

Feelings: I felt eager to know more about how it worked and when the supervisor carried out the procedure step by step, felt confident in the beginning because with time it was just a matter of following the procedure step by step. When the incident took place, I was a bit flustered and was wondering what I should do, but my supervisor handled the situation smoothly, felt relieved, and made a note in my head to report each and every abnormal incident.

Evaluation: Through the experience, I was able to learn how to handle incidents like this in the future. The bad experience was even though I was present there we did not get to do any work other than observe what our supervisor did.

Analysis: Specimen labeling errors have long plagued the laboratory industry putting patients at risk of transfusion-related death, medication errors, misdiagnosis, and patient mismanagement. Many interventions have been implemented and are deemed to be effective in reducing sample error rates.

Conclusion: It is very important to check patient details with the BHT prior to taking samples from the patient, that process was not followed by the nurse accordingly. It is important to guide all the staff members to follow the procedure if not, take necessary actions against such employees.

Action Plan: Though required information may vary between laboratories, the following information must be on all specimen labels; Patient's name, first and last, Collector's ID, Time and date collected, Hospital number, record number, or medical record, Patient location, Specimen types, and Test required also be conscious and responsible over hospital resources and minimize waste.

Reflection on postpartum care after childbirth

Jayasundara H.S.G.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: This incident happened in the maternity ward of a well-known hospital. The patient in this case scenario is a 32-year-old mother who was admitted to the hospital. She was 34 weeks pregnant when she was admitted and has undergone a LSCS. Due to slight respiratory distress, the newborn baby boy was transferred to the NICU for further treatment. After the patient was settled in her room, the in-charge nurse appointed me to look after the patient. So, I managed to talk with the patient and obtain her vitals every hour. After about two hours, the in-charge nurse asked me how the patient and I told her that her vitals are normal but the patient is cold so I gave her more blankets. Then the nurse questioned me about the bleeding. Since I have not checked for bleeding, I told the nurse so. She got panicked and went directly to the patient's room and asked the bystanders to be outside. She removed the bed sheets and spread the legs of the patient to observe the bleeding. Since she was under spinal anesthesia, I had to support her legs. To my surprise, she has a considerable amount of blood in the under pad and the nurse looked at my face signaling me that it is important to pay attention to this matter. Then she massaged the patient's abdomen hard and so many blood clots were removed and the nurse asked me to do the same. She told me that a hard part that I could feel while massaging is the fundus. Then she turned to me and advised me on observing for active bleeding after childbirth is much more important. Further, she told me to look for bleeding and keep the nurse posted every 15 minutes about the condition of the patient.

Feelings: Since it was my very first day in the maternity ward, I was very energetic, excited, and curious to observe antenatal and post-partum mothers in the ward. When the nurse questioned me about bleeding, I was clueless. I was worried thinking about the patient's condition and was very scared that I have messed up things. After seeing the amount of blood that the patient has lost, I was shocked and panicked. After the nurse educated me about the importance of checking for active bleeding after childbirth, I felt relieved. I was neutralizing the feeling by thinking that I have learned a vital fact after all.

Evaluation: When considering the positive outcomes of this incident, I had an opportunity to monitor and observe a post-partum patient paved a very rare path to understanding and utilizing the knowledge we gained in real-world situations. It also helped me to understand my strengths and weaknesses in skills and to what areas should I pay more attention. There were also negative experiences that came along with this incident. Even though I have learned through experiences, I have made the patient's condition at risk by being irresponsible. This may have led the patient's life at risk. I did not get the needed information and advice from the staff before commencing the process. I made the patient and the staff uncomfortable with the situation. This may affect the therapeutic outcome of the patient as it is expected.

Analysis: Post-partum hemorrhage is a condition where the woman has heavy bleeding after giving birth to a newborn. In more serious conditions the bleeding from the vagina does not stop and in addition symptoms like blurred vision or chills and weak body, strength can be experienced. This can be due to past medical conditions and blood clotting conditions. This can occur when the uterus exerts pressure on the blood vessels in the uterus while it is trying to push the placenta out. If the contractions are not stronger enough the vessels bleed more. This usually takes place within one day of giving birth, it can also be continued up to 12 weeks after having a baby. Thus, it is necessary to be educated on these matters and conduct a proper assessment so that the mother's health is not at risk.

Conclusion: The main responsibility of the nurse is to make the patient feel comfortable throughout their stay in the hospital, including the times before any procedure, during a procedure, and at the end of the procedure. But in maternity and pediatric nursing, more than the patient the nursing officers could undergo more sensory experiences. But as responsible nurses, they should give priority to the patients as usual. Therefore, the nurse must pay good attention and have a good consciousness in performing the procedures and patient assessments. This should not endanger the life of the patients. Every action we take must focus on improving the physical and mental well-being of the patients.

Action Plan: If I had to face the same kind of situation in the future, I would not be overconfident and proceed without any advice from seniors. I would not take any action to make the patient's condition critical. First, I would confirm the patient's situation and their real needs. I would use my critical thinking ability and involve in these kinds of situations with good consciousness. I will discuss any kind of doubts about the patient's unpredictable medical conditions and clarify them before performing a procedure or any kind of assessment.

PP 183

Reflection on “Display on an error on the glucometer”

Noorul A.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: This incident took place on the 07th of May 2022 in the Cardiac ward of a well-known hospital in Colombo. Patient X was 52 years old with a history of diabetes mellitus and was admitted to the cardiac ward after the surgery CABG (coronary artery bypass graft). It was the patient’s day 2 after the surgery. since his blood sugar levels have been on the rise and have a history of diabetes. I was asked to obtain a Random blood sugar and mark the results in the chart. So, I prepared the equipment and went to the patient’s room. After initiation of the procedure, I put the lancelet in the pen, put the strip in the glucometer, cleaned the puncture site, and got the sample. I got the blood on the strip the light on the screen of the glucometer was on but the result was shown as an “error”. I was confused and informed the sister what happened, and she said that the glucometer I had taken had a technical issue. So, I took a new glucometer and went to the patient and explained what happened, and apologized for my careless actions. The patient was cooperative and was okay to get another test done. In which the results were displayed correctly. Finally, the sister advised me to check the equipment properly before taking them to the patient’s room and to be extra careful when working with cardiac patients because they are given anticoagulants, which make their blood thin in result they can lose a lot of blood.

Feelings: Before the procedure, I was calm and confident because I knew how to do the procedure well, as I have done it several times before, and I was also happy that I got the opportunity to do the procedure. During the procedure when the first result on the glucometer displayed “error” I was confused as I have not had gotten this result before, and I was disappointed in myself later for not checking the glucometer before bringing it to the patient’s room and when the sister asked me to obtain the RBS again, I was a bit anxious as I had to puncture the patient twice. After the procedure, I was happy because I was able to obtain a correct result on the second try and the sister in charge did not scold me but advised. I was also relieved because the patient did not blame me for having to prick twice but was cooperative and kind.

Evaluation: The good experiences I obtained from this incident were, getting valuable advice from the senior staff, being able to be calm and handle the situation well, and getting exposed to a new situation. Bad experiences I obtained from this incident were patients being punctured more than once, having limited technical skills of tools used in daily procedures, getting hospital resources wasted and the reputation of the hospital could have been tainted.

Analysis: Point-of-care glucose testing in the hospital gives numerous potentials for inaccuracy. Under the correct circumstances, every gadget can fail. With thousands of operators, hundreds of devices, and dozens of sites involved in glucose monitoring in the hospital, there is plenty of room for errors that can affect the quality of test findings. Internal checks and the capacity to advise the operator of meter faults were limited in early glucose meters. Hospitals must be aware of the risk of errors by recognizing the flaws in the testing process that could lead to incorrect results and taking actions to prevent errors or reduce the harm to patients if they do occur (Technol., 2011).

Conclusion: The above situation showed me the importance of checking the equipment before taking them to the patient for a procedure and also that I should improve my technical skills, and the ability to make sure that the equipment used daily in procedures is working properly. Also, I realized the importance of communication with the patient, the rapport that I built earlier with the patient helped the patient understand that what happened was unintentional though it was a very careless thing to do. I also learned that even if mistakes happen that being calm will help you get through the moment rather than actually being panicked and stressed out. Also, another important thing to remember is that if you make a mistake inform your superiors, let them know what happened, and learn from them. It is also very important that you tell the patient what went wrong and sincerely apologize for it, and also patient education on his condition is also very important. So, we were asked to tell the patient the results of his test and to advise him on what to do and what not to do and also the complications that might occur.

Action Plan: Next time when asked to do a procedure; I would always check the tools before the procedure and be conscious and responsible for hospital resources and minimize the wastage of resources. I would develop my knowledge related to technical skills and a basic understanding of how the equipment functions. I will give full attention to the procedure to be performed and will not rush the procedures. I would always ask for help from the senior staff. Moreover, I will communicate with the patient while doing the procedure to build a good rapport.

PP 184

Reflection on the importance of proper assessment of equipment

Herath H.M.S.U.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: I was assigned to a 73-year-old female patient who was admitted to the hospital due to Dengue symptoms. She had symptoms of high fever and muscle, and eye pains and has a past medical history of diabetes mellitus, hypertension, and hyperlipidemia. At around 9:45 am I was asked by the sister in charge to insert the patient with a cannula. I agreed, and I approached the patient on her right side and found she was dozing off. After the consent, I came back with the prepared equipment and told her not to pull their hand away when I am doing a procedure. I successfully inserted the cannula, but when I was trying to leave, I saw the plug of the cannula had fallen off which led to bleeding. But fortunately, I was able to pick it up on time and insert it back again. Before leaving I didn't tell the patient to inform me if something happened. I went to the nurses' station and 10 minutes later the sister in charge asked me to take the vital signs of the patient. I collected the equipment and saw the patient had dozens of them. When I approached her to check on the cannula, I saw blood on the bed and the patient. I added pressure to a nerve and froze not knowing what to do. Finally, I saw the fallen plug. I picked it up from the bed and inserted it; it got loose again and a nurse saw what had happened and assisted me. After bringing cotton pads, the nurse removed the cannula as the patient's hand was swollen. The patient got scared and I was able to calm her down. After a little while later I came back to the patient, took her vital signs, changed the bed sheets, and inserted a new cannula into her left hand.

Feelings: Before the incident happened I was excited, confident, and proud of myself. I was excited because I got to do a procedure. I was just confident because I have done the procedure several times and not even once have I failed. I was proud of myself because of my success. During the incident, I got scared and confused. I was scared because of a lot of blood and was confused about why the blood had flown out and what was happening. After the incident, I felt regretful and scared. I was regretful because I didn't do a proper assessment of the equipment and hurt the patient. I was scared because I got scolded by the sister in charge.

Evaluation: The good experience I had was that I learned a lesson and got more knowledge for future incidents like this, and I also identified the problem before it was too late and I also had the chance to change the cannula twice. The bad experience was that I had the patient hurt more, caused discomfort to the patient, and had to clean the mess afterward.

Analysis: Analyzing the incidents and the situation assisted me in identifying the issue, the importance of effective communication, the importance of critical thinking, and the importance of equipment checks before use.

Conclusion: In order to prevent such incidents from happening again, I should have enough knowledge of cannula incidents, if something like this happens again, I will know how to prevent it. I should assess

any equipment carefully before use with the patient. I should be more attentive to the patient of their condition before treatment. I should ask for help if needed in an emergency.

Action Plan: For me to prevent such a thing from happening again, I should be able to communicate effectively so that there will be no misunderstanding, I should do a proper complete assessment of the patient, the equipment before doing any procedure, in case of an emergency I should never get panicked, during the procedure I should be more focused on the patient and the procedure.

PP 185

Reflection on Blood Drawing

Perera S.H.¹

¹*School of Nursing, International Institute of Health Sciences, Welisera, Sri Lanka*

Description: Gibbs Reflective Cycle is a self-reflection and management tool that help people to think clearly and systematically about the different experiences they have gone through during specific activity or similar situation and draw conclusions. Mr. X was a 31-year-old male patient who was admitted to the ward complaining of right lower quadrant abdominal pain. I was given the chance to draw blood to be sent for investigation. It was my first time conducting a blood drawing procedure on a patient at a hospital. I started my procedure and successfully completed all the steps according to the guidelines up to the insertion of the needle of the syringe into the vein. After inserting the needle, I could observe blood filling the hub, so I slowly started to pull the plunger. To my dismay, when I was drawing the blood out, I accidentally pulled the needle backward causing the bevel to be slightly seen externally. When I tried to swiftly put the needle back into the vein, the patient cried out in pain. Hence, I ended the procedure by removing the tourniquet and placing a cotton swab, and taking the needle out. I quickly informed the senior nurse about the calamity caused. She inspected and re-punctured the patient successfully and drew blood out. I apologized to both my patient and the senior nurse for the inconvenience caused. The senior nurse nicely advised me on how to perform the procedure successfully next time. I checked up on my patient from time to time.

Feelings: Before the procedure, I was quite excited that I was assigned to perform a procedure on a patient by myself. I felt quite nervous at that time as I have not performed this procedure on a patient. However, during the procedure, I felt a bit scared when I realized that I pulled the needle too hard until the bevel was visible. I panicked a bit when I could not get the procedure done as expected but I kept remaining calm on the outside. I also felt very anxious when I heard my patient cry out in pain. Finally, I felt very embarrassed about the inconvenience caused as I lost the trust of both my patient and my senior nurse. I also felt extremely upset about the fact that I caused discomfort to my patient.

Evaluation: Some of the positive aspects that I gained from my experience were that I received the chance to perform a blood-drawing procedure at the hospital. I was also capable of handling and accepting my mistake. I learned the importance of quick collaborative actions. I was taught and advised nicely and ended up learning how to perform the procedure accurately now. Some of the negative aspects that were experienced were that I panicked a bit during the situation. The patient was also pricked twice. I made the patient feel uncomfortable and there would have been negative views about the hospital and the care.

Analysis: In health care, blood specimen collection is a common procedure, and the results have an impact on clinical decisions (Bölenius, Brulin, & Graneheim, 2014). It should be conducted with strong ethical intentions and based on good theoretical and practical nursing skills. In health care, blood specimen collection is a frequent procedure, and the results of specimen analysis have a significant impact on clinical decisions. Phlebotomy errors can result in repeated sample and diagnosis delays, putting patients' safety at a risk. These abilities should be conducted with strong ethical intentions,

based on good theoretical and practical nursing skills, to increase patient safety and provide the best possible care (Bölenius, Brulin, & Graneheim, 2014).

Conclusion: Finally, given the goal of reflection is to learn from an experience, I have learned how to improve my knowledge and practice as a student nurse by reflecting on such situations. This was a fantastic opportunity for me to reflect on my mistake, assess where I am now, and make improvements to my present and future practices. I've also realized the importance of good practice and staying alert because if I had been more observant in this scenario, I could have prevented such inconveniences.

Action Plan: I need to be more patient-centered, and empathetic, and comprehend well on what the patient is going through. If I am unsure about a procedure, I will make sure there is a senior nurse on hand to monitor me, and I will be extra cautious when carrying out the procedures. I will also improve my skills by exposing myself more to working as a nurse in order to improve my present and future practice. Lastly, learning to think critically and not rush with the procedures and I will always double-check the procedure with another professional.

Reflection on the importance of concentration and competency in a laboratory setting

Mahaliyana D.P.¹

¹*School of Biomedical Sciences, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: This event took place on a usual day of placements at one of Colombo's leading research institutes. I was asked to prepare 1% agarose gel for the gel electrophoresis procedure during the last three few hours of my placements. Thus, I gathered all the required equipment, reagents, and specimens needed for the experiment and carried it out. I was able to carry out the initial steps accurately. As a result, I was successful in transferring the agarose gel into the casting tray while avoiding the formation of air bubbles and kept allowing it to solidify completely. However, as I was only left with a few minutes left before the placement hours ended, I removed the comb fast which ultimately resulted in damage to the wells. As I was stressed, I forgot that I had to remove it in one go and I dragged the comb from the gel which caused damage to the wells. These wells were inspected under the blue light transilluminator to observe the status of the wells. Unfortunately, this showed that most of the wells were damaged while trying to remove the comb from the gel. Therefore, I was not able to run the gel electrophoresis resulting in a waste of specimens, reagents, and time invested in the experiment.

Feelings: Before the incident, I was grateful and enthusiastic when I was told to conduct this experiment as this was my first time. Moreover, while I was carrying out the experiment, I felt confident and happy that I was carrying out the initial steps accurately. Yet, I was alarmed and disheartened to discover that the wells were damaged when observing under the blue light transilluminator. Thus, I was disappointed as I failed in experimenting and I could not make proper wells.

Evaluation: This incident is an ideal example of mistakes caused due to lack of experience in carrying out such experiments and a lack of concentration. However, when considering the negative outcomes of this incident, I was not able to perform the most crucial step accurately at the end causing a waste of time, reagents, etc. On the other hand, the positive outcomes of this incident, I was able to gain experience and learn how to avoid such mistakes in the future. I was also fortunate to gain advice from my supervisor.

Analysis: Gel electrophoresis is a technique that can be used in separating macromolecules including DNA and RNA in life science labs. Furthermore, it is required to carry out each step precisely to gain the desired result. Based on research, higher levels of concentration make individuals less susceptible to distraction (Sörqvist and Marsh, 2015). Thus, as a biomedical scientist, the experiment should have been given full concentration which would have eliminated the concerns of running out of time. Moreover, competency is the ability to learn new things and apply what you have learned to practice (Epstein, 2002). As accurately even though I did know the importance of removing the combs at one go without harming them, I was not able to put the theory-based knowledge into practice accurately. Hence, a biomedical scientist must carry out experiments with full concentration and competency.

Conclusion: Biomedical Scientists must carry out experiments in their laboratories with precision. This requires a great deal of concentration and competency. When considering this incident, I was overly concerned about time and rushed through a crucial step while losing concentration. As a result, I was not able to carry out the experiment accurately. However, if I had removed the comb with concentration, I would have avoided causing harm to the wells.

Action plan: Such mistakes can be avoided by always paying heed to the supervisor's guidance and understanding the importance of each step. This can be done by asking the supervisor if the outcome of any step is conducted incorrectly. This may help in keeping in mind the crucial steps to avoid such mistakes. Furthermore, conducting more experiments similar to this while working with a high level of concentration can aid in omitting such mistakes.

PP 187

Reflection on the importance of considering patient safety at all times

De Silva C.A.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: This incident occurred in a ward at a leading hospital in Colombo during placements. That particular day, I was asked to mobilize a patient who have undergone brain surgery and had developed facial nerve palsy as a post-surgery complication. Intending to carry out the treatment protocol, I entered the patient's room. I then observed that the patient had a Nasogastric Tube (NG Tube) inserted. After performing relevant breathing exercises and Active Range of Motion (AROM) exercises I informed the patient and the bystander that I need to mobilize her and thus, we need to walk along the corridor. Getting the patient ready to mobilize along the corridor, I made sure that the patient wore her footwear. However, thinking that the patient will feel uncomfortable wearing a mask over the NG Tube, I did not ask the patient to wear it. My supervisor who saw me mobilizing the patient without a mask inquired as to why I did not ask the patient to wear the mask. I then informed him about my concern, and he explained that I had put the patient at risk of being infected and could have mobilized within the patient's room if so.

Feelings: Prior to the incident I was very happy and grateful that I was allowed to treat a patient who have undergone surgery for a cerebellar lesion. While treating the patient, I was apprehensive because it was my first time mobilizing a patient on my own. I was also confused when it came to deciding whether or not the patient should wear a mask over the NG tube. In addition, I felt guilty for not prioritizing the patient's safety and putting the patient at risk.

Evaluation: When considering the circumstances surrounding this incident, it is evident that it occurred due to a lack of experience dealing with such patients and a failure to consider the patient's safety. Thus, an incorrect decision was made, potentially putting the patient at risk which could have caused further complications. On a positive aspect, I was able to gain advice from my senior supervisor and understand the importance of prioritizing the patient's safety irrespective of any circumstance.

Analysis: One of the most important aspects of healthcare quality is patient safety. According to the World Health Organization, millions of patients worldwide are injured as a result of unsafe medical care and activities (El-Jardali et al., 2011). Moreover, a physiotherapist must make well-informed and effective decisions in the best interests of the patient while also considering the patient's safety. Mostly during the period of the pandemic, all hospitals across the globe have come up with strict guidelines that prevent the exposure of patients to the pandemic. Thus, both healthcare workers and patients are required to adhere to the guidelines within the clinical setting. Hence, standard measures should constantly be applied in all sections of health care while prioritizing patient safety.

Conclusion: For novices, the gap between theory and clinical practice has always been difficult to bridge. This incident is an example of a lack of patient handling and prioritizing patient safety.

Therefore, it is required to always gain advice and guidance from a senior when in confusion instead of putting the patient's health at risk.

Action Plan: Reflecting on this case, helped in identifying certain steps that can be done to avoid such mistakes. This includes practicing discussing and clearing doubts with the supervisor, and always prioritizing the patient's safety before any treatment.

Reflection on the importance of adhering to the standard guidelines in suctioning

Rodrigo B.K.J.S.T.¹

¹*School of Physiotherapy, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: This event took place in a busy ward at a leading hospital in the Western Province. I was handed over a male patient (66 years) who was unconscious and confined to the bed. The patient has undergone a craniectomy surgery due to Sub-Dural Haemorrhage [SDH]. As part of the treatment, I was intending to do Passive Range of Motion Exercises (PROM) and suctioning. Before performing suctioning, I set the oxygen pressure gauge to 200mmHg. However, I was a bit confused about the range of the pressure for the patient. Yet, without thinking much I continued with the procedure. So, I informed my supervisor, and after he came to inspect, he told me to immediately reduce the pressure to 150mmHg and proceed. He explained that the bleeding was most likely caused by damage to the mucus membrane as a result of the high pressure.

Feelings: Prior to the incident, I was very happy, confident, and grateful that I was allowed to treat a patient who has undergone a craniectomy surgery for a Sub-Dural Haemorrhage. While treating the patient, I was apprehensive although I had previous experience handling the procedure, and also, I could not stay focused on the procedure guidelines. In addition, I felt guilty for not prioritizing the patient's safety and putting the patient at risk.

Evaluation: When the circumstances surrounding this occurrence are considered, it is clear that it occurred owing to a lack of experience dealing with such patients as well as procedures, as well as a failure to regard the patient's safety. As a result, careless judgments were made that put the patient at risk and could have led to severe difficulties. On a positive note, I was able to get guidance from my senior supervisor and learn the significance of prioritizing the patient's safety regardless of the circumstances.

Analysis: One of the most important aspects of healthcare quality is patient safety. Generally suctioning is performed when the patient is unable to effectively move secretions from the respiratory tract. This can lead to possible airway obstruction and ineffective airflow (Pasrija and Hall, 2022). In this procedure, the suction pressure should be kept at less than 200 mmHg in adults (Kim et al., 2015). Thus, as a responsible physiotherapist, I should have inquired my senior supervisor as I did not know it accurately. This would have prevented any bleeding during the suctioning procedure.

Conclusion: The gap between theory and clinical practice has always been difficult for a trainee to cross. This case exemplifies a failure to prioritize the guidelines for suctioning. Thus, it is always needed to conduct any treatment based on the standard guidelines.

Action Plan: Reflecting on this case such incidents can be avoided by the following action plan. I can always discuss the standard guidelines with my supervisor. Furthermore, I can always revise and write down the steps in the book I carry during ward rounds.

Reflection on the importance of patient education

Devindini. P.A.D.O.¹

¹*School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka*

Description: Reflective practice in its own terms is the process of thinking back on an event that had happened before and identifying the situation. This incident occurred in the pediatric ward of a well-known Colombo hospital. Patient X, a 7-day-old newborn with a history of iron deficiency anemia, was brought to the hospital after failing to feed and developing a high fever. The midwife arrived shortly after the patient arrived and began feeding the baby, despite the infant's aversion to being fed. The mother reported the next day that she was in excruciating back pain and was quite weary. She also mentioned that she was having problems feeding the baby, so the midwife and I went to check on the baby. We helped the mother sit comfortably and handed her the baby, which we placed on her mother's chest in a comfortable position for a good latch, and urged her to continue feeding. We departed after assisting her and went to check on the other patients in the ward. Not long after we had assisted her with her breastfeeding, patient X rang the bell. When I entered the room, I noticed the mother, who had been sitting in the chair and was now laying on the bed, feeding the infant. She complained that the baby was not drinking milk and that she was suffering from a backache, requesting that her husband bring some ointment to apply. I was concerned and advised the patient not to feed the baby while laying down in bed since it is quite risky and she may fall asleep, especially given her tiredness, and fall on the infant, which could be fatal. She had no idea what may have occurred if she had been feeding lying down when she was exhausted. So I assisted her up to the chair so she could feed the baby properly and safely, but she appeared to be struggling to even hold the baby. The midwife saw this and recommended her not to do so again, at least not yet, because the baby may become accustomed to drinking milk while in bed, and that if she wanted to feed the baby while laying on her side, she should ask a nurse to assist her or have a guardian stay nearby.

Feelings: Prior to the incident, I was so happy and excited to know how to administer care in the particular situation but later when I assisted the midwife initially as I was also considered a part of the health care team, and also explained the rationale while providing health education for the patient care. But later, I was concerned about why the patient had rung the bell so soon after we had shown her how to breastfeed and knowing that she was exhausted. During the incident when I saw the patient lying sideways nursing the infant with no bystander nearby, I was alarmed, terrified, and concerned. I was confused not knowing what to do afterward and I felt guilty for being irresponsible in explaining the proper position for breastfeeding given the consequences. I was relieved after the occurrence since I had informed her of the problem before anything terrible might have happened.

Evaluation: To begin with the positive outcomes, this occurrence gave me the opportunity to witness firsthand the specific difficulties that might arise from inappropriate breastfeeding positions. I was able to avert any potentially dangerous circumstances for the mother or the baby. Also, I was able to provide health education to the mother which was beneficial. The negative experience was that I could not apply my critical thinking skills when handling such a situation, I was unable to inform her of the potential repercussions of feeding the infant while lying down.

Analysis: Sleeping with a child on surfaces such as couches increases the risk of Sudden Infant Death Syndrome (SIDS) associated with bed-sharing, and many baby deaths linked to bed-sharing are likely the result of inadvertent sleeping when parents were not intending to do so. Kendall-Tackett et al reported that up to 25% of a sample of mostly breastfeeding mothers fell asleep with their babies in potentially dangerous sleep environments including couches, sofas, or recliners. However, especially in Western nations, parental beds are rarely designed with baby safety in mind, and bed-sharing has been connected to a few odd inadvertent newborn deaths owing to entrapment or parental overlaying. Thus, it is important to educate patients on such incidents and the importance of avoiding them.

Conclusion: For prim gravida (first-time mothers), health education is quite beneficial, and they should be educated on what should and should not be done. Prenatal education is an important component of a healthy pregnancy, which assists pregnant mothers in managing stress, supporting a healthy diet, avoiding toxic substances and circumstances, detecting warning signs and symptoms that signal something is wrong with their pregnancy, and preparing for labor and delivery throughout their pregnancy. They should also be warned about the dangers of feeding the infant while they are sleepy or in unusual postures.

Action Plan: Next time when a patient is seen tired, I would advise them not to feed the baby when tired and make sure that lying sideways is not appropriate and not to feed the baby and require assistance from the nurse or the midwife still if the baby needs to be fed lying sideways. Also, I would advise the mother before feeding the baby on necessary precautions, ask the patient to get adequate sleep and rest while explaining the dangers of feeding the infant in various postures, highlighting the importance of a safe place so that they are aware of the consequences and will not face the same hazards.

TRANSLATIONAL SCIENCE, OPPORTUNITIES FOR HUMANITY

www.iihsciences.edu.lk

International Institute of Health Sciences

No. 704, Negombo Road, Welisara, Sri Lanka

Telephone +94114651144 | Fax +9411295192

www.bioinquirer.org

