

BioInquirer Journal

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



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Message from the Editor in Chief

Greetings and welcome to the Proceedings of IIHS, 26th BioInquirer – Annual Academic Sessions themed "**Healthcare revolution innovating Sustainable future**". Being the Editor in Chief of this remarkable conference has bought me great pride.

It is imperative to acknowledge the profound implications of the ongoing healthcare revolution as we approach a transformative era in healthcare. This crucial moment is not limited to technological advancements; it represents a comprehensive transition towards a more sustainable and equitable future for all.

Modern medicine saw the development of many tools such as antibiotics, the polio vaccine, heart procedures, chemotherapy, radiation, and medical devices such as joint replacements from 1940 to 1980. The convergence of cutting-edge technologies like telemedicine, artificial intelligence, and personalised medicine is being witnessed in our pursuit of innovative solutions, with a renewed commitment to environmental stewardship. This integration is crucial as we aim to improve patient care and address the pressing challenges our planet is facing.

Image recognition, radiography, and pathology are the main focus of AI in diagnostics given at the beginning of the voyage. The discussion goes deeper into the field of personalised medicine, emphasising the impact of AI on drug discovery, precision medicine, and genomic analysis.

In attempting to execute sustainable healthcare, an array of frameworks has been put forward including those that handle corporate social responsibility targets, employee and patient satisfaction, lean thinking in the provision of healthcare, quality management and accreditation, facilities management that reduce hospitals' environmental impact, and even more.

Let's grasp this opportunity to establish a healthier future that values creativity, diversity, and sustainability as we explore the innovations and projects that distinguish this revolution. By collaborating, we can transform the healthcare industry to serve generations to come along with our own.

I invite all research enthusiasts to explore the intricate interplay between digital technologies and healthcare sustainability through the 26th BioInquirer, 2024. This event will be immensely graced by a keynote speech and plenary speeches by globally renowned industry professionals and researchers from the United Kingdom, Canada, Australia and Sri Lanka. Over the past decade, the BioInquirer research forum has gained prominence in the community and received more than 1800 abstracts. Additionally, I would like to express sincere appreciation to the authors whose technical assistance is acknowledged in these sessions.

In order for us to as a whole look ahead to a future of ground breaking research, anticipate a remarkable conference full of stimulating presentations and sharing of expertise. We appreciate your participation in our quest for a more equitable and sustainable future in healthcare. We anticipate a phenomenal conference full of invigorating presentations and knowledge-sharing so that we can all await a future of trailblazing research. Thank you for joining us on this journey towards a brighter, more sustainable healthcare future.

Dr. Kithsiri Edirisinghe Editor in Chief, BioInquirer Journal

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ORAL PRESENTATIONS

NURSING AT THE FOREFRONT: PIONEERING CARE IN THE MODERN WORLD

Pioneering nursing education with innovative strategies: IIHS Contributions to Global Health Solutions

DR. KITHSIRI EDIRISINGHE

CEO, Co-Founder, International Institute of Health Sciences, Welisara, Sri Lanka

MBBS, MSc MD(Medical Administration), PhD (Health Sciences), IVLP (USA), T & A (Australia), Master Trainer (Australia)

The nursing profession faces an immense challenge due to the necessity of over 13 million nursesvworldwide. The International Institute of Health Sciences (IIHS) has adopted a sustainable, frugal approach to nursing education, aiming to build a "world-ready" nursing workforce through innovative and cost-effective programs. As global health systems strain under the burden, IIHS is shifting paradigms in nursing education to prevent systemic collapse by rapidly preparing nurses to meet this critical demand. Current strategies in first-world countries, which recruit nurses from other health systems, are unsustainable. IIHS presents a long-term solution by empowering nurses in developing regions. This win-win approach addresses global nursing shortages while creating job opportunities in these regions and boosting their economies through increased foreign exchange revenue. By offering international qualifications, IIHS ensures these nurses are prepared for the global healthcare market.

The Practice Ready Nurse Fast initiative is at the heart of IIHS's strategy, rapidly preparing nurses through a blended model of rigorous academics and practical training. This program offers multiple levels of certification, from essential certificates to advanced diplomas and bachelor's degrees, allowing nurses to study part-time while gaining valuable hands-on experience. To date, IIHS has produced 2,500 graduates, with over 2,000 working globally, 3,500 internationally qualified nurses, 3,250 Bachelor of Nursing Science (BNS) graduates, 239 Master of Nursing Science (MNS) professionals, 11 Doctor of Nursing (DN) experts, and over 100 Advanced Diploma in General Nursing (ADGN) graduates, along with more than 70 additional BNS and 30 MNS specialists.

These graduates are addressing the demand for nurses, particularly in first-world countries, where high workloads and low recognition persist post-COVID. IIHS integrates modern technology, including learning management systems (LMS), virtual reality (VR), extended reality (XR) hubs, and simulation lab center learning to enhance learning experiences and reduce costs. These technologies offer high-fidelity clinical simulations and personalized learning, preparing nurses with critical skills in a controlled, cost-efficient environment. More than producing nurses, IIHS is cultivating critical thinkers and evidence-based decision-makers equipped to collaborate within dynamic healthcare teams. With over 1,500 academic abstracts published and 3,000 reflective practices completed, IIHS fosters lifelong learning, ensuring its graduates are innovative healthcare leaders.

Student involvement is central to IIHS's holistic learning environment, with committees like Flouna (focused on sustainability), Music, Arts, Dancing Drama: MADD (stimulating right-brain aesthetics), Sports (promoting mental and physical agility), and the Scientific Committee (organizing conferences and workshops). These initiatives ensure graduates are skilled professionals and well-rounded individuals ready to tackle global healthcare challenges. Through its innovative, sustainable approach, IIHS is redefining nursing education and shaping the future of healthcare—turning mirrors into windows of opportunity for the next generation of nurses.

Nursing at the Forefront: Pioneering Care in the Modern World

PROF. GLENDA WHITING

Head of the School of Nursing, International Institute of Health Sciences, Welisara, Sri Lanka

Registered Nurse, Registered Midwife and Health Educator, Australia

In the modern era, nursing is at the cutting edge of healthcare. Nurses today embrace technology, from telehealth to electronic health records, enhancing patient care and efficiency. Their role extends beyond traditional bedside care; they're leaders in health promotion, patient advocacy, and policy development. They navigate complex healthcare systems, coordinate care across disciplines, and educate patients and families. Amidst rapid healthcare changes, nurses remain steadfast in their commitment to compassionate, patient-centered care. Their ability to adapt and innovate makes them indispensable in delivering high-quality healthcare and pioneering new standards of care in our evolving world.

Nursing is now at the forefront of medical evolution, driving transformative changes in healthcare. Modern nurses are blending technology and compassion in unprecedented ways. With telehealth, electronic health records, and advanced medical devices, they're enhancing efficiency and patient outcomes. Their role isn't confined to hospitals; nurses are active in community health, policy-making, and education.

This presentation explores how nurses are breaking new ground in leadership roles, shaping healthcare policies, and leading clinical research. Their advocacy for patient rights and public health initiatives demonstrates their vital influence beyond direct patient care. Continuous education and professional development keep them at the cutting edge of medical advancements.

Rescuing Nursing Education: From Traditional to Contemporary

PROF. VIOLETA LOPEZ

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Adjunct Professor, School of Nursing and Allied Medical Science, Holy Angel University, Philippines

Of the 17 Sustainable Development Goals of the United Nations, the fourth goal is about quality education. Education is the key that will allow many other SDGs to be achieved. Education not only helps to reduce poverty, gender inequalities but also empowers people everywhere to live more healthy and sustainable lives. Many countries have asked their governments to place education as a priority in both policy and practice. So to is the importance of providing quality education for nurses. Throughout the coming decade, the nursing profession will look vastly different. Nursing education should evolve rapidly to prepare nurses who can meet the challenges articulated in the Future of Nursing Report 2020-2030. Given the crucial role of nurses concerning the quality, accessibility, and value of care, the nursing profession must undergo transformation in which nurses are educated from the traditional approach that is no longer adequate for dealing with the realities of healthcare that restrict the innovations nursing can bring to the everchanging landscape of the healthcare organizations and shortage of nurses. Nursing school curricula need to be strengthened so that nurses are prepared to help promote health equity, reduce health disparities, and improve the health and well-being of everyone. There is a need to re-think the nursing curriculum as we look into the future by adding to the caring domains the competencies in bio-engineering and computer science. Transformation of the traditional nursing curricula needs to be multifaceted. To change nursing education meaningfully will require changes in what is taught, how it is taught, who the students are, and who teaches them. This presentation aims to provide a synopsis of the past, now and future of nursing education and recommend how we can rescue the current nursing education approaches to prepare the future nursing workforce.

Student Nurses' Knowledge, Attitudes, Experience and Associated Factors on Gender-Based Violence in Sri Lanka

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Background: Gender-based violence (GBV) is a critical global health issue that often has long-term adverse effects and is significantly underreported. Nurses, as frontline responders, are in a pivotal position to identify and address GBV, although many may not feel adequately equipped. This study aimed to assess the knowledge, attitudes, and experiences of student nurses regarding GBV and to explore factors associated with these aspects in Sri Lanka.

Methods: A descriptive cross-sectional survey was conducted among final-year nursing students from five government nursing schools in Sri Lanka: Kandana, Kurunegala, Galle, Ratnapura, and Batticaloa. From a population of 978 students, a sample of 283 was selected through systematic random sampling. Data were collected using self-administered questionnaires and analyzed with SPSS software. Descriptive statistics, such as frequency distribution tables, and inferential statistics, including cross-tabulations, were used to examine relationships between GBV knowledge and independent variables. Cutoff P value was 0.05 with 95 % CI.

Results: A total of 227 nursing students participated in the study. The majority (93%) were female, aged 24–26. Results revealed that 59.9% (n = 136) of the students demonstrated poor knowledge of GBV, while 40.1% (n = 91) exhibited good knowledge. Common misconceptions included that GBV is primarily perpetrated by strangers (68.7%, n = 156) and that physical injuries are uncommon in such cases (67.4%, n = 153). Victim-blaming attitudes were prevalent, with 66.5% (n = 151) agreeing that women provoke violence and 48.9% (n = 111) believing that women could avoid it through behavioral changes. Many students expressed a desire for further training in clinical examination (23.8%, n = 54) and victim support services (28.2%, n = 64). A significant association was found between higher education levels and more positive attitudes toward GBV (p = 0.01).

Conclusion: The findings reveal a gap between nursing students' empathy toward GBV victims and their actual knowledge and preparedness to manage GBV cases. Although students displayed positive attitudes, their knowledge, particularly regarding the epidemiology of GBV, was inadequate, highlighting curriculum deficiencies. This study underscores the need for enhanced GBV education, interdisciplinary collaboration, and the correction of misconceptions to better equip future nurses to support GBV victims

Keywords: Student Nurses, Knowledge, Attitudes, Gender-Based Violence, Sri Lanka

Knowledge, Attitude and Practice Among Second Year Nursing Students in Western Province, About Therapeutic Communication

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Background: Therapeutic communication is critical for enhancing learning, providing support, motivating patients, and promoting healthy behaviors. It plays a pivotal role in decision-making and real-world applications within educational and healthcare settings. For high-quality care, effective communication among nurses and nursing students is essential. This study aimed to assess the Knowledge, Attitude, and Practice Among Second Year Nursing Students in Western Province, About Therapeutic Communication

Methods: A descriptive cross-sectional quantitative study was conducted among 255 second-year nursing students from three government nursing schools in the Western Province of Sri Lanka. Data were collected using a self-administered questionnaire consisting of five sections: demographics, daily practices, attitudes, knowledge, and specific therapeutic communication techniques. The questionnaire was adapted to the Sri Lankan context and was based on validated instruments.

Results: The study revealed a strong positive attitude toward therapeutic communication, with 98.8% (n = 252) of participants acknowledging its importance in nursing care. The majority of participants demonstrated good knowledge and regularly employed techniques such as active listening (96.47%, n = 246) and using facial expressions (96.47%, n = 246). However, gaps were identified in areas like seeking clarification, where only 78.82% (n = 201) used this technique regularly. Additionally, 38.82% (n = 99) reported not having received formal training in therapeutic communication. The primary challenge faced by students was lack of time (46.3%, n = 118), followed by lack of awareness of how to properly apply therapeutic communication techniques (15.3%, n = 39).

Conclusion: The study underscores the need for targeted interventions in nursing education to improve therapeutic communication skills. Comprehensive training programs, addressing time constraints, and creating supportive work environments can enable nursing students to effectively use therapeutic communication. Recommendations include developing tailored training programs, integrating communication skills into continuing education, and implementing mentorship and peer support systems.

Keywords: Therapeutic communication, Nursing Education, Nursing Students, Communication Skills, Patient Care

Knowledge and Attitude regarding the Utilization of Partogram among Nurses in Maternity Hospital Mahamodara Galle

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Background: The partogram is a graphical tool used to monitor labor progress and maternal-fetal wellbeing, playing a crucial role in the early detection and management of labor complications. Despite the availability of skilled birth attendants and a high rate of institutional births in Sri Lanka, concerns remain about the quality of maternal health care provided. This study aimed to assess the knowledge, attitudes, and factors affecting the utilization of the partogram among staff nurses at Maternity Hospital Mahamodara Galle.

Methods: A descriptive cross-sectional study was conducted among 132 staff nurses using a structured, self-administered questionnaire to gather data on the importance of Partogram utilization and the organizational factors affecting its use by nurses. A pre-test was conducted with five participants as part of a pilot study to ensure the questionnaire's reliability and validity. The collected data were analyzed using SPSS version 24, Cutoff P value was 0.05 with 95% CI.

Results: The study found that 54.5% (n = 72) of the nurses understood the partogram's role in implementing the safe motherhood program. Knowledge scores revealed that 53.3% (n = 70) of nurses had average knowledge about the partogram, 43.3% (n = 57) demonstrated good knowledge, and only 3.3% (n = 5) had poor knowledge. The study also noted that 79.7% of the 473 deliveries during the study period were monitored using a partogram. Over 90% of nurses believed the partogram was useful for identifying labor-related problems. The regression analysis showed that knowledge of partograph components and usage was statistically significant (p<0.001). Nurses with good knowledge were 0.7266 times more likely to practice partographing than those with poor knowledge. When adjusting for attitude, 27.9% of the significance was linked to attitude, and the result remained significant (p=0.095). After adjusting for utilization factors, 37.2% of the significance was attributed to these factors, with the result still remaining significant.

Conclusion: Although nurses exhibited moderate knowledge and positive attitudes toward the partogram, its practical utilization was suboptimal. To enhance maternal and fetal outcomes, interventions should focus on targeted training, addressing staffing shortages, and establishing clear guidelines for consistent partogram use.

Keywords: Partogram, Nurses, Knowledge, Attitude, Utilization, Maternal Health

Knowledge and Attitudes on Diabetic Foot Care among Nurses at Teaching Hospital Karapitiya

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Background: Diabetic foot complications pose a significant global health challenge, contributing to morbidity, mortality, and healthcare costs. Nurses play a critical role in diabetic foot care, and their knowledge and attitudes directly impact patient outcomes. This study aims to assess the knowledge and attitudes towards diabetic foot care among nurses at Teaching Hospital, Karapitiya, Sri Lanka.

Methods: This descriptive, cross-sectional study used a pre-tested, validated, self-administered questionnaire to collect data from 100 nurses with more than one year of experience in diabetic foot care at Teaching Hospital, Karapitiya. The questionnaire comprised three sections: demographic information, knowledge assessment and attitude assessment (10 questions on a five-point Likert scale). Data were analyzed using SPSS version 25, employing descriptive statistics, Chi-square tests, and correlation analysis.

Results: The study found a significant knowledge gap among the participating nurses. While 86.7% had received formal training on diabetic foot care, only 54% demonstrated adequate knowledge. The study revealed a statistically significant association between nurses' knowledge scores and their age (p=0.001), years of experience in diabetic foot care (p=0.003), and participation in continuing education programs (p=0.023). Nurses demonstrated positive attitudes towards diabetic foot care, with 73% acknowledging its importance and 81% expressing a willingness to learn more. However, only 56% felt confident in their ability to provide comprehensive diabetic foot care.

Conclusion: The study highlights the need for targeted educational interventions and continuing professional development programs to enhance nurses' knowledge and skills in diabetic foot care. Bridging the knowledge gap and fostering positive attitudes among nurses are crucial steps towards improving patient education, early detection of complications, and effective management of diabetic foot problems, ultimately contributing to reduced morbidity and improved quality of life for patients.

Keywords: Diabetic Foot Care, Knowledge, Attitudes, Nurses, Sri Lanka

SUSTAINABLE DEVELOPMENT INITIATIVES IN PUBLIC HEALTH

Sustainable Development Initiatives in Public Health

PROF. NIHAL DE SILVA

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In 2015, the UN adopted 17 Sustainable Development Goals (SDGs) with the goal of "**leaving no one behind**" and emphasizing **a holistic approach** to achieving sustainable development for all.

The world today has about 8 billion people and providing for all of them in an equitable way is a very noble but lofty goal that seems unattainable and unaffordable in some parts of the world. Regional disparities are stark. Cooperation is essential. Continuing wars seem to be pulling humankind in opposite directions. Immigration, displaced persons, and refugees are at record levels.

Human behavior can be considered at four levels. Personal and private, family, community, country, and global. Selfish behavior at all these levels has led to disparities in terms of "haves and have-nots". The latter aspire to the former leading to competition, consumption, depletion of resources, and dissatisfaction in most cases. This general mass behavior influences our environment, the climate, and social flux – entities that are not immediately visible or measurable.

These results are grossly manifested in terms of good/bad Health (SDG 3), stable/unstable Community (SDG 11), and cooperation efforts in implementation (SDG 17).

The definition of Health is shifting from "absence of disease" to prevention and well-being (productivity and creativity as life expectancy increases) and the impact of the social indices of health.

Community awareness and community spirit are also changing rapidly and are manifested by the acceptance and tolerance of the LGBT culture and the definition of marriage and family. Telehealth is becoming more acceptable to the younger generations. Demographic changes within traditional communities due to war, immigration, and the labor workforce, resulting in social disruption, unrest, and intolerance are increasing.

Partnerships to attain these goals include finance and trade arrangements, technological and science inputs, capacity expansion, strengthening of implementation, and private-public partnerships involving political participation. These are higher-order decisions far distant from grassroots activities.

Contributing Factors For Iron Deficiency Anemia Among Pregnant Mothers In Moh Area-Matugama, Sri Lanka, 2023

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Background: Iron Deficiency Anemia (IDA) is a major problem. It is recognized to lead to adverse pregnancy outcomes such as intrauterine growth regurgitation (IUGR), Low Birth Weight (LBW), Preterm birth and perinatal death. The main objective of this study was to assess the contributing factors for IDA among pregnant mothers in the MOH area-Matugama.

Methods: The study was conducted using a Descriptive cross-sectional approach and a selfadministered questionnaire. The questionnaire was developed by the researcher. The questionnaire was administered to a sample of 163 pregnant mothers in the MOH area in Matugama, Sri Lanka.

Results: A total of 163 pregnant mothers participated in the study, with 57% (n=93) having normal hemoglobin levels and 43% (n=70) being anemic. Among the anemic mothers, 42% had mild anemia and 1% had moderate anemia, according to WHO definitions. The majority (71%) of anemic mothers were aged 25-35, and 76% were Sinhala. Most were housewives (80%) with an O/L G.C.E. education level (51%), living in urban areas (76%) and from low-income households (78%). Significant associations were found between anemia and socio-demographic factors like age, nationality, income, and living area. Additionally, 54% of the anemic mothers were in their third trimester, 45% had been pregnant 3-4 times, and 74% had a history of irregular menstruation. Only 30% had experienced previous abortions. Despite the prevalence of anemia, 83% had good knowledge of anemia, and 77% were aware of iron-rich foods.

Conclusion: Iron deficiency anemia in pregnancy was found to be a public health problem in the study area in Matugama. Socio-demographic factors such as Age, Nationality, living area, Low family income, low educational level, and unemployment were significantly associated with anemia during pregnancy. Also, Gestational age, gravity, Previous history of abortion, previous history of Irregular menstrual cycle, and knowledge-related anemia were significantly associated with IDA with pregnancy.

Keywords: Iron Deficiency Anemia, Contributing Factors, Pregnant Mothers

Anthropometric Indices in Predicting 10-Year Risk of Cardiovascular Diseases Risk among Women with Type 2 Diabetes Mellitus

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Background: The aim of this study is to determine the best anthropometric parameters to predict the 10-year risk of cardiovascular disease (CVD) risk among the female Type 2 Diabetes Mellitus (T2DM) population in Sri Lanka.

Methods: A Cross-sectional study was carried out on 293 female patients with T2DM, attending Diabetes and endocrinology clinic, Colombo South Teaching Hospital, Sri Lanka. Variable required to calculate FRS, Age, HDL cholesterol levels, Total Cholesterol levels, smoking status, systolic blood pressure was collected and anthropometric parameters, Hight, Weight, Hip circumference (HC), Waist Circumference (WC), Body Mass Index (BMI), Waist to Hip Ratio (WHR), waist-to-height-ratio (WHR) and weight-adjusted-waist index (WWI) were estimated. The CVD risk was assessed using Framingham Risk Score (FRS). Statistical analysis was performed using IBM-SPSS_v.26 and Microsoft Excel.

Results: FRS Categorize 23.2% (n=68), 48.8% (n=143) and 27.9% (n=82) of study population in low, intermediate and High-risk categories respectively. WWI (r = 0.193, p< 0.01) and WHR (r =0.143, p< 0.05 showed significant low positive correlation with FRS while Hight (r = - 0.116, p< 0.01) showed significant low negative correlation with FRS. ROC results revealed that when FRS >10%, the WHR \geq 0.93 (Sensitivity = 57.3%, Specificity= 63.2%; AUC = 63.4% (P=0.001)) and the WWI \geq 11.74 cm/ \sqrt{kg} (Sensitivity = 67.1%, Specificity= 50%; AUC = 61.2% (P=0.005))

Conclusion: Current study reveals that the majority of the study population was under the risk of developing CDVs in 10 years. Further there is a possibility to predict 10-year risk of CVD using WWI and WHR However Further studies, ideally with CVD outcomes are required to confirm the current findings.

Keywords: Anthropometric Indices, Risk of Cardiovascular Diseases, Among Women, Type 2 Diabetes Mellitus

Knowledge and Attitudes of Contraception and Abortion among Youth in Gampaha District, Sri Lanka

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Background: Abortion is the termination of a pregnancy, whether it is induced or spontaneous. Sri Lanka's abortion ban is strict, but it is estimated that between 125,000 and 175,000 induced abortions occur annually, despite the ban. Societal knowledge and attitudes toward both contraception and abortion can impact individual choices regarding unintended pregnancies and the health sector's response to potential changes in the law. Understanding youth perspectives on these issues is crucial for developing effective reproductive health interventions. The main goal of this study is to assess the knowledge and attitudes of contraception and abortion among Youth in the Gampaha district, Sri Lanka

Methods: A quantitative cross-sectional study was performed based on the knowledge and attitudes toward contraception and abortion among youth in Gampaha district, Sri Lanka. Data was collected using an interviewer-administered questionnaire which was developed based on a scale of knowledge regarding contraception and abortion. Scores will be given based on the answer provided each item and range of knowledge will be categorized based on the score. All the data were analyzed using a statistical package of social sciences version (200) SPSS and by using descriptive statistics.

Results: The study found a majority of the participants were female (n=211) and aged between 19-21 years (92%)6. Notably, over 50% of the respondents demonstrated neutral knowledge regarding both contraception and abortion. Regarding the attitudes towards contraception and abortion among the youth, the findings again highlighted a general sense of neutrality and uncertainty. This suggests a lack of comprehensive understanding and awareness about contraception and abortion among the youth in the Gampaha district.

Conclusion: This research emphasizes the need for comprehensive sexual and reproductive health education programs in Sri Lanka. Initiatives should focus on providing accurate information about contraception and abortion, promoting open dialogue to address misconceptions, and advocating for policy changes that support accessible and inclusive reproductive healthcare services for young people. By fostering greater awareness and understanding, a more supportive environment can be created to empower youth to make informed choices about their reproductive health.

Keywords: Knowledge, Contraception, Abortion, Youth, Sri Lanka

TRANSFORMING EDUCATION THROUGH DIGITAL INNOVATION AND COMMUNITY COLLABORATION

PLENARY - OP 12

The Personal Agency Dimension in Countering Linguistic Shame

MR. CARL JONES

Director, International Development, International Institute of Health Sciences

This presentation investigates the impact of linguistic shame on individuals in rural Sri Lanka, with a particular focus on how personal insight and agency can mitigate the negative effects associated with perceived language deficiencies. Linguistic shame, largely driven by societal perceptions of English proficiency, plays a significant role in shaping socioeconomic status, employment opportunities, and social connections.

We will analyze how rural Sri Lankans with perceived lower English proficiency often experience internalized inferiority, leading to social stigma and restricted opportunities, while those with higher proficiency benefit from enhanced prospects and increased respect. The discussion will address two key structural factors: the internalization of cultural norms by individuals with lower proficiency and the normalization of advantages by those who are proficient.

Central to our discussion is the role of personal agency in addressing linguistic shame. We will explore how individuals and managers possess the power to either adhere to or challenge the cultural norms associated with English language proficiency. By becoming aware of this power, individuals and managers can influence and reshape both organizational and societal norms. Recognizing their capacity to create more inclusive environments, they can actively work to counteract linguistic shame, promote inclusivity, and expand opportunities for all.

Assess the Effectiveness of Structured Teaching Program on the Awareness of Quality of Life among Elderly Cardiac Patients at G.K.N.M Hospital, Coimbatore, India

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Background: Older adults recognize that they have less time in which to continue achieving their goals, so they face their challenges with resilience and determination. The objectives of the study is to assess the quality of life of elderly cardiac patients, to assess the effectiveness of structured teaching program, and to find the association between the pre- test level of scores and selected demographic variables.

Methods: The study is a Pre- Experimental, One Group pre-test post-test design done in Cardiac and Cardio – Thoracic Out-Patient Departments and Master Health Department, GKNM Hospital. The data was collected from 40 elderly cardiac patients using a structured interview method. The pre-test level of awareness on quality of life was assessed using modified WHOQOL-BREF scale and a structured teaching for about 30 minutes regarding, exercise, nutrition, sleep, medication safety, alternatives ways to alleviate pain, skin protection, social wellness, cognitive well- being, psychological well- being, emotional health, safety measures and environmental health was given on an individual basis, and the post-test (using modified WHOQOL-BREF scale) was asked to be sent through postal after five days.

Results: Using a pre-experimental one-group pre-test and post-test design, 40 elderly patients were assessed. Results showed significant improvement in awareness after the program. In the physical domain, 90% had poor awareness before the program, dropping to 2.5% post-program, with 47.5% reaching very good awareness. The psychological domain showed similar improvement, with poor awareness decreasing from 85% to 0%. In the social domain, poor awareness dropped from 82.5% to 10%, and in the environmental domain, it decreased from 85% to 5%. Paired t-tests confirmed statistically significant improvements in all domains. Additionally, a significant association between education levels and awareness in the physical domain was found, suggesting that higher education correlates with better awareness. Other demographic variables showed no significant associations across the domains.

Conclusion: The findings of the study revealed that the elderly cardiac patients receiving the structured teaching program had a better awareness on quality of life. Hence this teaching program can be implemented by the nurses in cardiac and cardio-thoracic and master health departments, on a regular basis.

Key words: QOL, WHOQOL-BREF, Awareness, Elderly, Cardiac

Anxiety Levels of Sri Lankan Advanced-Level Students Studying English Language in Face-to-Face Classes

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Background: The global rise of English as an international language has increased the demand for English language learning. However, many learners experience anxiety, which can hinder their learning process. This study investigates the levels of anxiety among Sri Lankan Advanced Level students studying English in face-to-face classes in the Gampaha district, Sri Lanka. This research examines the relationship between classroom environment factors (e.g., class size, teaching style) and anxiety levels among students.

Methods: A descriptive cross-sectional study was conducted using a self-administered questionnaire adapted from a previous study. The questionnaire measured anxiety levels of classroom environment factors. A simple random sample of 426 students was selected from the population of Advanced Level students studying English in the Gampaha district. Data were analyzed using SPSS version 27, employing descriptive statistics, chi-square tests, and Pearson's correlation coefficient. Reliability and validity of the instrument were established through a pilot study.

Results: The study found that a significant portion of students experience anxiety related to English language learning. A majority of students reported neutral feelings towards anxiety (50.8%), while 33.3% agreed that they experienced anxiety. Chi-square tests revealed strong, statistically significant relationships between anxiety levels and classroom environment factors (p < 0.001). Pearson's correlation coefficients indicated moderate positive correlations between anxiety levels and classroom environment significantly influences anxiety levels in English language learners.

Conclusion: The findings emphasize the crucial role of a supportive classroom environment, positive peer interactions, and enhanced English proficiency in reducing anxiety among Sri Lankan advanced-level students learning English. Educators and policymakers should consider these factors when developing strategies and interventions to address language anxiety and create a more conducive learning environment for students.

Keywords: English language, Anxiety Level, Advanced-Level Students, Sri Lanka, Classroom Environment

YOUNG CHANGE AGENTS (AUSTRALIA)

Venkatachalam. A.

Young Change Agents, Australia

Young Change Agents is an award-winning, Australian not-for-profit social enterprise that is dedicated to ensuring early and equitable access to social entrepreneurship education for every young person. Social entrepreneurship education empowers learners to view problems as opportunities and create solutions that generate environmental and/or social impact. Across the 170 000+ youth, teachers and education organisations that Young Change Agents has worked with since 2016, we have observed the tangible shifts in mindset, skillset and toolset that this type of education brings to youth aged 10-25. Our entrepreneurial learning pathways have been embedded in Australia, India, New Zealand, Ghana and now, will be embedded at IIHS in Sri Lanka.

Teaching social entrepreneurship to youth offers numerous benefits that extend beyond traditional entrepreneurial education. This kind of education emphasises social and environmental impact, fosters a purpose-driven mindset, enhances critical thinking and problem-solving skills, builds resilience, promotes inclusivity, and aligns with global goals. Social entrepreneurship education prepares students to become innovative, responsible and impactful leaders, regardless of their chosen path. Youth can apply these entrepreneurial skills within their organisations, drive innovation and best practices, or launch their own social enterprises to address real community needs.

Integrating social entrepreneurship into a student's curriculum pathway is not just an educational imperative, but a societal one. It equips the next generation with the tools and mindset needed to create a better world as well as strengthens their employability. Evidence consistently shows how social entrepreneurship education supports, *SDG4 - ensure inclusive and equitable quality education and promote lifelong learning for all*, resulting in: Increased student agency and engagement, Stronger creativity, resilience, courage, initiative, collaboration, lifelong learning, and responsibility in and across learning areas, Better youth health and well-being outcomes, Reduced direct teaching workload and improves teacher retention, Greater student connection to the community, A more creative focus on the fundamentals, including literacy and numeracy.

This session will introduce participants to the power of entrepreneurial education as a tool to build an innovative, future-focused mindset. During this fun and interactive workshop, we will: Introduce, define, and put design thinking and entrepreneurial competencies into practice, Share data, case studies, and research that show how entrepreneurial education transcends educational context, country, disciplines, and industries, Share how this approach to entrepreneurial education will be implemented with Bioenquiry students at IIHS Sri Lanka, Invite participants to immerse themselves into the design thinking and entrepreneurial learning process, Provide space for participants to reflect about how entrepreneurial education would apply in their own context, teaching practices or learning.

BREAKING BARRIERS: ADVANCING MENTAL HEALTH ACCESS AND EQUITY

PLENARY - OP 16

Schizophrenia: Time to Commit to Policy Change: Sri Lankan Perspective

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Schizophrenia is recognized as a severe mental disorder and one of the most complex mental health disorders incorporated in ICD and DSM reports respectively. This condition is characterized by abnormal thinking, perception disparities and collapsed levels or exaggerations in emotional expressions. It has been estimated that schizophrenia directly affects at least 24 million people worldwide, and twice as many are indirectly affected. The historical background revealed that the patients had not been treated nicely who had been suffering from this condition. It has drastically changed the atmosphere of treatment and caring for schizophrenia patients after the revolutionary invention of medicines and standard therapies. The discrimination towards schizophrenia had been omitted with the presence of exquisite contributions of some genius personalities such as musician Ted Gardestad, mathematician John Nash, and writer Zelda Fitzgerald, they have made remarkable contributions in fields such as art, music, mathematics, and science, demonstrating exceptional talent amidst their struggles.

The climate of the Sri Lankan context of Schizophrenia could be explicated as a culturally sensitive practice amidst vulnerable criticisms against reality. Patient care standards would have been assured with the effect of admittance to medical care nevertheless some incidents had been incapacitated from scientific diagnosis and health policies. Recommendations are highly anticipated for the policy change and activate this practically. Leverage digital innovation in research, treatment and care pathways would be a great initiative on this matter as far as establishing a pathway going beyond the treatment such as integrating mental health training into all levels of healthcare training, offering additional specialized training for those pursuing mental health careers, priorities recovery, ensure the involvement of people with schizophrenia and their chosen caregivers when deciding on what services are required and Ensure holistic treatment plans taking into account social support and co-morbidities. Apart from these practices, it would have been more efficacious for optimizing schizophrenia treatment, taking care of the caregivers and empowering people with schizophrenia.

Women's Experiences of Discrimination Caused by Hospital Staff during Prenatal Care, Labor, and Postnatal Care at De Soysa Hospital for Women, Colombo, Sri Lanka

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Background: Obstetric discrimination is a widely recognized issue in maternity care settings globally. Humiliating interactions with healthcare providers and systemic flaws can adversely affect the quality of maternity care. This study aims to assess the prevalence, types, and potential factors of discrimination faced by women during prenatal, labor, and postnatal care at De Soysa Hospital for Women, Sri Lanka.

Methods: A mixed-method study was conducted, comprising a quantitative descriptive survey with a stratified random sample of 608 hospitalized women using a pretested self-administered questionnaire. Additionally, qualitative interviews were conducted with a purposive sample of 15 hospitalized women and health workers. Data were analyzed using descriptive and inferential statistics, alongside thematic analysis following Braun and Clarke's method. Ethical clearance was obtained from the International Institute of Health Sciences, Sri Lanka.

Results: The majority of participants reported not experiencing discrimination (72.2%), physical abuse (80.6%), or stigma (70.6%). However, nearly half (49.5%) reported verbal abuse, and 85.7% indicated poor rapport with staff. Significant associations were found between experiences of discrimination and religion (p=0.002) and employment (p=0.000). Additionally, significant correlations were observed for physical abuse (p=0.008), verbal abuse (p=0.000), and poor rapport with staff (p=0.002). The qualitative analysis revealed three main themes: associations with patient characteristics, healthcare worker dynamics, and workplace/service conditions.

Conclusions: While the majority of women did not report experiencing discrimination during maternal care, notable instances of verbal abuse and poor rapport with staff were identified. Improved communication and relationship-building with clients are essential. Further research is necessary to explore the risk and protective factors that may influence the relationship between discrimination experiences and adverse birth outcomes across different ethnic groups.

Keywords: Discrimination, Maternal Care, Abuse, Stigma, De Soysa Hospital for Women

Psychological Concern among Undergraduate Students in Gampaha District, Sri Lanka

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Background: Psychological problems are a growing health concern among undergraduate students. University students, often faced with heavy academic workloads and social pressures, are vulnerable to mental health issues due to poor time management. Understanding the psychological factors influencing sleep and academic performance is essential for enhancing students' overall well-being. This study aimed to determine the impact of psychological correlates on the well-being of undergraduate students.

Methods: A descriptive cross-sectional study was conducted among university students in the Gampaha district, Sri Lanka (N = 122). Data were collected using a self-administered survey that included demographic questions and psychological concerns based on the Depression Anxiety Stress Scales (DASS-21). The data were analyzed using SPSS (version 25) to evaluate the relationships between variables.

Results: The final sample consisted of 122 individuals aged 16 and above, with the majority (37.7%) aged 20–22. A significant portion (73.8%) of respondents reported difficulty concentrating and poor memory due to inadequate sleep, which also affected their academic performance. Depression was present in 74.5% (n = 91), anxiety in 88.6% (n = 108), and stress in 69.7% (n = 85) of the students. A significant association (p < 0.05) was observed between anxiety, stress, and depression. No significant link was found between caffeine consumption and depression. Behaviors such as trembling, nervousness, panic, agitation, and low motivation were significantly associated with depression, anxiety, and stress.

Conclusion: The study identified moderate levels of depression, anxiety, and stress among undergraduate students. Students experiencing psychological imbalances should recognize the importance of sleep in maintaining mental health, as it significantly influences their academic performance and overall well-being.

Keywords: Psychological Concerns, University Students, Gampaha District, Stress, Sri Lanka

Effects of Social Media Addiction on Sleep Quality and Psychological Problems among Healthcare Students in Gampaha District, Sri Lanka

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Background: Social media addiction among digital-native youth is raising concerns about its effects on sleep quality and psychological well-being. This study aimed to examine the impact of social media addiction on sleep quality and psychological health among young adults residing in the Gampaha District, Sri Lanka.

Methods: A descriptive cross-sectional study design was employed, using convenience sampling to select participants from healthcare academic institutions in the Gampaha District. A pre-tested self-administered questionnaire was used to gather data on socio-demographic characteristics, social media usage, sleep quality, and psychological well-being.

Results: The study involved 150 healthcare students (N = 150) and found that social media addiction negatively affected sleep quality and psychological health. The majority of participants were female, studying nursing, biomedical science, medicine, pharmacy practice, cosmetic science, physiotherapy, and health administration. Most participants reported sleeping 4-6 hours per night, with an average of 5.5 hours of sleep per day. Many expressed dissatisfaction with their sleep quality and reported feeling sleepy during the day. Among the participants, 33.3% (n = 50) frequently used social media before sleep, and 27.2% (n = 41) used it occasionally. Additionally, 28.1% (n = 42) of students reported mild to severe impacts on their daily performance due to poor sleep. Social media dependence was moderate overall, with 15.8% (n = 24) highly dependent and 7.9% (n = 12) extremely dependent. The study suggests that reducing smartphone use before sleep and engaging in non-screen-related activities could improve sleep quality and overall health.

Conclusion: This study highlights the detrimental effects of social media addiction on sleep quality and psychological well-being among healthcare students in Gampaha District, Sri Lanka. Reducing social media usage, especially before bedtime, and promoting offline activities may help improve sleep quality and mental health.

Keywords: Social Media Addiction, Sleep Quality, Psychological Well-Being, Healthcare Students, Gampaha District

Social media and Teen Mental Well-Being: Exploring the Relationship between Online Connectivity and Psychological Well-Being

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Background: Social media has become an integral part of teenagers' lives, offering numerous opportunities for online connectivity and interaction. Despite its advantages, concerns have emerged about its potential impact on teenagers' mental health. It is essential to examine the relationship between teenagers' online connectivity and psychological well-being to address any possible harmful effects as social media usage increases.

Methods: This cross-sectional study investigates social media use among teenagers aged 13-19 in urban and suburban areas. Using stratified random sampling, 426 participants were surveyed through a pretested, self-administered questionnaire. Ethical approval was granted by the IIHS Ethics Review Committee (ERC), and informed consent was obtained from all participants. Data were analyzed using SPSS version 25, with incomplete responses excluded to ensure data quality.

Results: The majority of respondents (75.6%) were females, with most participants (62.2%) aged between 15-19 years. Facebook was the most frequently used social media platform, favored by 62.2% of respondents. Additionally, 31.1% reported regular use of more than four social media platforms, with an average of 3-4 hours spent on social media daily. Notably, 33.3% of teenagers experienced cyberbullying or negative interactions on social media, while 44.4% reported feeling stressed or anxious due to their social media usage. Despite these challenges, 80% believed social media positively impacted their mental well-being. Furthermore, 51.1% demonstrated moderate resilience in dealing with challenges. The majority of participants coped with negative experiences on social media by blocking or unfollowing individuals, and 82.2% found social media to be a source of distraction from daily activities. Additionally, 28.9% sought professional support or counseling for mental health concerns. The study found no significant correlation between age, gender, or educational level and online connectivity (p > 0.05), but excessive social media usage had a significant impact on teenagers' psychological well-being (p < 0.05).

Conclusion: This study highlights the effects of social media on teenagers' mental health, offering insights for tailored interventions, and providing guidance for parents and educators. It emphasizes the need for policies that promote safer and more supportive digital environments for young users.

Keywords: Social Media, Psychology, Teenagers, Mental Health, Well-being

INNOVATING HEALTH ADMINISTRATION FOR SUSTAINABLE SYSTEMS

PLENARY - OP 21

Innovating Health Administration for Sustainable Systems

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Health innovation is to develop new or improved health policies, systems, products and technologies, and services and delivery methods that improve people's health, with a special focus on the needs of vulnerable populations.

Delivering affordable and quality health care to the people presents enormous challenges and opportunities. Innovations could be a way for a large number of people to get quality care at a cost that the nation can afford. Although healthcare managers make increasingly difficult decisions about health innovations, the way they may interact with innovators to foster health system sustainability remains underexplored.

The healthcare sector faces several challenges, such as rising costs, rising demand, and the need for sustainability. A new area of healthcare has emerged due to these problems, focusing on long-term improvements in management, social policy, and health economics. Given the growing need for more accessible, higher-quality, and affordable healthcare services, lasting solutions to the industry's complex difficulties are needed.

Rising healthcare expenditures, changing demographics, and chronic illness prevalence may be overcome via sustainable healthcare innovation. Policy and governance are crucial to sustainable healthcare breakthroughs. We need to focus on innovation to provide sustainable healthcare delivery. Innovative techniques that address socioeconomic determinants of health and enhance population health are essential for sustainable healthcare delivery.

Telemedicine can improve health outcomes, cut healthcare costs, and extend access to healthcare. Management techniques like team-based care and evidence-based procedures can increase healthcare quality and efficiency while lowering costs. Further, telemedicine and digital health technologies can improve healthcare availability in rural or underserved areas and reduce patient travel.

Efficient management of healthcare assets, such as personnel, medical technology, and buildings, is necessary for sustainable healthcare. Healthcare management methods significantly influence the efficiency and efficacy of healthcare services. Information and communication technologies to enhance healthcare delivery is one area of healthcare administration that has recently attracted more attention. Stakeholder cooperation and partnerships can facilitate the effective implementation of sustainable innovations in healthcare. Some approaches to ensure the long-term sustainability of innovative healthcare practices include: Embrace change, Engage stakeholders, Measure impact, Secure financing, Policy alignment, and Continuous improvement

ClinicalPad – A Solution for Simplified Clinical Documentation Generation with the Use of Artificial Intelligence (AI)

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¹ ClinicalPad

Background: The clinical documentation process is time-consuming for healthcare professionals, limiting their focus on patient care. While medical transcription services in the UK convert voice reports into written documentation, they face issues of accuracy, security, and delays, compromising patient safety. An analysis of healthcare providers revealed an urgent need for more efficient documentation to reduce administrative burdens. ClinicalPad was developed as a user-friendly, AI-powered system to improve clinical document creation and reduce paperwork.

Methods: To tailor ClinicalPad to the real needs of healthcare professionals, we interviewed and surveyed GPs and private consultants from various medical fields. The focus was on understanding their administrative pain points, especially around document generation, record maintenance, and task management. Over 12 months, medical practitioners and developers collaborated to build ClinicalPad, an online tool using AI to automate prescriptions, manage patient records, and streamline documentation. The software is intuitive, requires minimal training, and is customizable for different healthcare settings.

Results: Seventy-eight specialists participated in interviews and surveys, all expressing interest in a system that could alleviate their administrative workload and free up time for patient care. Many noted that generating documents, like discharge letters, often takes two to seven days. The time consumed in administrative tasks inevitably delays patient care, such as, follow-up appointments, etc. Therefore, ClinicalPad was set up in order to address these needs with AI-powered document generation, task management tools, real-time updates, and seamless integration with electronic health records. Specialists will now be able to use various input methods, such as shorthand and voice notes, emphasizing the need for a system that can accommodate multiple formats. These features significantly reduce errors, improve workflow efficiency, and enhance team coordination, leading to cost savings and better patient care.

Conclusion: ClinicalPad effectively addresses the documentation challenges of healthcare professionals by automating clinical document creation and reducing administrative workloads. Its ability to handle multiple input formats and its user-friendly design ensures rapid adoption, allowing more time for patient care, reducing wait times, and improving healthcare delivery.

Keywords: AI-powered documentation, Healthcare efficiency, Administrative burden, Patient care, Clinical workflow

An Assessment on Factors Influencing the Healthcare Service Quality A Case Study on Divisional Hospital-Palai OPD Services, Killinochchi District, Sri Lanka

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Background: Sri Lanka's healthcare system is highly regarded for its free public health services, as reflected by the country's low Infant Mortality Rate (IMR) of 8.0 in 2020, which is comparable to developed countries such as the USA (IMR: 6.5). However, despite this success, the Divisional Hospital Palai in Kilinochchi District has seen a sharp decline in outpatient department (OPD) enrollments, dropping from 40,524 in 2018 to 13,500 in 2021. This study aimed to assess the key factors influencing perceived service quality at DH Palai's OPD, amid concerns over infrastructure, human resources, and the impact of the COVID-19 pandemic.

Methods: A cross-sectional study was conducted among 398 randomly selected patients (n = 398) attending the OPD at DH Palai. Data were collected using a structured, pre-tested questionnaire based on the SERVQUAL model, which assessed five dimensions: Tangibility, Assurance, Reliability, Responsiveness, and Empathy. Descriptive statistics were used for data analysis, and Pearson's correlation and multiple regression analysis were performed to determine the relationships between these variables and overall patient satisfaction with service quality. Cutoff P value was 0.05 with 95 % CI.

Results: The study found that Tangibility ($\beta = 0.318$, p < 0.001) and Reliability ($\beta = 0.305$, p < 0.001) were the most significant predictors of perceived service quality. However, Assurance ($\beta = 0.081$, p = 0.245) and Responsiveness ($\beta = 0.052$, p = 0.397) were not statistically significant. Only 50% of respondents agreed that Tangibility, including infrastructure and equipment, met their expectations. Overall, the results highlighted a need for significant improvements in physical resources and reliability in service delivery.

Conclusion: The findings emphasize the importance of improving infrastructure and standardizing service reliability to enhance patient satisfaction at DH Palai's OPD. Targeted investments in these areas, along with continuous staff training and development, can help improve the quality of care provided. These recommendations could serve as a framework for enhancing service quality and patient experience at DH Palai and similar healthcare institutions in the region.

Keywords: Service Quality, Healthcare, Patient Satisfaction, SERVQUAL, Infrastructure, Sri Lanka

Patient Satisfaction and Associated Factors with Nursing Care in the District General Hospital, Trincomalee

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Background: One of the most important indicators of the efficacy and quality of care is patient satisfaction. Therefore, the aim of the study is to assess patient satisfaction and related factors in nursing care in the General Hospital, Trincomalee, Sri Lanka.

Methodology: A cross-sectional study was carried out. A non-probability (purposive sample) of (532) patients who were admitted to the District General Hospital (DGH), Trincomalee for treatment were included in the study. Data was collected through a questionnaire. Data was analyzed statistically using Statistical Package Social Sciences (SPSS), MS Excel 2010, and Minitab after cleaning the data. Quantitative variables were compared by using the Chi-square test.

Result: A total of 532 adult patients from medical and surgical wards participated in the study. Patient satisfaction was high overall, with an average score of 3.99 out of 5. Satisfaction was measured across eight dimensions, with "Emotional Support" scoring highest (4.09), followed by "Attentiveness" and "Interpersonal Relationships" (4.01 each). "Professional Knowledge" scored 4.00, "Communication" 3.99, "Professionalism" 3.98, "Clinical Skills" 3.95, and "Availability" 3.94. Patients with higher age, lower education levels, and positive pre-hospital perceptions of nursing care tended to report greater satisfaction. No significant relationships were observed between satisfaction and gender, religion, marital status, type of admission, type of illness, or length of stay.

Conclusion: Generally, the study confirms that the most of patients are satisfied with nursing care in District General Hospital Trincomalee and there are significant relationships between patient's satisfaction with nursing care and level of education of the patient.

Keywords: Patient Satisfaction, Nursing Care, Associate Factors, Quality Improvement, Cross-Sectional Study

INNOVATIONS IN BIOMEDICAL SCIENCES FOR PERSONALIZED AND SUSTAINABLE HEALTHCARE

PLENARY - OP 25

RNA-Based Therapeutics - The Promise and Challenges

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RNA-based therapeutics are the latest group of molecules to be established in the armament of biologically inspired therapies. They are thought to fill the "non-druggable targets" gap for traditional therapeutics. While RNA-based therapies were under intense investigation over a long period of time, the COVID-19-led fast-tracking of RNA vaccines led to the adoption of RNA-based therapies globally within a very short period with remarkable success.

RNA can be divided broadly into coding and non-coding. The revolution in molecular biology has been focused on coding RNA. In contrast, RNA therapies have shed light on harnessing the power of non-coding RNA and their synthetic analogues, such as RNA aptamers. Five classes of RNA-based therapeutics exist. They are RNA interference-based therapies, antisense oligonucleotides, small activating RNA therapies, circular RNA therapies, and messenger RNA-based therapeutics. RNA-based therapies function as targeted inhibitors of the translation process, by preventing or downregulating the expression of a particular protein at the mRNA level. With FDA approval, short-interfering RNA (si-RNA) was first introduced to treat rare genetic conditions such as acute hepatic porphyria and amyloidosis. The introduction of inclisiran, a PCSK9 inhibitor prescribed for hypercholesterolemia, is the first use of RNA-based therapies in treating a non-genetic condition. A large pipeline of RNA-based therapies is in clinical trials for genetic and acquired conditions.

The adoption of RNA-based therapeutics in mainstream medicine is not without challenges. The high cost and complex delivery are two of the most significant challenges. RNA is inherently unstable in biological environments, and protected delivery of high molecular weight targets to cells is a monumental task compared with smaller drug molecules. Encapsulation and surface modifications are strategies to address the delivery problem. The rapidly changing landscape of RNA-based therapeutics offers exciting opportunities for both clinicians and biomedical scientists while patients are the ultimate beneficiaries.

Phenotypic and Molecular Identification of *Amblyomma javanense* (Java ticks) Associated with Sri Lankan Pangolin *Manis crassicaudata* (Mammalia: Manidae)

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Background: Pangolins are currently listed as endangered animals in CITES Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, as well as being the national first-level protected wild animal in Sri Lanka. They are highly susceptible to tick infestations. To better understand the tick diversity associated with pangolins in Sri Lanka, both molecular and morphological identification approaches are essential. Morphological identification methods have certain limitations that can result in misidentification. In contrast, molecular-based identification methods utilizing genetic markers offer a more precise and rapid approach to identifying tick species. As knowledge about the molecular biology of tick diversity in Sri Lanka is scanty, the aim of the present study was to genetically identify ticks and determine their congruence with phenotypic traits.

Methods: A total of 111 tick samples were received from pangolin carcasses found in different geographical regions of Sri Lanka. Initially, morphological identification of ticks was done using appropriate identification keys. Phenotypically, the ticks were found to belong to the *Amblyomma javanense* complex. PCR amplification of the 460-base-pair 16S partial gene sequence of tick species and direct sequencing were then performed to confirm the genotypic traits of the tick specimens.

Results: Regarding phylogenetic analysis, it was found that the 16S sequences of the present study formed a distinct clade that shares a common ancestor with sister clades and consists of *A. javanense* sequences from China. That also suggests that the sequences identified as *A. javanense* in Sri Lanka are genetically distinct from the *A. javanense* sequences from China according to their geographical origin. Furthermore, it was determined that there is a potentially distinct tick species within the complex that has not been previously documented.

Conclusion: The current study concluded that both morphological and molecular techniques are crucial for precise tick identification. The findings of this research will contribute to the existing knowledge on tick identification, tick control, and the management of tick-borne pathogens, ultimately aiding in the conservation efforts of pangolins.

Keywords: Ticks, PCR, 16S rDNA, Molecular Identification, Phylogenetic Analysis

Molecular Identification of Canine Distemper Viral (CDV) Strains in a Cohort in Sri Lanka

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Background: Canine Distemper is recognized as a global disease that affects millions of dogs and is noted for its high epidemiological spread. The Canine Distemper Virus causes defects in the respiratory system, diseases related to the gastrointestinal tract, and various neurological disorders. It is also established that Canine Distemper can affect different species within wildlife families, particularly Felidae and Canidae. This study aims to identify the strains of the Canine Distemper Virus in Sri Lankan dogs.

Methods: This study utilized RNA samples, comprising a total of thirty-four specimens for analysis. The 1st Elusion vaccine served as the positive control for RT-PCR, while distilled water functioned as the negative control. The primers employed included CDV-F4854 forward primer, with a genomic position from 4854 to 4875, and CDV-R5535 reverse primer, spanning genomic positions 5513 to 5535. The sequences obtained were sequenced and aligned for the construction of a phylogenetic tree. Sequence alignments were performed on four samples identified through Gel Electrophoresis. Phylogenetic analysis was executed using ClustalW. The analysis predominantly observed strains including KJ747372, KJ747371, KU578276, KU578257, KY971532, AY964112, GU138403, EU716337, AF164967, AY386316, AY466011, AB474397, and AB823707.

Results: Thirteen strains of canine distemper virus were analyzed, revealing a slight resemblance to the Vaccine Asia 3 strain. These strains appear to be unique and require further confirmation through additional analysis using more samples. This study primarily involved a preliminary phylogenetic analysis of the Fsp coding region of commercially available vaccine strains.

Conclusion: Canine Distemper virus is recognized as a fatal disease that affects dogs globally and is classified as a communicable disease. The research presented above analyzes the Fsp region of various CVD strains and establishes a relationship with commercially available CDV strains.

Keywords: Canine Distemper Virus, Vector Tree Method, Reverse Transcriptase Polymerase Chain Reaction Untranslated Regions, Ribonucleic Acid

In-vitro Screening of Antibacterial Activity and Anti-biofilm Forming Activity of Momordica charantia L., Pterocarpus marsupium, Monochoria hastata (L.) Solms Leaves and Pongamia pinnata Roots and Barks against Escherichia coli and Staphylococcus aureus

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Background: Antimicrobial resistance (AMR) and biofilm-associated infections present significant challenges in healthcare, particularly with pathogens such as *Escherichia coli* and *Staphylococcus aureus*. Ethnomedicinal plants have long been recognized for their bioactive compounds, which may offer novel alternatives to combat these resistant pathogens. This study aims to evaluate the in-vitro antibacterial and anti-biofilm activities of selected ethnomedicinal plants: *Momordica charantia L., Pterocarpus marsupium, Monochoria hastata (L.) Solms*, and *Pongamia pinnata* against *E. coli* and *S. aureus*.

Methods: Aqueous and methanol extracts were prepared from the plants, using freeze drying for aqueous extracts and rotary evaporation for methanol extracts. The antibacterial efficacy was assessed using the Well diffusion method, while Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC) assays were performed. The anti-biofilm activity was evaluated through crystal violet staining assays to assess both inhibition and disruption of biofilms formed by *E. coli* and *S. aureus*.

Results: It is expected that the tested plant extracts will demonstrate significant antibacterial activity, indicated by clear inhibition zones in the well diffusion assay. The MIC and MBC values are anticipated to reflect the efficacy of these extracts against both pathogens. Additionally, notable reductions in biofilm formation and disruption are expected, suggesting that these plant-derived compounds could serve as promising alternatives to conventional antibiotics for treating biofilm-associated infections. Further discussion will explore the potential mechanisms by which these plants exert their antibacterial and anti-biofilm effects.

Conclusion: The findings from this study are anticipated to contribute valuable insights into the development of novel, plant-based therapies to combat AMR and biofilm-associated infections, supporting the global effort to address the growing threat of resistant pathogens.

Keywords: Antimicrobial Resistance, Biofilm Inhibition, Escherichia coli, Staphylococcus aureus, Ethnomedicinal Plants

Innovative and Sustainable Strategies in Biomedical Waste Management: A Systematic Literature Review

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Background: Biomedical waste management in hospitals presents significant challenges due to its environmental and public health implications. Sustainable strategies have gained prominence in mitigating these challenges, focusing on waste reduction, recycling, and environmentally friendly practices. Aim of the review is to assess the sustainable strategies implemented in hospitals and how these strategies impact waste management practices and environmental sustainability.

Methods: This qualitative systematic review follows the PRISMA 2020 guidelines to examine published literature from 2020 to 2024. A total of 10 published studies were selected out of 575 studies from Google Scholar and PubMed using Zotero as a reference management tool. Data extraction utilized a structured data form to collect relevant information on sustainable strategies in biomedical waste management. Exclusion criteria included Irrelevant Studies, Outdated Information, Studies without Clear Methodology, and Non-Hospital Settings. Risk-of-bias assessments were conducted using Robvis to ensure unbiased integration of critical appraisals into the included articles.

Results: The review identified diverse sustainable strategies implemented in hospitals worldwide. Key technologies included Life Cycle Assessment (LCA), which evaluated the environmental impacts of waste management systems. Studies highlighted the effectiveness of integrated systems that combined incineration with energy recovery, autoclave-shredder, chemical disinfection, and Effluent Treatment Plants (ETPs) in reducing environmental burdens. Strategic Environmental Assessment (SEA) was instrumental in implementing policies such as the "3-R policy" (Reduce, Reuse, Recycle) and the "polluter pays principle," which enhanced regulatory frameworks and environmental impact assessments. Advanced treatment technologies, including biological treatment, catalytic solar disinfection, alkaline hydrolysis, steam sterilization, upcycling, microwave treatment, and nanotechnology, significantly improved waste treatment efficiency. These technologies offered flexible and effective solutions for managing biomedical waste, reducing disease transmission, and mitigating environmental pollution.

Conclusion: Sustainable biomedical waste management strategies show promising results in reducing waste generation and environmental impact. Challenges such as financial constraints, regulatory complexities, and varying regional practices require tailored approaches for effective implementation. Recommendations include continuous education, institutional support, and the development of eco-friendly technologies to optimize waste management practices.

Keywords: Biomedical Waste Management, Environmental Sustainability, Life Cycle Assessment, Recycling Strategies, Waste Treatment Technologies

Identification of Pathogens Through Swabbing and Sequencing Techniques in a Selected Private University in Western Province

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Background: The pervasive presence of microorganisms in public environments has significant implications for public health. This study focuses on identifying pathogens on high-touch surfaces at a private university in the Western Province to understand the microbial landscape and its potential health risks. High-touch surfaces in educational institutions are reservoirs for various microorganisms, including pathogens like *Escherichia coli, Salmonella spp., Staphylococcus aureus,* and *Pseudomonas spp.* The primary objectives are to measure microbial presence, categorize pathogens, and provide hygiene improvement strategies.

Methods: Sterile swabs were used to collect samples from high-touch surfaces, including door handles, washrooms, and canteen tables. Samples were transported in saline solution at 37°C to the university's biotechnology lab. Serial dilutions were prepared and plated on MacConkey agar to determine microbial concentration. Colony-forming units (CFUs) were counted in the streaked MacConkey agar plates after 24-hour incubation at 37°C. Gram staining was performed to differentiate bacterial species, and *Escherichia coli* were identified and confirmed using Xylose Lysine Deoxycholate agar (XLD agar). The effectiveness of hygiene practices was assessed.

Results: High-touch surfaces exhibited varying bacterial loads. The colony-forming units per milliliter (CFUs/mL) for each sample were as follows: door handle: 1.6×10^1 (1), 4.0×10^4 (0.1), 4.0×10^6 (0.01); girls' washroom: 3.5×10^1 (1), 2.2×10^4 (0.1), 1.0×10^1 (0.01); boys' washroom: 5.0×10^1 (1), 3.0×10^4 (0.1), 2.7×10^1 (0.01); and canteen table: 5.0×10^1 (1), 4.5×10^4 (0.1), 3.2×10^6 (0.01). Door handles and canteen tables showed the highest bacterial loads, indicating frequent contact and inadequate cleaning. The washrooms exhibited moderate bacterial contamination, with the boys' washroom having a slightly higher load than the girls' washroom.

Conclusion: Regular and thorough cleaning, especially in high-contact zones, is crucial for reducing bacterial contamination and minimizing health risks. Implementing stricter hygiene measures and raising awareness among the university community are essential for maintaining a safe environment. *Keywords: Microbial Contamination, Pathogens, High-Touch Surfaces, Hygiene Practices, 16S rRNA Sequencing*

Awareness and Perception of Mammalian Cell Culture Methodologies and Their Applications

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Background: Mammalian cell culture is crucial for studying cellular mechanisms and advancing disease research and therapeutic development. However, awareness and perception of these methods vary among researchers, students, and professionals, affecting research quality and reproducibility. This study aims to identify knowledge gaps to improve future education and training in cell culture techniques.

Methods: This study used a cross-sectional survey design to evaluate the awareness and perception of mammalian cell culture methodologies and applications. A structured questionnaire was used to collect data, and statistical analysis which was done using SPSS, evaluated relationships and trends within the data.

Results: Among the 100 participants, 87% lacked real-world experience, while 58% were familiar with mammalian cell culture methods. Only 33% of respondents indicated familiarity with growth analysis methodologies. The majority of respondents (61%) considered mammalian cell culture significant for scientific progress, particularly in drug testing, cancer research, and vaccine development. Only 26% of respondents were aware of advanced procedures, such as 3D cell culturing. Participants emphasized the need for government funding, educational initiatives, and infrastructure development to enhance cell culture skills, especially in Sri Lanka. Additionally, 79% of respondents expressed an interest in learning more about mammalian cell culture techniques. These results indicate both potential and challenges in expanding infrastructure and knowledge in cell culture.

Conclusion: The study indicates moderate awareness but limited practical experience in mammalian cell culture methodologies, highlighting a need for greater exposure to advanced techniques like 3D cell culture. Enhancing access to resources and infrastructure is essential for progress in scientific research and biotechnology.

Keywords: Cell Culture, Awareness, Perception, Infrastructure, Structured Questionnaire

PIONEERING SUSTAINABLE PRACTICES IN PHYSIOTHERAPY

Attitudes Towards Physical Health Promotion for Disease Prevention among Urban Sri Lankan School Teachers.

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Background: Current global estimates indicate a disturbing trend of physical inactivity. Highest recorded percentage of inactivity was among adolescents. This has a significant negative impact on the health systems, economic development, community/ individual wellbeing and quality-of-life. Health promotion as a strategy for disease prevention emphasizes proactive, holistic approaches to improving well-being by encouraging healthy lifestyles. Physical activity is therefore identified as a vital tool in achieving long-term public health goals, especially within the school setting where foundational habits for lifelong well-being are established. Schools provide an optimal environment for promoting physical activity among children, a critical age group for establishing healthy behaviors that persist into adulthood. Assess the effectiveness of school-based physical activity promotion programs as a disease prevention strategy among school children.

Methods: A scoping search was conducted in databases including PubMed, Cochrane Library, Scopus, and Web of Science, focusing on studies published between 2005 and 2024.

Results: Out of the 470 articles retrieved, 27 met the criteria. School-based physical activity interventions, such as enhanced physical education programs, active breaks, and extracurricular sports, demonstrated significant improvements in health outcomes such as Obesity prevention, Cardiovascular health, Metabolic health and Mental health. Key factors influencing the success of interventions: Duration and intensity, Integration with education and Inclusivity.

Conclusion: School-based physical activity promotion is effective in preventing various diseases in children, particularly by reducing obesity and improving cardiovascular and metabolic health. Long-term, structured physical activity programs in schools are essential for enhancing health outcomes and preventing chronic diseases later in life. Future research should focus on optimizing the sustainability and accessibility of these interventions across diverse school populations.

Keywords: Physical inactivity, disease prevention, physical activity, school interventions, childhood obesity prevention.

Use of Artificial Intelligence based products in Physiotherapy: A Scoping review

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Background: Artificial Intelligence (AI) based software use in Physiotherapy is fast spreading both in the developed and developing world. These products range from educational solutions to clinical care solutions. These solutions are mushrooming without much regulation or involvement of formal training or advocacy. It is important to identify its current use to guide effective integration into clinical practice and enhancing patient outcomes. To scope the current evidence regarding the application of AI in physiotherapy.

Methods: A scoping review was conducted following PRISMA guidelines. Databases including PubMed, IEEE Xplore, Scopus, and Cochrane Library were searched from 2010 to 2024. The following keywords were used: "AI in physiotherapy," "artificial intelligence in rehabilitation," "machine learning in physical therapy," "robotics in rehabilitation," and "wearable sensors in physiotherapy." Inclusion criteria were studies using AI technologies in physiotherapy interventions, clinical decision-making, or rehabilitation monitoring.

Results:110 articles were retrieved for screening. Only 3 related research publications were found, others were mainly information leaflets or recorded perceptions. AI applications were categorized into four areas: Diagnostic and Prognostic Algorithms: Machine learning models are used to predict patient outcomes in musculoskeletal disorders and post-stroke recovery. Robotics in Rehabilitation: AI-powered robotic devices such as exoskeletons and rehabilitation robots. Wearable Sensors for Monitoring: AI-driven wearable systems, particularly in gait analysis and post-operative rehabilitation. Tele-Rehabilitation and Virtual Assistants: AI-driven tele-rehabilitation platforms and virtual assistants were effective in remote monitoring and providing real-time feedback.

Conclusion(s): AI technologies demonstrate significant potential in enhancing physiotherapy outcomes by improving diagnostic precision, personalizing treatment, and enabling remote care. However, challenges related to data privacy, high costs, and patient acceptance must be addressed for widespread adoption. Further research and guidance is needed on the use of AI and Physiotherapy.

Keywords: AI in physiotherapy, rehabilitation robotics, machine learning, wearable sensors, telerehabilitation

Knowledge and Attitudes on Physical Activity among students in a Leading Private Educational Institute in Sri Lanka

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Background: Physical activity enhances overall health and well-being, impacting various aspects of life. Factors like age, gender, race, and environmental conditions influence activity levels. Sedentary lifestyles lead to negative mental health outcomes. The objective of the study is to assess and understand the factors that influence physical activity, with a focus on knowledge and attitudes. The study population would include students from a leading private institute in Sri Lanka.

Methods: A qualitative, descriptive, cross-sectional study was conducted using a sample of 354 students who are in the age group 18 to 30 who are in the General Program at the International Institute of Health Sciences in the Gampaha district of Sri Lanka. A pre-tested self-administered questionnaire was used.

Results: The study included 354 individuals, with virtually equal gender distribution and a majority aged 20-25 years. The ADBMS program had the biggest enrollment, with the majority of students in their first academic year. The concept of physical activity was understood by 51.7% of respondents, whereas 48.3% did not. Attitudes toward the benefits of physical activity were varied; 51.1% disagreed that it improves physical health, while 60.5% recognized its mental health benefits. The majority (68.6%) agreed that physical activity enhances longevity, and 52.8% favoured engagement among unmarried young girls. Preferences for team and individual sports were balanced, and there were differing perspectives on socialising with active individuals. Knowledge and attitude scores were modest, with averages of 25.82 and 40.33, reflecting a range of views on physical exercise.

Conclusion: The study reveals a wide range of knowledge and attitudes toward physical activity, with gaps in comprehending its physical health benefits but recognition of its psychological benefits. While attitudes are usually positive and societal support exists, specialised, personalised fitness programs are required to overcome knowledge gaps and mixed sports preferences.

Keywords: Physical Activities, Attitudes, Knowledge, Mental Health

Quantitative Study to Assess the Knowledge on Lower Back Pain and its Effect on Student Nurses in the Western Province, Sri Lanka

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Background: The physical demands of the healthcare industry, particularly on student nurses, have led to a prevalence of lower back pain (LBP). This study focuses on assessing the knowledge of LBP among student nurses in the Western Province of Sri Lanka, a region with a high incidence of LBP, potentially due to factors like limited hospital funding and staff shortages leading to increased workload for student nurses.

Methods: This descriptive cross-sectional study utilised a self-administered questionnaire to gather data from a sample of 426 student nurses from nursing school in the Western Province of Sri Lanka. The questionnaire was designed to assess knowledge about the causes, symptoms, diagnosis, treatment, and prevention of Lower Back Pain (LBP).

Results: The findings revealed that although 86.8% of the participants knew the common causes of low back pain, only 58.7% exhibited sufficient understanding of preventive techniques such as body mechanics and ergonomics. Furthermore, 60% of the participants said they had experienced LBP at some point during their training, and 40% of those said the pain had a detrimental effect on their everyday activities and clinical performance. Furthermore, a deficiency in nursing curricula is evident from the fact that only 45% of respondents had received formal education on LBP management. The research findings indicate that although student nurses have a moderate level of awareness regarding long-term pain, there are notable deficiencies in their comprehension of preventive and long-term care.

Conclusion: While student nurses in the Western Province of Sri Lanka exhibit a good overall understanding of LBP, the study highlights the need for targeted educational interventions to address specific knowledge gaps, particularly among older student nurses. Focusing on enhancing their comprehension of chronic LBP, sciatica, and preventive measures is crucial for promoting long-term well-being and minimizing the impact of LBP on their future careers.

Keywords: Lower Back Pain, Rehabilitation, Quantitative, Proactive Care, Curriculum

EMPOWERING HEALTHCARE THROUGH DIGITAL INNOVATION

PLENARY - OP 36

Convergence of Clinical Sciences and Technology

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The human body comprises numerous micro-power-generating units that produce electrical pulses, enabling the nervous system to transmit signals throughout the body and to the brain. These electrical signals allow us to move, think, and feel. Essential elements like sodium, potassium, calcium, and magnesium carry specific electrical charges, and their movement within the cells generates electricity. When there is a disruption in these electrical circuits, it can lead to various illnesses. For instance, the heart relies on electrical currents for proper contraction. An electrocardiogram (ECG) reflects the rhythm of the heart, and irregularities in these electrical currents can prevent the heart muscles from contracting correctly, potentially leading to heart failure.

The Pulse Depth Modulation (PDM) technique is fundamental in many current and emerging electromedical devices. These devices use PDM to address the evolving challenges in medical practice. The human body's pulse waveforms pose significant challenges in clinical diagnosis. The development of pulse sphygmographs, which digitalize the characteristics of pulses, has made it possible to analyze pulse properties in both the time and frequency domains using PDM.

Pulse palpation (the pulse examination by touch) remains a vital clinical diagnostic technique that helps guide medical practitioners in their treatment strategies. Modern medical equipment now integrates artificial intelligence (AI) and computer technology to implement clinical practice guidelines, signifying the inevitable convergence of health sciences and technology.

In medical informatics, electrocardiography and other tools are powered by software programs integrated into hospital systems. These technologies manage patients' health information, record and interpret measurements, and assist in diagnosing and treating diseases. Devices like heart rate monitors, breathing rate monitors, and blood pressure monitors are all powered by advanced software, enabling clinicians to assess a patient's health status and prescribe appropriate treatments.

Soon, medical systems will become fully technologically integrated. Ultrasound diagnostic devices may replace traditional tools like stethoscopes with multiple features, connected to tablets or computers for enhanced diagnostic capabilities. To keep pace with these advancements, it would be wise to incorporate subjects like Medical Physics and Artificial Intelligence into mainstream education, ensuring that future practitioners grasp the theoretical and practical aspects of emerging technologies already integrated into healthcare systems.

Usage of Online Resources and Social Media for Acquisition of Maternity Information and Emotional Support among Pregnant Mothers in De Soysa Maternity Hospital, Sri Lanka

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Background: Utilizing internet, social media and pregnancy-related applications for health care information is a growing trend nowadays. Access to reliable health care information is vital for pregnant women and their fetuses. The objective of the study is to investigate the perception on usage of online resources and social media on maternity information and emotional support among pregnant mothers in De Soysa Hospital for Women, Sri Lanka.

Methods: A mixed method of study; the quantitative descriptive survey with a purposive sample of (n=300) expectant mothers admitted to the De Soysa Hospital for Women, Sri Lanka, using a pre-tested self-administered questionnaire and qualitative study with purposive sample of expectant mothers (n=17) using Focused Group Discussions was conducted.

Results: Response rate was 97.08%. The majority of the mothers belonged to the 26-30 years age category, Sinhalese (62.3%), Buddhists (55%) lived in Colombo city area (47%). The majority of them educated up to Advance Level (41.3%), unemployed (59.3%) belong to more than 60001 LKR (41.3%). The majority were primiparous (59.3%) and married (97.0%). YouTube was mostly used on social media (95.3%). Mostly used pregnancy related apps (34.3%) while mostly impacted by Videos (90.3%). Participants used online resources less than once a day (39.3%) and 16-30 minutes per day (45%). The online resources mostly impact on expanding their access to a wide range of knowledge (3.83 ± 0.78) and gain positive support for emotional wellbeing' (3.53 ± 0.74). The study identified four key themes: comprehensiveness, meaningfulness, manageability, and reliability. Participants highlighted the importance of thorough information on fetal development, emotional support, and manageability. They also noted the convenience of online expert advice but struggled to distinguish reliable sources from misleading ones. The study suggests improved guidance is needed for pregnant women.

Conclusion: The usage of online resources was high for different purposes and impacted them significantly. It is essential to empower them in the identification of correct information from available sources. Further, launching an official website for pregnancy-related topics is recommended for future progress.

Keywords: Pregnant Women, Online Resources, Colombo, YouTube, Quantitative Descriptive Survey

Telemedicine Acceptability among Patients in Private Multi-Specialty Hospital Abu Dhabi UAE Healthcare Management United Arab Emirates (UAE)

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Background: This study examines if telemedicine is acceptable to patients at Abu Dhabi's private multispecialty hospitals, emphasizing how crucial it is to comprehend patient views and satisfaction. This study employs the Service User Technology Acceptability Questionnaire (SUTAQ) to determine the elements that impact the acceptance of telemedicine and to offer practical suggestions for legislators and healthcare professionals.

Method: This descriptive cross-sectional study focused on patients who were 18 years of age or older and had used telemedicine services within the previous six months. It was carried out in private multispecialty hospitals located in Abu Dhabi. Random sampling was used to choose 426 participants for the sample. A validated Service User Technology Acceptability Questionnaire (SUTAQ) was used to conduct phone interviews in order to gather data. The Mann-Whitney and Kruskal-Wallis tests were used for group comparisons in the statistical analyses carried out using IBM SPSS Version 26.0. Throughout the study, participant anonymity and informed consent were guaranteed by the ethical permission that was acquired.

Results: With 379 respondents, the poll had an 88.96% response rate and a virtually equal gender distribution (50.1% male, 49.9% female). The participants' various marital status, employment positions, and educational levels reflected a range of socioeconomic backgrounds. Key findings showed that while 74.7% reported better access to care, 40.4% strongly agreed that the telemedicine kit saved time. Privacy issues were noted, with 61.2% disagreeing their privacy was infringed. 51.8% of respondents strongly agreed that the kit functioned as intended, indicating a high level of trust in its operation. Overall, 56.1% reported feeling less anxious about their health, which suggests that the telemedicine services were well-received.

Conclusion: In addition to highlighting the high level of telemedicine acceptability among patients in Abu Dhabi's private multispecialty hospitals, this survey also identifies areas that require improvement, including schedule flexibility and privacy concerns. Future developments in telemedicine can be guided by the insights obtained, making sure that the technology is patient-centered and meets a variety of user requirements.

Keywords: Telemedicine, Acceptability, Patient Satisfaction, Privacy Concerns, Abu Dhabi

The Impact of Health Information Technology on Patient Safety in a Sri Lankan Private Hospital

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Background: The adoption of Health Information Technology (HIT) systems, such as Electronic Health Records (EHRs), Computerized Physician Order Entry (CPOE), and Clinical Decision Support Systems (CDSS) has become increasingly common in healthcare settings worldwide. These systems promise to improve patient safety by reducing medical errors, enhancing communication among healthcare providers, and streamlining clinical workflows. This study investigates the impact of HIT implementation on patient safety outcomes in a private hospital in Sri Lanka, considering the unique contextual factors of a developing country setting.

Methods: A mixed-methods approach was employed to analyze the relationship between HIT systems and patient safety at Lanka Hospitals PLC, a leading private healthcare institution in Sri Lanka. The study at Lanka Hospitals PLC used a mixed-methods approach to examine the relationship between Health Information Technology (HIT) systems and patient safety. Quantitative data was collected through surveys, while qualitative data was collected through interviews and focus group discussions. Statistical techniques were used to examine the relationships between variables and assess the impact of HIT on patient safety outcomes.

Results: The study at Lanka Hospitals PLC found that integrating Health Information Technology (HIT) significantly improved patient safety. A strong positive correlation (r = 0.70) was observed between HIT use, like Electronic Health Records (EHRs) and Clinical Decision Support Systems (CDSS), and better safety outcomes. Healthcare providers with higher HIT integration and training reported better patient safety scores. Effective medication management through HIT also reduced medication errors, supported by Chi-Square test results ($\chi^2 = 10.24$). Overall, the study supports the conclusion that strategically integrating HIT systems, providing comprehensive training to healthcare workers, and optimizing workflows are essential for improving patient safety in healthcare settings.

Conclusion: This research provides evidence that the strategic implementation of HIT systems, coupled with comprehensive staff training programs, can significantly improve patient safety outcomes in a Sri Lankan private hospital setting. The study highlights the importance of a multifaceted approach that integrates technology, training, and workflow optimization to maximize the benefits of HIT in enhancing patient care.

Keywords: Health Information Technology (HIT), Patient Safety, Impact

SUSTAINABLE FOOD SYSTEMS AND NUTRITION SECURITY: FROM FARM TO FORK

PLENARY - OP 40

Sustainable Food Systems and Nutrition Security: From Farm to Fork

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The farm to fork strategy is a comprehensive approach to improve lifestyles, health, and environment. Consumers should be empowered to choose sustainable food and all actors in the food chain should take this responsibility and work towards this opportunity. In Sri Lanka, one fourth of households are food insecure and food assistance is an essential part of the population. Around 50% of the population cannot afford healthy diet due to economic downturn while about 40% of the food produced is wasted. Nearly 50% of adult women are overweight or obese and obesity is also rising among children, contributing to a high prevalence of diet-related diseases including various type of cancers. Overall, there are gaps in Sri Lankan diet and the food environment does not ensure that the healthy option is always the easiest one. Research and Innovation are key drivers in accelerating the primary production to sustainable, healthy and inclusive food systems. It can help innovations, overcome barriers, and uncover new market opportunities. It will need to strengthen resources to develop and maintain appropriate advisory services, innovative centers and functioning legislative framework on sustainable food system to achieve the nutrition security. There is an urgent need to provide correct food information to consumers to minimize misleading information. The transition to sustainable food systems requires a collective approach involving parliamentarians, policy makers at all levels (urban, rural coastal and estate sectors), private sector across the food value chain, non-government organizations, community leaders, academics and public.

OP 41

Occupational and Lifestyle Factors Affecting for Obesity among Nurses in Teaching Hospital, Kurunegala

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Background: Obesity among healthcare workers, particularly nurses, is a growing concern due to its impact on both personal health and job performance. This study, conducted at the Teaching Hospital in Kurunegala, aimed to identify and analyze the occupational and lifestyle factors contributing to obesity among nurses.

Methods: A descriptive, cross-sectional study design was used, involving 300 nursing officers recruited through purposive sampling. Data were collected using a self-administered questionnaire divided into five sections, covering demographics, professional background, dietary habits, stress levels, and stress management strategies. The data were analyzed using SPSS, applying descriptive statistics, chi-square tests, and correlation analyses to examine the relationships between obesity and various occupational and lifestyle factors. Cutoff p value was 0.05 with 95 % CI.

Results: The results revealed that 42.3% of nurses occasionally experienced stress at work, while 16.7% reported rarely feeling stressed. More than half of the nurses (56.3%) reported insufficient physical activity, which was found to be significantly associated with obesity (Fisher's exact test, p = 0.000). Poor dietary habits at work were linked to higher stress levels (r = -0.116, p = 0.045), and a positive correlation was observed between eating habits at work and at home (r = 0.198, p = 0.001). However, no significant association was found between obesity and overall eating habits outside of work (p = 0.132). These findings suggest that occupational stress, physical inactivity, and poor dietary patterns at work are key contributors to obesity among nurses.

Conclusion: This study highlights the need for interventions targeting the occupational and lifestyle factors that contribute to obesity in nurses, such as promoting healthier dietary habits, improving stress management, and encouraging physical activity. Addressing these issues through workplace policies and health promotion initiatives is essential for improving nurses' well-being. Obesity management programs, including realistic weight loss goals, regular monitoring, and motivational support, are crucial. Nurse practitioners also play a vital role in guiding both their peers and patients toward healthier lifestyles and effective weight management.

Keywords: Obesity, Nurses, Occupational Factors, Lifestyle Factors, Teaching Hospital

OP 42

Knowledge, Attitudes, and Practices Regarding Fast Food Consumption Among Working Adults in Industrial Zone, Ekala, Sri Lanka

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Background: Fast food consumption, characterized by high levels of unhealthy fats, sugars, and sodium, has been linked to the rising incidence of obesity, heart disease, and diabetes. This underscores the need for public health interventions and dietary changes. The objective of this study was to assess the knowledge, attitudes, and practices regarding fast food consumption among working adults in the industrial zone of Ekala, Sri Lanka.

Methods: A descriptive, cross-sectional study was conducted among 106 working adults (n = 106) at IDB Estate, Ekala, Sri Lanka. Data were collected using a self-administered questionnaire designed by the researcher. The questionnaire assessed participants' knowledge of fast food's health impacts, their attitudes toward fast food, and their consumption practices. Descriptive statistics were used for data analysis.

Results: The majority of participants (87%, n = 92) acknowledged that fast food consumption could lead to various health issues, such as obesity, heart disease, and diabetes. All participants (100%, n =106) recognized the role of fast food in increasing cholesterol and blood sugar levels. Convenience was identified as a key factor influencing fast food consumption by 96% (n = 102), followed by taste (91%, n = 97) and the variety of options available (83%, n = 88). Additionally, 69% (n = 73) viewed fast food as a social activity. Regarding consumption practices, 50% (n = 53) of participants reported eating fast food 3-4 times per week, while 41% (n = 44) consumed it five or more times per week. Furthermore, 42% (n = 45) replaced two or more meals per day with fast food. Despite awareness of the associated health risks, 48% (n = 51) never considered the nutritional content of their fast food choices, with taste (100%, n = 106) and price (100%, n = 106) being the most influential factors in decision-making.

Conclusion: The findings suggest a need for targeted health education campaigns to raise awareness about the health risks of fast food and to promote healthier eating habits. Additionally, fast food establishments should be encouraged to offer more nutritious options. Workplace interventions can also play a crucial role in reducing fast food consumption. Further research involving larger and more diverse samples is needed to explore the long-term dietary impacts and inform effective public health interventions.

Keywords: Fast Food Consumption, Health Awareness, Dietary Behaviors, Working Adults, Nutritional Considerations

OP 43

Knowledge and Attitudes on Maintaining Ideal Nutrition; A Cross-Sectional Study among Nursing Students at a Government Nursing School in Sri Lanka

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Background: Nursing students are the future role models of health; so critical evaluation of their nutritional status is imperative for the effective functioning of the health sector. This study aimed to assess attitudes and knowledge on maintaining nutrition among nursing students of the College of Nursing, Anuradhapura.

Methods: A descriptive Cross-sectional study design was conducted among 213 nursing students in their first and second years at the College of Nursing, Anuradhapura. A self-administered questionnaire developed by researchers based on available literature was distributed among randomly selected participants. Data was analyzed using SPSS 26 version for descriptive and inferential statistics.

Results: Among the participants, the majority were female (92%) between 23-24 years age group (34.3%) and Buddhists (86.9%) in their second year (61.9%). Of them, majority reported for the normal BMI range (63.4%). A large number of these are non-vegetarian students (84%) while 114 students currently follow diet control methods (53.5%). Among them nutritional knowledge was distributed for poor and good knowledge; 57.2% and 42.7% respectively. Knowledge of food frequency was reported for good knowledge (62.9%) while poor knowledge was reported for food classification (69%), choosing foods (67.1%), and management of health problems and body weight (68.1%). The larger proportion of nursing students' attitudes toward maintaining nutrition was found to be above average level (90.6%). The knowledge of the students was statistically significant by gender (p=0.01) and currently on diet (p=0.016). There is a significant difference found for attitudes on maintaining nutrition by academic year (p=0.000) and age group (p=0.004).

Conclusion: The study revealed poor knowledge but above-average levels of attitudes toward maintaining nutrition. Therefore, nutritional knowledge needs improvement. Updated practical sessions for students are needed to enhance attitudes and knowledge for maintaining their own nutrition.

Keywords: Nutrition, Knowledge, Attitudes, Nursing Students

POSTER PRESENTATION

Knowledge, Practices and Attitudes Towards Infection Control among Nurses in National Eye Hospital, Colombo

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Background : Nurses play a crucial role in infection control practices, which are essential for ensuring patient safety and preventing the spread of infections in healthcare settings. This study aimed to assess the knowledge, practices, and attitudes (KAP) regarding infection control among nurses at the National Eye Hospital in Colombo, Sri Lanka.

Methods : A cross-sectional study was conducted among 100 randomly selected registered nurses (n = 100) working at the National Eye Hospital in Colombo. Data were collected through a structured, pretested questionnaire that assessed knowledge, practices, and attitudes toward infection control. The questionnaire also covered demographic information. Descriptive statistics were used for data analysis, and chi-square tests were performed to examine the association between knowledge, practices, attitudes, and adherence to WHO infection control guidelines.Cutoff P value was <0.05 with 95 % CI

Results : The survey found that while a significant proportion of nurses (76%, n = 76) had adequate knowledge of infection control, this knowledge did not have a significant effect on their adherence to WHO infection control methods (p = 0.235). However, there was a strong association between infection control practices and adherence to WHO guidelines (p < 0.05), indicating that nurses who practiced proper infection control were more likely to follow recommended protocols. Although nurses generally had positive attitudes toward infection control, no significant correlation was found between attitudes and adherence to infection control practices (p = 0.899).

Conclusion : The results emphasize the importance of continuous and practical infection control training for nurses to improve adherence to protocols. Comprehensive training programs that focus on both theoretical knowledge and practical skills, along with regular monitoring, a supportive work environment, and clear infection control policies, are essential to improve infection control practices and ensure better patient outcomes.

Keywords: Infection Control, Nurses, Knowledge, Practices, Attitudes, National Eye Hospital, Sri Lanka

Parents' Knowledge and Practice of Oral Hygiene Practices among Children Aged 3 to 5 in the Damana MOH Area of Ampara District, Sri Lanka

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Background : Oral health is essential for overall well-being, preventing issues such as cleft lip and palate, oral and throat cancer, periodontal disease, tooth decay, and other oral diseases. The awareness and attitudes of parents, particularly those of preschool-aged children, are key factors in ensuring their children's oral health. This study aimed to assess the knowledge and practices regarding oral hygiene among parents of preschool children in the Damana MOH area in Ampara, Sri Lanka.

Methods : A descriptive, cross-sectional study was conducted among 50 randomly selected parents (n = 50) of preschool children in the Damana MOH area. Data were collected through a structured, pretested questionnaire that covered demographics, knowledge, and practices regarding oral hygiene. Descriptive statistics were used for data analysis.

Results : The survey revealed that 66% (n = 33) of parents believed that oral hygiene is important for their children, but 52% (n = 26) were dissatisfied with the available information on children's oral health. Additionally, 65% (n = 33) of parents did not know the appropriate type of toothpaste for their children, and only 12% (n = 6) encouraged their children to brush their teeth twice daily. The most common oral health issues identified were mouth sores and dental caries. Furthermore, 72% (n = 36) of parents believed that reducing sugary and acidic foods was the best preventive measure for maintaining their children's oral health.

Conclusion : The findings suggest that parents of preschool children in the Damana MOH area have insufficient knowledge about oral hygiene, with significant gaps in understanding preventive practices. The study underscores the need for targeted educational interventions to improve parental knowledge and promote better oral health habits among preschool-aged children.

Keywords: Oral hygiene, knowledge, preschool children, Damana MOH, Sri Lanka

Factors Affecting Stress Among Nurses in a Government Hospital of Sri Lanka

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Background : Stress among nursing officers in government hospitals significantly impacts their mental and physical health, leading to decreased efficiency. This study aimed to assess the personal and work-related stress factors and evaluate stress management strategies among nursing officers at Government Hospital Negombo, Sri Lanka. The findings aim to contribute to the development of policies and training programs to improve nurses' well-being and work conditions.

Methods : A cross-sectional study was conducted among 100 randomly selected nursing officers (n = 100) aged 24-60 years at Government Hospital Negombo. Data were collected using a structured, self-administered questionnaire, which included demographic details, work-related factors, personal stress factors, and stress management strategies. Descriptive statistics were used for data analysis, and the reliability of the questionnaire was confirmed with a Cronbach's Alpha of 0.783. Chi-square tests were performed to examine associations between work-related factors, personal stress, and the overall stress levels.

Results : The survey found that 65% (n = 65) of participants experienced high levels of stress, with insufficient staffing and unpredictable work schedules identified as major contributors to work-related stress. Personal factors, such as irregular working hours and financial concerns, were also significant stressors, affecting 58% (n = 58) of participants. Work-related factors accounted for 14.1% of the variance in stress levels, while personal factors contributed 12.8%. A significant association was found between these factors and increased stress levels (p < 0.05). The study highlighted the need for better staffing policies and support systems to reduce stress among nurses.

Conclusion : The study underscores the need for targeted interventions to address both work-related and personal stress factors affecting nursing officers at Government Hospital Negombo. Improving working conditions and providing mental health support are crucial steps to reduce stress and enhance the overall well-being of nurses.

Keywords: Stress, Government Hospital, Work-related stress, Personal stress, Sri Lanka

Assessing the Patients in Intermediate Wards' Oral Health Knowledge, Attitudes, and Behavior (Special Reference National Institute Of Mental Health, Mulleriyawa)

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Background : Oral health is essential for overall well-being, significantly affecting individuals' ability to speak, eat, and socialize. This study aimed to assess the oral health knowledge, attitudes, and practices of patients admitted to the intermediate wards at the National Institute of Mental Health, Mulleriyawa, Sri Lanka. Understanding these factors is critical for developing effective oral health interventions and improving the quality of life for these patients.

Methods : A cross-sectional study was conducted among 80 randomly selected patients (n = 80) in the intermediate wards. Data were collected using a structured, pre-tested questionnaire covering three areas: oral health knowledge (including tooth anatomy, oral diseases, and treatment), attitudes toward oral health practices, and self-reported oral hygiene behaviors. Descriptive statistics were used for data analysis, and associations between knowledge, attitudes, and behaviors were examined.

Results : The survey found that while all participants reported brushing their teeth, only 30% (n = 24) brushed twice a day, which falls short of recommended practices. Less than 50% (n = 40) of participants correctly answered questions about gum disease, plaque, and oral cancer risk factors, indicating limited knowledge. Despite understanding the negative effects of sugary drinks on dental health, 70% (n = 56) of participants still consumed them regularly. Positive attitudes toward oral hygiene were observed, with 91% (n = 73) recognizing the importance of using toothpaste and a toothbrush.

Conclusion : The study highlights that while patients in intermediate wards have adopted basic oral hygiene habits, their knowledge of oral diseases and risk factors is limited. There is a need for targeted educational programs to improve oral health literacy and address the gap between knowledge and practice. Emphasizing preventative measures and encouraging regular dental visits are crucial to enhancing oral health and overall well-being in this population.

Keywords: Oral Health, Knowledge, Attitudes, Practices, Intermediate Wards, Sri Lanka

Awareness of Osteoarthritis among Females over 30 Years in Rambukkana MOH Area in Sri Lanka

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Background: Osteoarthritis is a leading cause of disability, particularly affecting women's mobility and quality of life due to joint pain and limited movement. This study aimed to assess the knowledge and awareness of osteoarthritis among women over 30 years old in the Rambukkana MOH area of Sri Lanka.

Methods: A cross-sectional study was conducted among 100 randomly selected women (n = 100) aged over 30. Data were collected through a structured, pre-tested questionnaire covering knowledge of osteoarthritis, including causes, symptoms, complications, prevention, and treatment. Descriptive statistics were used for data analysis, and chi-square tests were performed to examine associations between age and the occurrence of joint pain, as well as the level of osteoarthritis awareness.

Results: The survey found that 63% (n = 63) of participants had general awareness of osteoarthritis, while only 39% (n = 39) were knowledgeable about its complications. Additionally, 48% (n = 48) of respondents reported experiencing symptoms in the past three months, with 56% (n = 56) of women aged 40 and older reporting joint pain. A significant association was found between age (40 years and above) and the incidence of joint pain (p < 0.05). Moreover, 59% (n = 59) of participants experienced pain during or after movement, and 52% (n = 52) lacked sufficient knowledge about osteoarthritis prevention and treatment. The study also highlighted that women aged 40 and above were at higher risk for osteoarthritis symptoms.

Conclusion: The results emphasize the need for targeted education to improve osteoarthritis awareness, particularly regarding its complications and the importance of early screening and prevention. Increasing awareness could help reduce the burden of the disease, especially in high-risk age groups.

Keywords: osteoarthritis, awareness, knowledge, women, joint pain, age association

The Study Of Knowledge, Attitude, And Practice Of Basic Life Support Among Nurses Working In The Government Hospital Of Maldives

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Background : Basic Life Support (BLS) is an essential emergency procedure that involves the identification of cardiac arrest and the immediate initiation of cardiopulmonary resuscitation (CPR) to maintain life until advanced medical care is available. Nurses, being the first responders in many emergency situations, must possess adequate knowledge and skills in BLS to effectively save lives. This study aimed to assess the knowledge, attitudes, and practices of nurses regarding BLS at Indira Gandhi Memorial Hospital (IGMH) in the Maldives.

Methods : A cross-sectional study was conducted among 210 randomly selected nurses (n = 210) working at IGMH. Data were collected through a structured, pre-tested questionnaire that included sections on nurses' knowledge of BLS, their attitudes toward performing CPR, and their practical skills in implementing BLS. Descriptive statistics were used to summarize the data, and chi-square tests were conducted to explore associations between demographic factors and the levels of knowledge, attitude, and practice regarding BLS.

Results : The survey revealed that 52.71% (n = 111) of nurses had moderate knowledge of BLS, indicating a need for improvement in critical areas. The average attitude score was high, at 81.57% (n = 171), reflecting a generally positive attitude toward the importance of BLS in nursing practice. However, a significant gap was identified between attitude and practical application, with 59% (n = 124) of nurses reporting insufficient confidence in performing CPR, particularly on pediatric and elderly patients. A negative correlation was found between attitude and practice (p = 0.001), suggesting that positive attitudes do not necessarily translate into effective practice without adequate hands-on training.

Conclusion : The study highlights that while nurses at IGMH demonstrate a positive attitude towards BLS, their knowledge and practical skills require further development. Comprehensive and regular BLS training programs focusing on both theoretical knowledge and practical CPR skills, particularly for different age groups, are recommended. These initiatives could significantly enhance the effectiveness of nurses in emergency situations.

Keywords: Basic Life Support, Nurse Knowledge, Cardiopulmonary Resuscitation, Attitude, Practice, IGMH

Assess The Knowledge And Practices Towards The Preventing Intravenous Catheter Site Complications Among 3rd Year Student Nurses In School Of Nursing Colombo.

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Introduction : Intravenous (IV) cannulation is a common medical procedure used to administer medications and fluids, but it carries risks such as infections, phlebitis, and patient discomfort. Preventing these complications is crucial for improving patient outcomes. This study aimed to assess the knowledge and practices of third-year nursing students at the School of Nursing Colombo regarding the prevention of intravenous catheter site complications.

Method : A descriptive cross-sectional design was employed, involving a systematic sampling of 74 students (n = 74) from a total population of 369. Data were collected using structured questionnaires, and the analysis was conducted using IBM SPSS software. The questionnaire focused on students' knowledge of preferred veins for cannulation, infection control measures, and best practices for preventing catheter site complications.

Results: The study found that 74% (n = 55) of nursing students had a good understanding of commonly preferred veins for cannulation, yet there were notable misconceptions. For example, 59.6% (n = 44) of students preferred using non-dominant sites for cannulation, which could increase the risk of complications. Additionally, 61% (n = 45) believed the procedure was clean in terms of infection control, despite 99% (n = 73) acknowledging the importance of aseptic techniques. While students demonstrated good theoretical knowledge, the practical application of these concepts was inconsistent, revealing a significant knowledge-practice gap in preventing complications at the cannula site.

Conclusion : The study highlights gaps in the practical skills of third-year nursing students related to IV cannulation, despite their sound theoretical understanding. Addressing these gaps through targeted training and hands-on practice is essential to enhance students' competency in preventing catheter site complications, ultimately improving patient safety and care.

Keywords: Intravenous cannulation, Phlebitis, Nursing education, Cannula site complications, Knowledge assessment

Knowledge, Attitudes and Practice of Pain Management among Nurses in District Hospital and Divisional Hospital Settings in Kandy District

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Background: Pain assessment and reassessment are essential elements of the nursing role in pain management. The purpose of this study was to determine the knowledge, attitudes, and practices (KAP) of nurses regarding pain management.

Methods: A self-administered questionnaire was developed under the guidance of the research supervisor and pre-screened for validity. The questionnaire, prepared in English, consisted of 35 questions across four sections. Data were collected from a sample of registered nurses (N = 205) working in district and regional hospitals in the Kandy district.

Results: The results indicated that the majority of nurses (86.18%, n = 177) demonstrated a high level of knowledge about pain management, exceeding the 80% threshold. Over 80% of the nurses (n = 164) expressed positive attitudes toward pain management, with 89.27% (n = 183) agreeing that pain is observable in patients' behavior, 80.96% (n = 166) acknowledging that distraction techniques reduce pain, and 84.88% (n = 174) endorsing non-pharmacological interventions for mild to moderate pain. Additionally, 94.63% (n = 194) of nurses emphasized the importance of vital signs in validating severe pain. In practice, 93.17% (n = 191) provided direct care to elderly patients, 97.07% (n = 199) assessed pain in communicative patients, 85.36% (n = 175) used pain assessment tools, and 82.93% (n = 170) discussed pain management during nurse handovers. However, only 62.93% (n = 129) consistently trusted patients' self-reported pain, highlighting the need to improve nurse-patient communication and trust.

Conclusion: This study demonstrates a generally high level of competence in pain management among nurses in the Kandy district. However, communication issues related to patients' self-reported pain require attention. The findings suggest that mandatory, ongoing educational initiatives should be implemented to address nurses' specific needs, with further research required to assess the effectiveness of these programs

Keywords: Pain Management, Nurses, District Hospital, Divisional Hospital, Kandy District

Assessment of the Knowledge, Attitudes, and Practices on Hydration During Working Hours among Nurses in National Hospital, Kandy

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Background: Hydration is fundamental for maintaining general well-being and peak physical and mental performance, particularly for demanding professions like nursing. Water supports essential physiological functions, such as digestion, temperature regulation, and acid-base balance. Dehydration, even at mild levels (1.4% loss of body mass), can impair concentration, increase fatigue, and affect psychomotor skills (Kim & Hwang, 2020). In humid climates and extended work hours, nurses are often at higher risk for dehydration, potentially impacting job performance and patient care quality. This study aims to examine the hydration habits of nurses and explore strategies to promote adequate fluid intake during work hours.

Methods: This study utilized a descriptive cross-sectional design with 200 nurses from The National Hospital in Kandy. Data collection involving self-reported questionnaires should be administered in assessing water consumption, perceived hydration levels, and the impact of dehydration symptoms on work performance. In addition, physical assessments of hydration levels were conducted using urine specific gravity tests. Workplace interventions, such as access to water and hydration education programs, were introduced and evaluated for their effectiveness.

Results: Results indicated that 65% of nurses reported insufficient fluid intake during their shifts, with dehydration symptoms including fatigue, headaches, and impaired concentration. Nurses with lower hydration levels had significantly slower reaction times in cognitive tasks (p < 0.05). After implementing hydration interventions, including regular hydration breaks and accessible water stations, 78% of nurses improved their fluid intake, leading to enhanced physical and mental performance during their shifts. Job satisfaction also increased among 60% of participants who adhered to hydration protocols.

Conclusion: This study underscores the need for healthcare organizations to implement hydrationfocused strategies to promote nurses' health and performance. Enhancing access to water and hydration education can lead to improved work efficiency and well-being, benefiting both healthcare professionals and patient outcomes.

Keywords: Hydration, Nurses, Knowledge, Fatigue, Working Hours

Risk Factors for Cataract among Patients Visiting to Eye Clinic at Teaching Hospital, Jaffna

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Background: Cataracts represent a significant global public health concern, contributing to visual impairment and blindness. As individuals age, they frequently develop cataracts, which are patches of cloudiness in the lens of their eyes. In one nation, more than half of the elderly (above 60) have cataracts or have had cataract surgery. Over time, cataracts may cause a person's vision to become cloudy, fuzzy, or less colorful. They may also make it difficult for them to read or do other daily tasks. Surgery is the safest and corrects visual impairments caused by cataracts. The objective of the study is to identify the risk factors for cataracts among patients visiting the eye clinic at Teaching Hospital, Jaffna.

Methods: A descriptive cross-sectional study was conducted using a sample of 100 patients who are in the age group of 40- 60 who come to the eye clinic belonging to Jaffna MOH in Jaffna District. A pretested self-administered questionnaire was used.

Results: The study surveyed cataract patients aged 40-60 at a teaching hospital in Jaffna, Sri lanka, focusing on socioeconomic and health factors. Most patients were self-employed (52.04%), with 80.61% diagnosed between ages 48-60. Cataracts were reported in family members, particularly fathers (27.55%) and mothers (17.35%). Common comorbidities included Diabetes Mellitus and Hypertension. Social factors like education and outdoor work contributed, while most respondents had limited healthcare spending, earning less than Rs. 30,000 per month. The study underscores the role of various factors in cataract prevalence.

Conclusion: A study of 98 participants aged 60 or older found that over half had cataracts or had undergone surgery. The highest prevalence occurred in the 55-60 age group, with 62.24% reporting family members also affected. Most diagnoses were between ages 48 and 60, and diabetes mellitus was notably associated with those aged 70 and older. Additionally, 52.04% of participants had refractive errors, and 35.71% experienced hypertension. Occupational heat exposure was a risk factor, with 50% of participants working in high-temperature environments. However, the study's small sample size limits the generalizability of its findings to a larger population.

Keywords: Cataracts, Risk factors, Prevention, Eye Clinic, Sri Lanka

Factors Related to Psychological Health of Postnatal Mothers with Preterm Infants in De Soyza Maternal Hospital, Colombo

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Background: Pregnancy and childbirth are often described as joyful periods in a woman's life, but they can also leave women vulnerable to psychological health issues. Preterm birth is defined as babies born alive before completing 37 weeks of pregnancy, and studies have shown that mothers of preterm infants are at a higher risk of psychological distress compared to mothers of full-term infants. The postnatal period, which refers to the first six weeks after birth, brings about changes in a mother's psychological well-being as she adapts to her new parenting role.

Method: A quantitative research approach will be utilized. This study will employ a non-probability convenience sampling method due to the non-random selection of subjects and the unavailability of an exhaustive population list. A researcher-administered questionnaire will be used to collect data from the participants.

Results: The mean maternal stress level among postnatal mothers with preterm infants at De Soysa Hospital for Women is 2.40, indicating a moderate response towards identifying maternal stress. The mean level of maternal anxiety and depression is 2.31, which shows a moderate response from postnatal mothers with preterm infants. The standard deviation is 0.595, indicating a moderate dispersion of responses around the mean. Meanwhile, the mean level of perceived social support among postnatal mothers with preterm infants is 2.36, indicating a moderate response towards identifying the availability of support. The standard deviation is 0.805, suggesting a relatively higher dispersion of responses around the mean. The mean level of parent-infant bonding among postnatal mothers with preterm infants is 2.30, indicating a moderate response towards identifying the quality of bonding experiences.

Conclusion: While factors like maternal stress and social support have significant impacts, the relationships between maternal anxiety, depression, parent-infant bonding, and psychological health are more nuanced. This study underscores the importance of tailored support systems and interventions aimed at reducing maternal stress and enhancing social support.

Keywords: Maternal Mothers, Psychological Health, Preterm Infants

Knowledge, Attitudes and Practice Regarding Post Operative Pain Management among Nursing Officers in Puttalam Base Hospital

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Background: Post-operative pain management (POP) is critical for patient recovery and well-being. Despite international authorities raising awareness of the consequences of insufficient POP management, half of postoperative patients still report inadequate pain treatment. Nurses play a crucial role in post-operative pain management due to their continuous interaction with patients. This study investigated the knowledge, attitudes, and practices of nurses regarding post-operative pain management at Puttalam Base Hospital in Sri Lanka.

Method: A descriptive, cross-sectional study design was employed. A sample of 150 nurses from various wards, including orthopaedic, surgical, recovery, operating room, and trauma, was selected using a multi-stage sampling technique. Data were collected using a modified version of the Nurses Knowledge and Attitudes Survey (NKASRP) and analyzed using descriptive and inferential statistics.

Results: The study revealed that nurses had limited knowledge about post-operative pain management. Although over half of the nurses answered more than 8 out of 13 knowledge-based questions correctly, only 52% demonstrated an adequate level of knowledge. Nearly half (48%) lacked sufficient understanding of effective POP management, which may be attributed to limited access to specialized training in the district and the fact that most nurses had less than five years of experience. While nurses generally held positive attitudes towards POP management and recognized the importance of appropriate analgesia, only 36.3% reported routinely administering opioids. Factors such as fear of opioid addiction, hesitation in administering the drugs, and lack of commitment to pain management were cited as potential barriers. Additionally, a notable gap between nurses' attitudes and practices was observed, particularly regarding the administration of narcotic analgesics to children, despite their agreement on the importance of pain management.

Conclusion: This study underscores the need for targeted interventions to improve nurses' knowledge and practices related to post-operative pain management in Sri Lanka. These interventions should encompass continuing education programs, updated pain management curricula, and strategies to address sociocultural factors that may hinder effective pain management practices.

Keywords: Post-Operative Pain, Knowledge, Attitudes, Practices, Nurses

Knowledge, Attitude, and Practice about Dental and Oral Health among Students in Private Universities in Gampaha District, Sri Lanka

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Background: Dental and oral health are integral components of overall well-being, yet university students often exhibit varied levels of awareness and practice regarding oral hygiene. This study aims to assess the knowledge and practices related to dental and oral health among students enrolled in private universities within the Gampaha district, Sri Lanka.

Methods: A cross-sectional quantitative study was conducted using a convenience sampling method. A total of 200 nursing students from the International Institute of Health Sciences participated in the study. Data was collected through a pre-tested, self-administered questionnaire, available in both English and Sinhalese and analyzed using SPSS.

Results: The study found that most students understand the importance of oral health and its relation to overall well-being. Most (80.5%) strongly agree that oral health is important, and 86% understand the importance of regular dental checkups. A greater number (83.5%) correctly identified tooth brushing as effective in preventing gingivitis, and 87.5% knew that dental caries is mainly caused by germs. However, there were knowledge gaps, such as 24.5% believing gingival bleeding during tooth brushing is normal, and only 10.5% using dental floss in addition to brushing and toothpaste. Most students brush twice a day, and 49.5%) change their toothbrush when it loses efficiency.

Conclusion: This study highlights the need for targeted interventions to address knowledge gaps and promote consistent adherence to recommended oral hygiene practices among nursing students. Educational programs should emphasize the importance of regular dental checkups, proper brushing techniques, the role of flossing, and the significance of early detection and management of oral health issues.

Keywords: Dental Health, Oral Health, Knowledge, Practice, Gampaha District

Associations between Fast-Food Consumption and Body Mass Index

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Background: Broad consumption of fast food transcends ethnic and regional boundaries, often replacing traditional, nutrient-dense meals and contributing to rising body mass index (BMI) and obesity rates. This study aims to investigate the association between fast food consumption and BMI, as well as the implications for public health.

Methods: A descriptive cross-sectional study was conducted at the International Institute of Health Sciences in the Western Province, Sri Lanka. The study surveyed 203 students and workers (N = 203) using convenience sampling. Data were collected via a structured, self-administered online questionnaire. The relationship between fast food consumption and BMI was analyzed using SPSS version 26. Ethical approval was obtained from the ethics review committee of the International Institute of Health Sciences.

Results: The demographic data revealed that the majority of participants were female (81.8%, n = 166), primarily in their first year of study (65.5%, n = 133), and living at home (69.5%, n = 141). Most participants identified as Sinhalese (84.2%, n = 171) and followed Buddhism (49.3%, n = 100). The average age was 20 years, and the mean BMI was 10.63, which is notably below the typical healthy range. A significant proportion of participants reported consuming fast food (88.7%, n = 180), with dinner being the preferred time for consumption (65.5%, n = 133). Fast food was typically consumed once a day by 39.4% of participants (n = 80), with taste cited as the main reason for choosing fast food (61.6%, n = 125). The analysis found that frequent fast-food consumption was associated with lower BMI scores.

Conclusion: High fast-food consumption was linked to lower BMI among students and workers at the International Institute of Health Sciences in the Western Province, Sri Lanka. These findings are contrary to the common association between fast food and higher BMI, highlighting the need for further research to understand the underlying factors. Additionally, tailored public health strategies are necessary to address dietary behaviors and BMI management effectively within this population.

Keywords: Fast Food, Body Mass Index, BMI, Obesity, Public Health, Sri Lanka, Dietary Behaviors

Systematic Review of Innovative Biosafety Practices for Sustainable Biomedical Research: Emerging Trends and Future Directions

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Background: The landscape of biomedical research is rapidly evolving, driven by technological advancements and a focus on sustainability. As research practices advance, balancing biosafety with sustainability becomes crucial. This Systematic review aims to explore emerging trends and innovative biosafety practices that contribute to sustainability in biomedical research.

Methods: This qualitative systematic review follows the PRISMA 2020 guidelines. We reviewed literature from 2020 to 2024, selecting 13 studies from Google Scholar and PubMed, managed using Zotero. Data extraction was performed using a structured form to gather relevant information on sustainable biosafety strategies. Exclusion criteria included irrelevant studies, outdated information, studies lacking clear methodology, non-sustainability focus, geographical limitations, and duplicates. Risk-of-bias assessments were conducted with Robvis to ensure unbiased integration.

Results: The review of the published literature highlights several key innovations: Biohybrid Magnetic Microrobots (BMMs) that integrate biological entities with magnetic components for targeted drug delivery and sustainable actuation; Hand Sanitizer Gels (HSGs) with multifunctional properties, including antimicrobial effects and reduced skin irritation; technological trends in medicines identified by the European Medicines Agency, impacting drug development; advancements in synthetic biology and associated biosafety concerns; bio-based polymers developed for environmental sustainability, with applications in healthcare and biotechnology; biosafety and biosecurity practices in academia; safety-by-design measures in synthetic genomics; the Biosafety Level-3 Core Facility case study at NUS Medicine; and international biosafety laws addressing regulatory challenges.

Conclusion: This review emphasizes a comprehensive overview of emerging trends and innovative biosafety practices enhancing sustainability in biomedical research. It evaluates advancements, their impact on biosafety and sustainability, and provides recommendations for integrating these practices into future research protocols, ensuring that research is both safe and environmentally responsible.

Keywords: Bio-based Polymers, Biohybrid Magnetic Microrobots, Hand Sanitizer Gels, Synthetic Biology, Technological Trends in Medicines.

Critical Care Nurses' Knowledge and Implementation of Sepsis Care Bundles at National Hospital of Sri Lanka: An Investigation into Practices and Awareness Levels

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Background: Sepsis is a leading cause of morbidity and mortality worldwide. This study aimed to examine the comprehension and execution of sepsis care bundles among nurses at the National Hospital of Sri Lanka, focusing on factors influencing effective sepsis management.

Methods: An empirical research design was utilized, employing regression analysis, ANOVA, and correlation to explore the relationships between organizational support, environmental factors, concentration, and physical barriers in relation to sepsis care bundle implementation. Data were collected through surveys distributed to nurses, followed by rigorous statistical analysis to identify key influencing factors.

Results: The study involved a diverse group of nurses in terms of age, experience, and work settings, making the findings broadly applicable to critical care nurses in Sri Lanka. A negative correlation (-0.215, p=0.003) was found between nurses' awareness and the implementation of Sepsis Care Bundle Plans, indicating that higher awareness was unexpectedly linked to lower levels of planned sepsis care application. This suggests a gap between theoretical knowledge and practical implementation, warranting further investigation. The study used p-values to assess statistical significance, with key findings showing significant relationships between awareness, organizational support, environmental factors, and sepsis care bundle implementation (p < 0.001).

Conclusion: Findings emphasize the importance of strengthening organizational guidance, improving environmental conditions, and promoting ongoing education to enhance sepsis care practices. Although the influence of physical limitations requires additional research, these insights provide valuable information for healthcare organizations aiming to improve sepsis care and reduce patient mortality.

Keywords: Sepsis Care Bundles, Organizational Support, Environmental Factors, Nurse Awareness, Implementation Barriers

Impact of Individual Factors on Job Satisfaction of Nursing Officers in Teaching Hospital in Polonnaruwa District, Sri Lanka

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Background: Job satisfaction among nursing officers is vital for effective healthcare delivery, influencing staff retention, performance, and the quality of patient care. This study aims to examine the impact of individual factors on job satisfaction among nursing officers at the Teaching Hospital in the Polonnaruwa District, Sri Lanka.

Methods: A descriptive correlational study design was employed, with data collected from 190 nursing officers selected through simple random sampling. A self-administered questionnaire was used to measure job satisfaction related to factors such as working conditions, training, workload, professional support, career development, remuneration, and overall job satisfaction. Data were analyzed using SPSS, applying descriptive statistics, correlation, and regression analysis. Cutoff P value was 0.05 and CI 95%.

Results: The majority of the sample consisted of female nursing officers (85%) aged 30–50, with 5–15 years of experience. Overall job satisfaction was moderate, with a mean score of 2.96 out of 5. Satisfaction levels related to working conditions, training, workload, and professional support were similarly moderate, with mean scores ranging from 2.86 to 2.97. Although nurses found their training adequate, they expressed a desire for more specialized training options. Career development opportunities (mean score: 2.64) and remuneration (mean score: 2.98) were identified as areas of concern, highlighting limitations in career growth and dissatisfaction with pay. The correlation analysis revealed a significant negative relationship between compensation and overall job satisfaction (-0.201, p < .05), indicating that dissatisfaction with pay and benefits negatively impacts overall job satisfaction, particularly concerning career progression and compensation.

Conclusion: The study highlights the critical role of individual factors, especially remuneration and career development opportunities, in shaping job satisfaction among nursing officers. Addressing these concerns could lead to increased job satisfaction, which is essential for retaining nursing staff and enhancing the quality of patient care. The findings provide valuable insights for hospital administrators and policymakers in formulating strategies to improve job satisfaction and, in turn, healthcare outcomes

Keywords: Job Satisfaction, Nursing Officers, Remuneration, Career Development, Teaching Hospital

Perception of Online Learning During the Covid-19 Pandemic Among Final-Year Nursing Students in the Nursing Schools of Western Province, Sri Lanka

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Background: The COVID-19 pandemic has drastically affected Sri Lanka's education system, prompting a rapid shift to online learning. This study explores the perceptions of nursing students in the Western Province of Sri Lanka, who typically rely on in-person practical education, regarding their experiences with online education during the pandemic.

Methods: A cross-sectional study was conducted using a convenience sampling method. Data were collected from 333 final-year nursing students from three state-owned nursing schools in the Western Province via a self-administered online questionnaire. The data were analyzed using the Statistical Package for Social Science (SPSS) version 24, with both descriptive and inferential statistical methods employed.

Results: The results indicated a wide range of opinions regarding online education during the COVID-19 pandemic. Most participants (73.8%) were aged 21–25, predominantly female (96.3%), with no prior e-learning experience (100%) and intermediate IT proficiency (84%). A significant majority (78.5%, n = 261) found online education more challenging than in-person learning, while a minority (43.4%, n = 144) felt they could contribute more during online classes. Regarding affordability, 18.8% (n = 63) of respondents found online learning more affordable, while nearly half (49.8%, n = 166) disagreed. Students were divided on the ease of studying theoretical content online, with 25.5% (n = 85) agreeing and 43.7% (n = 145) disagreeing. These findings reflect the diverse challenges and experiences of students during the transition to online education.

Conclusion: This study highlights several barriers to effective online learning for nursing students, including lack of motivation, technological resource constraints, limited IT proficiency, family distractions, and differing learning preferences. While online learning provided continuity during the pandemic, the study suggests addressing these barriers by offering professional development for educators, improving student communication, upgrading technological infrastructure, integrating clinical skills training, increasing access to online materials, enhancing support services, and promoting flexible learning options to better accommodate students' needs.

Keywords: Covid-19 Pandemic, Online Learning, Nursing Students, Perception, Barriers

Assess of Knowledge, Attitudes and Practice on Fast Food Consumption among Grade 9 and 10 School Children in Ampara MOH Area, Eastern Province, Sri Lanka

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Background: Factors such as taste, convenience, and marketing strategies contribute to the popularity of fast food among children. Despite concerns about their nutritional value, some guardians willingly incorporate readily available outside food into their children's diets. Addressing the complex factors driving fast food consumption is crucial for safeguarding children's health and well-being. This study aims to assess knowledge, attitudes and practices regarding fast food consumption among grade 9 and 10 students in the MOH area, Eastern province.

Methods: A descriptive, cross-sectional quantitative research approach is used in this study. An interviewer-administered questionnaire is administered to evaluate the fast-food consumption patterns, attitudes, and knowledge of Grade 9 and 10 students. The collected data were subsequently analyzed using descriptive analysis.

Results: A total of 200 students participated in the study. The majority were 14-year-olds, with a balanced gender distribution. About 33.5% were aware of a balanced diet, but limited knowledge of its nutritional value. The students had mixed attitudes towards fast food consumption, with 21% remaining neutral. Concerns about the long-term health effects of fast food were moderately high, with a combined 60% expressing some level of concern. Fast food consumption was frequent, with 22.5% eating it daily and 52.5% at least once a week. The study also states that factors such as social media promotions and emotional factors influenced fast food consumption.

Conclusion: The study reveals that adolescents' dietary behaviors and perceptions of fast food are influenced by various factors. While better-informed students adopt more cautious attitudes, gender and grade disparities also have an impact on dietary habits. Recommendations include enhanced nutritional education, promotion of healthy school meals, regulation of fast food marketing, community and parental engagement, and policy interventions like mandatory nutritional labelling and taxes on sugary beverages.

Keywords: Fast Food, School Children, Knowledge, Practices, Diet

Knowledge Attitude and Practices of Colorectal Cancer among Adult Patients Visiting the Oncology Clinic of Teaching Hospital Jaffna in Sri Lanka.

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Background: Colorectal cancer (CRC) is a significant health concern globally, including in Sri Lanka. Early detection through screening plays a vital role in improving treatment outcomes and reducing mortality rates. However, various factors, including knowledge gaps, social stigma, and fear, can hinder screening uptake. The primary objective of the research is to describe the knowledge, attitude and practices of colorectal cancer among adult patients who visit the oncology clinic in Teaching Hospital Jaffna.

Methodology: A descriptive, cross-sectional, quantitative study was carried out among 308 adult patients diagnosed with colorectal cancer and undergoing follow-up treatment at the oncology clinic of Teaching Hospital Jaffna. A self-administered questionnaire was developed and used to collect data. Data from the completed questionnaires were entered into a database using Microsoft Excel. Descriptive statistics were used to describe the study sample and identify patterns.

Results: The data was collected from 308 participants. The majority of participants were female (56%) and fell within the age range of 50 to 60 years old (37.33%). A small percentage (11.65%) of participants reported a history of colorectal cancer. While 74.66% of participants demonstrated adequate general knowledge about CRC, a significant portion (58.33%) lacked awareness regarding screening procedures. A majority (73.66%) understood the purpose of colorectal cancer screening. Only a small percentage (5%) believed that screening tests could diagnose colorectal cancer with 100% accuracy. A large portion (72.66%, n=218) reported experiencing social stigma or anticipated it if they underwent screening due to various reasons. Most participants (86%, n=258) were at the clinic for follow-up care and had previously undergone screening.

Conclusion: The primary conclusion of the study is that while there is a moderate level of general knowledge about colorectal cancer among participants, there is a significant need to improve awareness and understanding of colorectal cancer screening. Social stigma, fear, lack of awareness and access remain significant obstacles to screening uptake targeted educational campaigns, community outreach programs, and culturally sensitive interventions can be implemented which will encourage more individuals to participate in colorectal cancer screening

Keywords: Colorectal Cancer, Attitude, Knowledge, Practices, Screening

Stigma Associated with Drug Use Disorders and Interventions for Stigma Reduction

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Background: People with drug use disorders (DUDs) struggle to recover due to stigma. DUD sufferers encounter social marginalization, discrimination, and internalized shame due to this stigma. Improving treatment outcomes and creating a supportive recovery environment requires addressing this stigma. Worldwide, cost-effective drug abuse prevention methods for vulnerable populations like teens have been implemented. These methods include culturally sensitive social interventions and therapy. Drug addiction has individual, environmental, and substance-specific causes, according to research. Teens are more likely to start using drugs due to a lack of awareness and unsafe situations, according to research. Stigma impairs mental and physical health, treatment adherence, and quality of life.

Method: A comprehensive literature search was conducted using databases such as MEDLINE, EMBASE, PsycINFO, CINAHL, Web of Science, EBM Reviews, and the Cochrane Database of Systematic Reviews. Studies published between 2014 and 2024 were included, focusing on interventions targeting stigma related to DUDs. The inclusion criteria encompassed peer-reviewed articles in English involving human subjects with both quantitative and qualitative outcomes. Data were extracted and analyzed using a standardized template, and the methodological quality of the studies was assessed using the Cochrane Risk of Bias Tool.

Results: The review identified various interventions, including cognitive-behavioral therapies, group counseling, educational programs, and public awareness campaigns, as effective in reducing stigma. These interventions showed significant improvements in treatment adherence, psychological wellbeing, and overall quality of life for individuals with DUDs. Culturally sensitive and multifaceted approaches were found to be particularly effective in addressing stigma at multiple levels, including self-stigma, social stigma, and structural stigma.

Conclusion: Stigma reduction must be culturally sensitive and multidimensional, according to the findings. Effective tactics boost treatment adherence, psychological well-being, and social compassion for DUD patients. This detailed analysis helps policymakers, healthcare professionals, and researchers promote evidence-based stigma-fighting and healing programs.

Keywords: Drug Use Disorders, Interventions, Stigma Reduction

Assess Knowledge, Attitude and Practice Towards Palliative Care Among Grade III Nursing Officers At Teaching Hospital – Jaffna

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Background : Palliative care is essential for patients with serious, life-limiting illnesses, focusing on symptom relief and improving the quality of life for both patients and their families. With the rising incidence of cancer and chronic diseases in South Asia, the demand for palliative care is increasing. Grade III nursing officers play a critical role in providing care, and understanding their knowledge, attitudes, and practices (KAP) regarding palliative care is crucial for improving patient outcomes.

Methods : A cross-sectional study was conducted among 73 randomly selected Grade III nursing officers (n = 73) at the Teaching Hospital, Jaffna, Sri Lanka. Data were collected using a structured, pre-tested questionnaire that covered knowledge, attitudes, and practices related to palliative care, including pain management, psychological support, and the barriers they face. Descriptive statistics were used for data analysis, and the results were presented through charts and tables using Excel software.

Results : The study found that 46.7% (n = 34) of nursing officers identified caregiving as their primary role in palliative care, while others recognized themselves as health advocates (20%, n = 15) and facilitators (13.3%, n = 10). The majority of participants (82%, n = 60) regularly practiced pain management, and 13.7% (n = 10) provided psychological support. However, 65% (n = 48) reported inadequate facilities, and 50% (n = 37) noted limited resources as barriers to delivering optimal care. Despite these challenges, nursing officers demonstrated a good understanding of the importance of palliative care, with 20.5% (n = 15) emphasizing the need for improved care for terminally ill patients.

Conclusion : Grade III nursing officers at Teaching Hospital, Jaffna, possess a positive attitude and sound knowledge of palliative care, particularly in pain management and psychological support. However, inadequate facilities and limited resources remain significant barriers to delivering high-quality care. Addressing these issues through resource allocation and enhanced training could improve palliative care services.

Keywords : Palliative care, Knowledge, Attitude, Practice, Nursing officers, Pain management, Healthcare

Factors Influencing Nurse's Attitudes Toward Patients with Mental Illness in Sri Lanka

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Background: Sri Lanka faces significant challenges in mental health care, with 5-10% of the population requiring attention. Limited resources and a shortage of trained professionals hinder the delivery of adequate care. Nurses' attitudes toward mental illness are influenced by factors such as education, personal experiences, cultural beliefs, workplace environment, and available resources. This study aimed to assess the factors influencing nurses' attitudes toward patients with mental illness in Sri Lanka.

Methods: This descriptive cross-sectional study was conducted among 90 nurses (N = 90) working at the National Institute of Mental Health (NIMH) in Sri Lanka. A self-administered questionnaire, adapted from an existing validated scale, was used to collect data. The questionnaire covered demographic information, clinical factors, personal experiences, and work-related factors potentially affecting nurses' attitudes. Data were analyzed using SPSS software (version 24), employing descriptive statistics such as frequencies and percentages.

Results: The study revealed that the majority of participants (89.9%, n = 81) were female and over the age of 30. Most respondents (77.3%, n = 69) held a degree, and 82.8% (n = 74) had more than four years of experience in mental health nursing. The analysis showed that 50.5% (n = 45) of nurses believed that working with mentally ill patients is similar to working with other patient groups, but 49% (n = 44) did not find the work rewarding. Furthermore, 77.8% (n = 70) considered mental illness a sign of personal failure. Regarding treatment standards, 49% (n = 44) agreed that standardized care is applied, while 31% (n = 28) disagreed. Uncertainty was also prevalent, with 79.8% (n = 72) unsure if treating mentally ill patients posed any danger. Despite these attitudes, 48% (n = 43) of the nurses expressed commitment to the field, while 32.8% (n = 30) considered changing careers.

Conclusion: The findings highlight the significant influence of education, training, and workplace environment on nurses' attitudes toward mental illness. The study underscores the importance of addressing these factors to improve mental health care in Sri Lanka. Interventions targeting stigma reduction and enhancing training programs could help foster more positive attitudes among nurses and improve patient outcomes.

Keywords: Mental Illness, Sri Lanka, Attitudes, Factors, Patients, Nurses

Prevalence and Factors Associated with Lost to Follow-Up among Tuberculosis (Tb) Patients in Colombo District

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Background: Lost to follow-up (LTFU) during tuberculosis (TB) treatment is a significant obstacle to TB control programmes globally. It increases the risk of treatment failure, disease relapse, and the development of drug-resistant TB. Understanding the factors associated with LTFU is crucial for developing targeted interventions to improve treatment adherence and achieve better treatment outcomes. This study aims to investigate the prevalence of and factors associated with LTFU among TB patients in Colombo District, Sri Lanka.

Methods: This descriptive, cross-sectional study was conducted at the Colombo Central Chest Clinic, Sri Lanka, from 1 July 2023 to 30 September 2023. All registered TB patients visiting the clinic during this period were included in the study. Data were collected using an interviewer-administered questionnaire via telephone conversations with TB patients. The questionnaire included sections on socio-demographic factors, healthcare provider-related factors, socio-economic factors, patient-related factors (knowledge), and healthcare system-related factors. Data were analyzed using descriptive statistics and Chi-square analysis with SPSS version 26.

Results: The findings revealed that 51.9% of tuberculosis (TB) patients were between the ages of 50 and 60, making it the most impacted demographic, followed by those aged 60-70 years at 15.6% and 30-40 years at 14.9%. In terms of gender, male patients represented 46.8%, while female patients made up 39.6%. Looking at ethnicity, the largest group consisted of Sinhalese at 60.4%, followed by Sri Lankan Tamils at 15.6% and Indian Tamils at 12.3%. Regarding employment status, 39.6% of the patients were unemployed, which could affect their adherence to treatment. The study reported a notable treatment success rate of 82%, which is higher compared to other regions. However, 20% of the patients experienced delays in starting treatment, pointing to operational challenges that require attention.

Conclusion: The study is expected to provide valuable insights into the prevalence of and factors associated with LTFU among TB patients in Colombo District. The findings will be used to develop targeted interventions and strategies to improve patient retention in TB care, enhance treatment adherence, and contribute to better treatment outcomes. These efforts are crucial for achieving the ultimate goal of TB control and elimination in the region.

Keywords: Tuberculosis, Lost to Follow-Up, Prevalence, Factors, Colombo District

Knowledge, Attitudes and Practices regarding foot care among type 2 Diabetes Mellitus patients in a selected MOH area in Gampaha District.

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Background: The study explores foot care knowledge and attitudes among diabetic patients in Gampaha District, Sri Lanka. It reveals significant knowledge gaps, with 48.5% lacking awareness of personal foot hygiene and 25% not knowing how to cut nails. Despite these, 75% expressed willingness to engage in self-care practices. Targeted educational strategies are needed to reduce complications.

Methods: This quantitative descriptive cross-sectional study aimed to assess the knowledge, attitudes, and practices regarding foot care among type 2 Diabetes Mellitus (DM) patients in the MOH area of Gampaha District, Sri Lanka, from April to May 2022. Ethical approval was obtained from the IIHS Ethical Review Committee. The study involved 239. A sample size of 160 was determined through convenience sampling. A Sinhala-based questionnaire was used to collect data on diabetic foot care practices. Face-to-face interviews were conducted by nursing officers. Data analysis was performed using SPSS, with descriptive statistics used for knowledge scores. Ethical considerations included informed consent.

Results: The study, conducted between April and May 2022, analyzed knowledge, attitudes, and practices of 160 diabetic foot self-care patients in Gampaha District, Sri Lanka, primarily male (62.5%), aged 56-65 years (50%), and married (75%), from a routine medical clinic. The study found that 95.42% of patients had good knowledge of diabetic foot care, largely due to effective healthcare interventions. Despite having a lot of knowledge, there is poor adherence to foot care procedures. Knowledgeable patients have little confidence when it comes to taking care of their feet. Failure to follow medical specialists' recommendations for foot care. However, only 45.88% showed good practices and many patients had poor attitudes towards foot care. The study reveals that despite having a good understanding of diabetic foot care, patients often lack practical application, highlighting the need for improved educational programs and regular screenings to enhance self-care practices and reduce foot ulcers.

Conclusion: a large percentage of diabetic patients experienced foot ulcers or infections despite having good knowledge of foot care practices, due to financial, cultural, and cultural barriers. Enhanced patient education and support can improve foot care practices.

Keywords: Diabetes Mellitus, Diabetic Foot Ulcers, Quantitative Study, Knowledge, Gampaha District

Factors Influencing Job Satisfaction of Nurses among Thaa Atoll Hospital, Maldives

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Background: Job satisfaction among nurses is crucial for ensuring quality healthcare delivery and positive patient outcomes. Understanding the factors that contribute to job satisfaction is essential for healthcare organizations to attract and retain qualified nurses. This study explores the factors influencing job satisfaction among nurses working at Thaa Atoll Hospital in the Maldives.

Methods: This descriptive cross-sectional study involved 140 nurses working at Thaa Atoll Hospital, selected through a simple random sampling method. Data was collected using a self-administered questionnaire incorporating demographic details and assessing job satisfaction across various aspects of their work environment. The questionnaire measured factors such as workload, resources, relationships with colleagues and management, opportunities for professional development, and work-life balance. Data was analyzed using descriptive statistics and Chi-square tests using SPSS version 26.

Results: Of the 140 participating nurses, 94.28% completed the questionnaire. The study found that the nurses' job satisfaction was significantly associated with factors such as workload (p=0.001), availability of resources (p=0.003), and opportunities for professional development (p=0.023). Nurses experiencing high workload and limited resources reported lower levels of job satisfaction. Additionally, nurses with access to professional development opportunities and supportive relationships with colleagues and management reported higher job satisfaction levels.

Conclusion: The findings of this study highlight the importance of addressing workload management, resource allocation, and professional development opportunities to improve job satisfaction among nurses at Thaa Atoll Hospital. Creating a supportive work environment that fosters positive relationships and provides avenues for growth can contribute to increased job satisfaction, ultimately benefiting both nurses and the quality of healthcare provided.

Keywords: Job Satisfaction, Nurses, Thaa Atoll Hospital, Maldives, Factors

Knowledge, Attitudes, and Practices on Prenatal Care Among Primi-Pregnant Mothers Attending to Antenatal Clinic in General Hospital Sri Jayewardenepura

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Background: Identifying and addressing prenatal and postnatal health issues is important to determine a healthy pregnancy and reproductive life. Antenatal care (ANC) is the medical evaluation of the mother and baby during pregnancy to achieve an optimal outcome for the mother and baby. Proper prenatal care is an effective method to reduce maternal and child morbidity and mortality. ANC enhances maternal and fetal health by providing screening, counseling, treatment, and continuous monitoring. This study aims to assess the knowledge, attitudes, and practices on prenatal care among primi-pregnant mothers attending to the antenatal clinic at General Hospital, Sri Jayewardenepura (SJGH).

Methods: A descriptive cross-sectional survey was conducted with 144 primi-mothers selected through convenience sampling. Data was collected using a self-administered questionnaire and the SF-36 standardized questionnaire to measure knowledge, attitudes, and practices. SPSS was used for data analysis, and ethical clearance was obtained from the Ethics Review Committee of SJGH.

Results: All three independent variables tested in the current study showed a positive strong relationship with the dependent variable implying knowledge, practice of antenatal care, and attitudes towards antenatal care positively impact the awareness of antenatal care. The study analyzed data from 144 respondents, revealing high reliability (Cronbach's alpha = 0.987) in measurement scales. Demographic analysis showed 52% aged 30-40, with a majority holding higher education. Most respondents were housewives (41%), indicating a need for targeted outreach in ANC clinics. Language and cultural barriers were also assessed The findings suggest that enhancing knowledge and fostering positive attitudes toward prenatal care can lead to improved practices among expectant mothers.

Conclusion: The current level of care for pregnant mothers is favorable. It is recommended that future studies expand to other hospitals with randomly selected respondents to enhance generalizability.

Keywords: Pregnancy, Knowledge, Attitude, Practice, Prenatal Care

Factors Affecting Job Satisfaction Among Nurses in Teaching Hospital, Anuradhapura

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Background: Job satisfaction is crucial for healthcare workers as it influences organizational development, employee well-being, and the quality of patient care. This study aims to investigate the factors that affect job satisfaction among nurses, using the KUHJSS scale to measure satisfaction levels. Given the WHO's projection that by 2050, the global population aged 60 and above will nearly double from 12% to 22%, the demand for nurses is expected to rise significantly. Understanding job satisfaction is therefore vital to retain nursing staff. Supportive leadership, effective communication, psychological rewards, and recognition are known to play key roles in enhancing job satisfaction.

Methods: This study employs a cross-sectional descriptive design. The target population consists of 1000 nurses, with data collected from 120 responses via a self-administered, pre-tested questionnaire comprising 50 items. The KUHJSS scale was used to measure job satisfaction. Data were analyzed using SPSS version 21 software, utilizing descriptive analysis, cross-tabulation, regression, and bivariate analysis methods.

Results: The study revealed significant associations between job satisfaction and factors such as nursing service, age, and leadership style. Supportive leadership, including effective communication and recognition, was found to have a statistically significant relationship with job satisfaction levels. Overall, 75% of the nurses reported high satisfaction, 15% were moderately satisfied, and 12% were dissatisfied with their jobs.

Conclusion: In conclusion, this study reveals a significant prevalence of psychological stress among nursing students at the Nursing Training School in Kurunegala, primarily driven by academic stressors. Notably, first-year students face higher personal and environmental stress, while third-year students report increased academic and clinical pressures. Female students experience greater stress than males, and those living in hostels report higher stress levels compared to their peers. These findings highlight the need for targeted interventions, such as orientation programs and counseling services, to help students manage their stress effectively and improve their overall educational experience.

Keywords: Job Satisfaction, Nursing, KUHJSS, Leadership, Healthcare

Assess Stress and Stressors among first-year nursing students in their clinical practice at the College of Nursing, Jaffna

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Background : First-year nursing students often face considerable stress during their clinical practice, which can adversely affect their academic performance, mental well-being, and long-term career success. Identifying the specific stressors that students encounter during this critical transition period is essential for creating effective support systems that enhance their learning experience and well-being. This study aimed to assess the stress levels and identify the key stressors experienced by first-year nursing students at the College of Nursing, Jaffna.

Methods : A cross-sectional study was conducted among 30 randomly selected first-year nursing students (n = 30) from the 2020 "A" batch at the College of Nursing, Jaffna. Data were collected through a structured, pre-tested questionnaire distributed via Google Forms, which included the Perceived Stress Scale (PSS) to measure stress levels and the Nursing Student Stressor Questionnaire (NSSQ) to identify contributing stressors. Data were analyzed using descriptive statistics, and the results were presented using pie charts and frequency distributions.

Results : The study revealed that a majority of the students experienced stress during their clinical practice. 76.7% (n = 23) of respondents reported feeling upset by unexpected events, and 50% (n = 15) expressed feeling unable to control important aspects of their lives. Additionally, 60% (n = 18) reported feeling nervous and stressed at least sometimes over the past month. Key stressors included workload and time pressure (46.7%, n = 14), lack of support from clinical staff (43.3%, n = 13), and dealing with patient suffering and death (53.3%, n = 16). Other contributing factors were poor interpersonal relationships, academic pressures, unfamiliar clinical environments, and the stress of being evaluated by clinical instructors.

Conclusion : The findings confirm that first-year nursing students at the College of Nursing, Jaffna, experience significant stress, with key stressors being workload, lack of support, and emotional challenges related to patient care. To mitigate these stressors, the implementation of stress management workshops, mentorship programs, peer support groups, and enhanced communication with clinical instructors is recommended. Future research should focus on assessing the effectiveness of these interventions in supporting student well-being and preparing them for their future nursing careers.

Keywords: Stress, Nursing Students, Clinical Practice, Stressors, Jaffna

Assess on Knowledge and Practices of First Aid in Road Traffic Accident Emergencies Among Three-wheel Drivers in Kalutara Town

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Background: Road traffic accidents are a significant cause of death and injury globally, with developing countries disproportionately affected. Any delay in medical care during a life-threatening situation can have catastrophic results. Without sustained action, road traffic crashes are predicted to become the seventh leading cause of death by 2030. This study assessed the first aid knowledge and practices of three-wheel drivers in Kalutara Town, Sri Lanka, considering their potential role as first responders at accident scenes.

Method: The study employed a quantitative descriptive cross-sectional design to assess the first aid knowledge and practices of three-wheel drivers in Kalutara Town, Sri Lanka. Data were collected through a self-administered questionnaire, which included four sections: demographic data, first aid knowledge, first aid practices, and critical thinking.

Results: A majority of the participants (95%) knew the emergency hotline, and 88% knew the best area to measure the pulse. 35% of the participants had been given first aid training, and 15% of them believed that they had the ability to perform first aid in an emergency situation. 75% knew how to temporarily arrest bleeding, 85% were aware of the first aid required for spinal cord injuries, 84% knew the treatment required for silencer-acquired burns. In a case of inhalation of harmful gasses, 72% of participants knew to immediately take the victim out to fresh air. 70% knew the identifying signs of head injury, with 75% of respondents choosing to keep the head in a lowered position. As for specific first aid practices, 50% of participants were aware of first aid given to limb fractures, 78% knew first aid performed for eye injuries, and 65% knew first aid for ear bleeding.

Conclusion: In Sri Lanka, most of the deaths that occur due to road traffic accidents happen during the time the victims are transported from the site of the accident to the hospital. In cases related to trauma, the "Golden Hour" is essential in determining the rate of recovery of the patient. If vehicle drivers possessed training for first aid, the rate of deaths occurring from RTAs can possibly be reduced.

Keywords: Road Traffic Accident, First Aid, Three-Wheel Drivers, Knowledge, Emergencies

Knowledge And Practices of Using Contraceptive Methods Among Married Women In Child Bearing Age In Wathukolakanda Public Health Midwife Area, Matara District, Sri Lanka.

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Background: Contraception, or family planning, is an effective measure to control population growth and maintain reproductive health. However, minimal usage of contraceptives contributes to expensive population growth. Uncontrolled population growth places significant strain on the economy, resources, and labor force in many developing nations. Effective use of contraception can empower women and girls by providing them with greater autonomy and control over their reproductive health and future. Therefore this study aims to identify knowledge and practice of the usage of contraceptive methods among married women in the Wathukolakanda PHM area, Matara District, Sri Lanka.

Methods: The study approach and design are quantitative approaches and descriptive design. 351 married women of childbearing age (18-49 yrs.) were recruited by purposive sampling from the Wathukolakanda PHM area taken as sample. After taking informed written consent participants completed an interviewer-administered questionnaire regarding knowledge and practice of contraceptive methods.

Results: A total of 351 married women aged 18 to 49 years participated for the study with the majority being between the age of 35 and 49. The majority had primary, secondary, or higher education and were housewives. Most had two or three children. The study found that all of the respondents know at least one modern contraceptive method, with most aware of oral pills and IUD. Female condoms were less well-known. Satisfaction levels on the current method of both women and spouses were good on average. According to the study while the majority of using modern methods 3.5% were practicing traditional methods. The respondents have chosen expecting pregnancy, currently being pregnant (18.8%), lactation amenorrhea (14.7%), fear of side effects(11%), and preferring traditional methods(10.2%) as reasons for not using contraceptives. The majority of women (42.35%) did not experience any side effects of contraceptives while some experienced side effects such as amenorrhea, irregular menstruation and fatigue.

Conclusion: While the respondents exhibited a solid understanding of contraceptive methods, their actual practice, particularly in terms of usage, remains moderate. Therefore, ongoing education and research are crucial to improving both knowledge and practice.

Keywords: Contraceptive Methods, Knowledge, Practices, Married Women, Child Bearing Age

Knowledge, Attitudes, Practices and Associated Factors towards Palliative Care among the Nurses at National Hospital Kandy

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Background: Palliative care is a crucial aspect of healthcare that focuses on improving the quality of life for patients facing serious and life-limiting illnesses. Nurses play a vital role in providing palliative care, as they are often the primary caregivers who address patients' physical, emotional, and spiritual needs. The objective of the study is to assess knowledge, attitudes, practices and associated factors related to Palliative Care among Nurses who are working in National Hospital Kandy, Kandy district, Sri Lanka.

Methods: A pre-tested, self-administered questionnaire consisting of five parts was used to collect data. The sample size was 428, and a convenient sampling technique was used to recruit the participants. The collected data were analyzed using the statistical software SPSS 26.0.

Results: The study included 428 nurses from various units at National Hospital Kandy Most nurses were female (89%) and aged 35-45 years (39%), with 80% holding diploma-level qualifications. The study assessed their knowledge, attitudes, and practices regarding palliative care. While 90.2% were aware of palliative care, only 44.9% had formal training, and the average knowledge score was moderate (10.4/20). Misconceptions, such as believing palliative care destroys hope, were common. Attitudes were generally positive, with 87.95/107 on average, though 31% thought families should be sheltered from a patient's declining condition. In practice, 78.3% of nurses regularly helped patients prepare for death, and 91.8% attended to the psychological needs of families. However, factors like religious beliefs, poor resources, and delays in diagnosis affected nurses' ability to provide palliative care. Overall, 55% demonstrated good practices, indicating room for improvement in training and resources.

knowledge.

Conclusion: The findings highlight the importance of addressing conflicts related to religious/spiritual beliefs and resource limitations in delivering quality palliative care. Furthermore, it provides valuable insights into the knowledge, attitudes, and practices of nurses regarding palliative care at National Hospital in Kandy, Sri Lanka.

Keywords: Palliative Care, Knowledge, Attitudes, Practices, Nurses

Assessment of Knowledge, Attitude, and Practices of Women towards Breast Cancer in Bope-Poddala MOH Area of Sri Lanka

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Background: Adequate risk factor awareness and risk reduction strategies are critical for primary breast cancer prevention. Unfortunately, there is a lack of measures in place to promote cancer prevention awareness, screening, and early diagnosis in Sri Lanka. As a result, this study was carried out to determine the level of knowledge about breast cancer, early detection methods, and treatment in the Bope-Poddala MOH area of Sri Lanka.

Methods: A descriptive cross-sectional study was conducted to assess knowledge of breast cancer and self-breast examination among 410 women in the Bope Poddala MOH area, Galle district, Sri Lanka. A self-administered questionnaire was used to gather socio-demographic data and information on breast cancer knowledge. The questionnaire included 22 questions covering risk factors, signs, symptoms, treatments, prevention, and self-breast examination awareness. Data were analyzed using descriptive statistics in Microsoft Excel, and presented with bar graphs, pie charts, and summary tables. Inferential statistics, including chi-square tests, were used to assess associations between variables.

Results: The majority of the respondents were between the ages of 30 - 40(45%), with 91% being married. Income level of 37% of respondents were between Rs.20,000 - 30,000, and 41% had the educational level up to Ordinary Level (O/L). 61.95% of participants had a low knowledge of the risk factors of breast cancer. 70.48% were aware that a lump in the breast is a symptom. Swelling of the lymph nodes under the arms or around the neck was seen as a symptom in 16.09% of respondents. Most people 45.6% believed that family history was a risk factor for breast cancer, while 9.58% believed that lack of exercise was a risk factor. When examining the knowledge of cancer prevention, it was found that most people have moderate knowledge which is 41.21%. The knowledge of breast self-examination among the respondents was shown at 56.34%.

Conclusion: Action and education should be taken to promote breast screening methods for cancer prevention in Sri Lanka. It is recommended that health education be increased in order to avoid the identified modifiable risk factors.

Keywords: Breast Cancer, Self-Breast Examination, Awareness, Knowledge, Attitude

Assess the Level of Knowledge, Attitudes, and Preventive Practices Towards Childhood Obesity Among Parents in the Meerigama MOH

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Background: Childhood obesity has reached epidemic levels in developed as well as in developing countries. It has both immediate and continuing health outcomes. Obese children are at risk of developing several medical conditions, as well as psychological conditions. Unfortunately, most obese children and youth do not outgrow their weight problems. Most people continue to gain weight as they age. The aims of the study were to assess the knowledge, attitude and preventive practices towards childhood obesity among parents.

Methods: A descriptive, cross-sectional study was conducted at the pediatric immunization clinic in the Meerigama MOH to assess parents' knowledge, attitudes, and practices regarding childhood obesity. A pre-tested, self-administered questionnaire consisting of 29 questions was distributed to 216 parents. The questionnaire, developed from a literature review and validated by the supervisor, covered four sections: demographic data, knowledge, attitudes, and practices. The responses were entered into a data entry template and analyzed using Microsoft Excel, with summary tables and charts for description.

Results: The survey revealed that knowledge, attitude and practices are good for parents when it comes to childhood obesity. The research showed nearly equal gender distribution among children, with most aged 4-5 years. 54.375% had a normal BMI, and 16.25% were underweight. Parental education positively influenced knowledge, attitudes, and practices, with 53.75% displaying good knowledge of childhood obesity. 76.25% disagreed that obese children are healthy, 75% viewed obesity as a serious issue, and 80% supported physical activity. Additionally, 81.25% practiced good health habits, and 96.25% rejected artificial food as healthy.

Conclusion: It showed that a good attitude is related to higher knowledge and best practices, but high knowledge does not mean it has good practices. These findings may be useful in targeting programs and strategies for preventing and intervention of childhood obesity. Education levels significantly influenced these factors. The study highlights the importance of continued awareness and education to prevent childhood obesity and promote healthier lifestyles for children.

Keywords Parents, Childhood Obesity, Knowledge, Attitude, Preventive Practices

Factors Influencing Stress Among Teenagers at a School in Kegalle District, Sri Lanka

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Background: Stress is a psychological and physiological response to external and internal stressors. Among school students, stress is often related to academic pressure, poor time management, and changes in lifestyle habits. Globally, stress among teenagers has been associated with personal, school environmental, and social factors. The World Health Organization (WHO) highlights stress as a key factor in mental health problems among adolescents, which can negatively impact academic performance and personal well-being. This study aims to identify factors influencing stress among teenagers in a school in Kegalle District, Sri Lanka, focusing on personal, school environmental, and social factors.

Methods: With a sample of 100 pupils in grades 9 through 13, Ke/Mawa Gabbala Sirisangabo Maha Vidyalaya carried out this cross-sectional quantitative study. The sample was representative for all demographic factors, including age and gender, which were also included. A standardized self-administered questionnaire with sections on social, school environmental, and personal stress variables was used to gather data. To summarize the results, the statistical analysis involved computing the mean, standard deviation, and percentage distribution. To verify the questionnaire's reliability, Cronbach's alpha was computed, and the result was a respectable score of 0.85.

Results: The study's findings showed that among youths in the Kegalle District, personal causes accounted for the majority of stress. Sixty-seven percent of students reported experiencing stress as a result of sleep deprivation, with an average stress rating of 4.1 out of 5. Another significant source of stress for 53% of the students was family income, with an average score of 3.8; personal illness caused stress for 28% of the students, with an average score of 3.5. When it comes to aspects of the school environment, 42% of the kids voiced discontent, which moderately raised their stress levels (mean score = 3.2). Another significant stressor that affected 55% of the kids and had a mean score of 3.7 was extracurricular pressures. Social variables also came into play.

Conclusion: The results indicate that the main causes of stress among youths in the Kegalle District are personal problems, including sleep deprivation and financial strain. Even if they are less common, the school environment and social variables can nonetheless significantly exacerbate stress. It is advised to use targeted interventions including financial counseling for families and sleep management programs. Furthermore, if offered at school, 76% of students said they would be open to taking part in stress-reduction activities. To find out how these stressors affect long-term mental health and academic performance, more research is required.

Keywords: Teenagers, Stress, Personal Factors, School Environment, Social Factors

Knowledge and Practices of Standard Precautions Among Nurses in General Hospital Trincomalee

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Background: The study evaluates the knowledge and adherence to Standard Precautions among nurses at the General Hospital in Trincomalee, Sri Lanka, aiming to identify gaps that could compromise patient safety. The demographic analysis revealed alignment with global nursing trends, including gender distribution, age, and educational background, which provides a robust foundation for comparison with other international studies. Standard Precautions are essential in maintaining a safe environment for both patients and healthcare workers. The findings provide insights into potential areas for improvement in infection prevention protocols and training programs, highlighting the critical role nurses play in infection control.

Methods: A cross-sectional study was conducted on 212 nurses at General Hospital, Trincomalee, using structured self-administered questionnaires to assess demographic data, knowledge, and practices related to Standard Precautions. The knowledge section included true/false questions to gauge understanding of infection control concepts, while the practice section assessed frequency of adherence to recommended precautions in clinical settings. The data was analyzed using descriptive statistics to identify patterns and correlations between demographic factors and infection control practices.

Results: The study found that 59.43% of nurses had good knowledge of Standard Precautions, including hand hygiene, PPE use, and sharps handling. However, 29.24% had moderate knowledge, with misconceptions about the scope of precautions. 11.32% showed poor knowledge, indicating a need for educational interventions. 19.34% consistently adhered to good practices, such as hand washing and glove usage. However, 66.99% had moderate adherence, especially in high-pressure situations. A small portion (13.67%) showed poor practices, potentially increasing the risk of nosocomial infections for themselves and their patients.

Conclusion: The study highlights the need for continuous education and training to improve knowledge-practice gaps among nurses at General Hospital, Trincomalee. Although many nurses have good knowledge and adhere to Standard Precautions, misconceptions persist. Emphasis should be placed on needle safety and hand hygiene. Regular training, practical workshops, and real-time feedback mechanisms are crucial for maintaining infection control practices. Addressing these gaps can create a safer environment for patients and providers, reducing healthcare-associated infections.

Keywords: Standard Precautions, Infection Control, Nurses, Knowledge, Practices

Awareness on Osteoarthritis among Housewives in Grama Niladhari Division, Halpita in Kesbewa Electorate in Sri Lanka

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Background: Osteoarthritis (OA)is a prevalent musculoskeletal disorder impacting millions globally, primarily women and older adults. Characterized by joint cartilage degeneration, it leads to pain, stiffness, and diminished mobility, significantly affecting quality of life. Although osteoarthritis cannot be cured, treatment can help reduce symptoms and minimize joint destruction and other complications. Treatment can include a combination of medication, physical therapy, and lifestyle modifications. Despite its impact, awareness and understanding of OA, especially among housewives, remains a concern. The primary objective of this study is to evaluate the awareness of OA among housewives in the Grama Niladhari Division, Halpita, Kesbewa Electorate in Sri Lanka, focusing on their knowledge of risk factors, causes, and available treatments.

Methods: A descriptive cross-sectional design was used to explore the housewives' knowledge on Osteoarthritis in Halpita Grama Niladahari divisions in the Kesbewa electorate. Data is collected through a pre-tested, self-administered questionnaire encompassing demographics, knowledge about OA risk factors and causes, and perceptions about treatment and prevention.

Results: The study surveyed 48 housewives over 50 years old, with 38% being O/L passed and 35% A/L passed. Most were educated until grade 8, with 3% being graduated and 5% holding diplomas. The study found a significant lack of awareness about OA among the participants. 78% of the housewives were unaware of what arthritis is. Over half of the participants experienced discomfort or pain in their knees, hips, back, or fingers. A majority lacked knowledge about OA risk factors, causes, and complications.

Conclusion: This study underscores the need for targeted health education programs for housewives in Sri Lanka to enhance their understanding of OA. Disseminating information about risk factors and early symptoms, and seeking timely medical advice is crucial. Utilizing accessible mediums like television and community outreach programs can effectively reach this demographic and empower them to manage their health better.

Keywords: Awareness, Osteoarthritis, Housewives

The Knowledge and Practice of Infection Control Among Nurses at Base Hospital Medirigiriya of Sri Lanka

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Background: Infection control measures, particularly hand hygiene, are vital for reducing healthcareassociated infections (HAIs) in hospitals. This study aims to assess the knowledge and practices regarding infection control among nurses at Base Hospital Medirigiriya. The objective is to identify gaps between knowledge and practice, focusing on hand hygiene and compliance with infection prevention protocols.

Methods: A cross-sectional descriptive study was conducted among 100 nurses working in the medical and surgical wards of Base Hospital Medirigiriya. Convenience sampling was used, and data were collected via a structured self-administered questionnaire assessing knowledge, attitudes, and practices (KAP). The data were analysed using SPSS with descriptive and inferential statistics.

Results: The study found a significant gap between knowledge and practice of infection control. While 85% of the nurses demonstrated good knowledge, only 70% consistently followed hand hygiene protocols. Compliance was higher in the surgical ward (80%) than in the medical ward (60%). Factors affecting compliance included workload and availability of resources.

Conclusion: There is a need for enhanced training and stricter monitoring to bridge the gap between knowledge and practice. The surgical wards demonstrated higher compliance, possibly due to heightened risk awareness. The findings emphasize the need for targeted interventions such as regular audits, feedback, and continuous education to improve infection control practices across all wards.

Keywords: Infection Control, Hand hygiene, Compliance, Nosocomial Infections, Nursing Practices

Factors Influencing on Level of Knowledge among Patients with Diabetes in Male, Maldives

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Background: Diabetes is a rapidly growing global health issue, with the Maldives experiencing an alarming rise in prevalence, particularly in its capital, Male'. Effective management of diabetes hinges on patients' understanding of the disease, including its risk factors, symptoms, complications, and self-care strategies. However, there is limited insight into how well diabetic patients in Male' understand their condition. This study seeks to evaluate the level of knowledge among diabetic patients attending outpatient clinics in Male' and identify gaps that could hinder effective disease control and prevention.

Methods: A cross-sectional study was conducted, utilizing consecutive sampling to gather a diverse group of diabetic patients in Male. A validated, interview-administered questionnaire was employed to assess participants' demographic information and their knowledge of diabetes mellitus. SPSS was used to analyze the data.

Results: The study found that nearly half of the participants had a clear understanding of diabetes mellitus, and almost half of the population was aware of it through healthcare workers. The majority of participants had a family history of diabetes, with 70.7% believing it was a condition of high blood sugar levels. The demographic data showed that 57% were females and 43% were males. The majority of participants were married, with 58% being married. The majority of participants were diagnosed with diabetes, with 54% diagnosed within 1 to 5 years and 27% within 5 to 10 years. Most participants were aware of the signs, symptoms, and control management of diabetes. The study aimed to understand the importance of lifestyle modifications in controlling blood sugar levels among diabetic patients.

Conclusion: More awareness about complications and risk factors of diabetes is still required, so, it is encouraged to conduct programs and workshops on the education of diabetes mellitus.

Keywords: Diabetes, Level of Knowledge, Maldives, Prevalence

Prevalence and Impact of Stress on Job Satisfaction Among Private Sector Nurses

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Background: Stress is the state of worry or mental tension caused by a difficult situation. Nursing is naturally a job with increased work-related stress due to the increased workload, stressful work environment, and due to dealing with ill and dying patients. Nurses occupy more than 50% of healthcare workers. They are the professionals who work with patients mostly and are sometimes the only healthcare provider a patient will meet. The stress level of a nurse has various factors contributing to it and stress level has an impact on job satisfaction among nurses. Reducing stress levels will contribute to increased job satisfaction which will ultimately increase the quality of care delivered to a patient.

Methods: This study is a descriptive cross-sectional study in which, nurses working at private sector hospitals in Colombo district, Sri Lanka were the population. A previously validated standard questionnaire was used to collect data from the participants via an online platform. The questionnaire had three separate parts: one for demographic data, second one for perceived stress scale, and the third for job satisfaction survey.

Results: The study included 305 nurses from private hospitals in Colombo, Sri Lanka, with 70.5% female and 29.5% male participants. The study measured stress using the Perceived Stress Scale, with an average score of 18.85, indicating moderate stress. Female nurses reported slightly higher stress (19) than male nurses (18), while widowed nurses had the highest stress (26). Job satisfaction averaged 53.32, with higher satisfaction among nurses working less than 3 hours in their unit, those in outpatient departments, and unmarried nurses. Widowed nurses had the lowest satisfaction. Regression analysis revealed that stress explained 51.5% of the variance in job satisfaction, with a strong negative correlation (r = -0.398), showing that higher stress reduces job satisfaction.

Conclusion: The study stresses the need for more research in Sri Lanka, as local stress-causing factors may differ significantly from those in other countries. Understanding these differences is crucial for addressing unique challenges in the country. However, it is expected that the current findings will help implement strategies to reduce stress among Sri Lankan nurses to increase job satisfaction which will ultimately result in delivering quality patient care.

Keywords: Stress, Job Satisfaction, Private Sector, Work Load, Quality of Care

Impact of the Use of an Office Automation System on the Doctor to Decision Time in an Accident and Emergency Department

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Background: Accident and Emergency (A&E) departments are critical in providing timely care to a growing population. The speed at which critically ill patients receive initial care significantly impacts their prognosis. Among the various time periods a patient spends in the A&E, the doctor-to-decision time (DT) is crucial from a clinical standpoint. This study explores whether using an Office Automation System (OAS) to retrieve investigative results improves the decision-making process compared to a conventional Manual System (MS).

Methods: The study used a quantitative, descriptive, cross-sectional survey design to gather data. The researchers used convenience sampling to recruit 51 doctors working in private sector A&E departments in Colombo City, Sri Lanka from a planned sample size of 91.1234 Data was collected using a self-administered, close-ended questionnaire, written in English, delivered through Google Forms in March and April 2023.456 The questionnaire used a 5-point Likert Scale to assess doctors' perceptions of and preferences for using an OAS or MS in the A&E, focusing on impacts on decision time. Data was analyzed using SPSS version 21, employing both descriptive and inferential statistical methods, including parametric testing.

Results: The analysis revealed a statistically significant preference for using OAS (M = 4.33) over MS (M = 2.26), with an almost equal preference for an Electronic Document Management System (EDMS) and Telemedicine Video System (TVS). The use of OAS was significantly correlated with an improvement in DT, r(51) = .642, p = .000, indicating a strong positive impact (B = .75, p = .000). Conversely, MS showed a small negative impact on DT, though not statistically significant. Additionally, no significant differences were found in OAS use based on gender, age, or experience level (p > .05).

Conclusion: The findings indicate that clinicians, regardless of gender, age, or experience, significantly prefer using an OAS over an MS in A&E settings to enhance decision-making time, with equal preference for EDMS and TVS systems.

Keywords: Accident and Emergency, Doctor to Decision-making Time, Office Automation System, Manual System, Questionnaire

Incidence, Knowledge and Practices of Needle Stick Injuries among Third-Year Nursing Students in the School of Nursing in Kandana, Sri Lanka.

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Background : Needle Stick Injuries (NSIs) are a major occupational hazard for healthcare workers, including student nurses. Exposure to NSIs significantly increases the risk of transmitting blood-borne pathogens. However, the prevalence and factors associated with NSIs among nursing students in Sri Lanka remain underexplored. This study aimed to assess the incidence, knowledge, practices, and contributing factors of NSIs among third-year nursing students at the School of Nursing, Kandana, Sri Lanka.

Methods : A cross-sectional study was conducted among 235 third-year nursing students, selected through a non-random convenience sampling method. Data were collected using a structured, pre-tested self-administered questionnaire, which covered demographics, knowledge of NSIs, practices, and contributing factors. Statistical analysis, including descriptive statistics and correlation analyses, was performed using SPSS version 26.

Results : Out of 210 students who completed the questionnaire (response rate of 89.36%), 16.7% (n = 35) reported experiencing at least one needle stick injury in the past year, with most incidents involving a single occurrence. Self-inflicted injuries were the most common. Although 87.1% (n = 183) of students had received prior education on NSI prevention and demonstrated good knowledge, there was a negative correlation between knowledge and injury incidence. The study identified improper handling of sharp instruments as the leading cause of NSIs, followed by time constraints (20%), lack of proper assistance (8.57%), and limited experience (14.28%). While students generally demonstrated adequate preventive practices, gaps remained in needle recapping behavior and injury reporting.

Conclusion : The study found that nursing students possess good knowledge and reasonable preventive practices regarding NSIs. However, the occurrence of NSIs suggests a need for improved training, particularly in safe instrument handling and reporting procedures. Strengthening safety training programs and promoting the use of safety-engineered devices could help reduce NSI incidence among nursing students.

Keywords: Needle Stick Injuries, Knowledge, Incidence, Nursing Students, Sri Lanka

Effect of Extract of *Mimusops elengi* Bark on Biofilm Formation of *Candida albicans*

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Background: Candida species are the most common fungal pathogens in humans. Candida albicans is an opportunistic fungal pathogen known for its ability to form biofilms, which contribute to its resistance against antifungal agents. The bark of Mimusops elengi has been traditionally used for its medicinal properties. This study examines the potential of Mimusops elengi bark extract in inhibiting the biofilm formation of Candida albicans.

Methods: A biofilm assay was conducted using six wells treated with varying concentrations of Mimusops elengi bark extract. The biofilm mass was quantified using a spectrophotometer to measure the Absorbance value at 570 nm, providing an indication of biofilm formation in each well. The average absorbance values and standard deviations were recorded for each well to determine the impact of the extract on biofilm formation. The results demonstrated a significant reduction in biofilm formation in wells treated with the extract, particularly in wells 4 and 5, which showed the lowest biofilm mass. This suggests a dose-dependent biofilm inhibition effect.

Results: The extract demonstrated inhibitory effects on biofilm formation in a concentration-dependent manner. The reduction in biofilm formation indicates that Mimusops elengi bark extract may possess compounds capable of interfering with Candida albicans biofilm development. The variation in results across different concentrations highlights the potential for optimizing concentration for maximum efficiency.

Conclusion: The results of this study demonstrate that Mimusops elengi bark extract inhibits biofilm formation by Candida albicans, with moderate reductions observed at certain concentrations. Mimusops elengi bark extract shows a promising inhibitory effect on biofilm formation by Candida albicans. These findings suggest that Mimusops elengi bark extract holds promise as a natural antifungal agent, potentially offering an alternative approach for managing biofilm-associated fungal infections.

Keywords: Candida albicans, Mimusops elengi, Biofilm Inhibition, Phytochemicals

Impacts of screen time on the eyesight of undergraduate students

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Background: This study investigates the impact of excessive screen time on eye health, particularly focusing on Digital Eye Syndrome (DES) in younger populations. DES is characterized by visual and ocular discomfort, which can be temporary but may lead to chronic issues if left unaddressed.

Methods: A cross-sectional study was conducted among 318 undergraduate students aged 18-25, excluding those with pre-existing ocular conditions. Data were collected through an online survey shared via social media, using a pre-tested, self-administered questionnaire to assess screen use and its effects on eye health.

Results: The majority of participants were aged 20-22, and 75.6% were female. About 31% of participants reported a family history of eye-related issues, and 49% noticed changes in their eyesight after starting their undergraduate studies. A significant portion (62%) spent more than 3 hours per day in front of screens for recreational purposes. Over half of the participants (53%) reported experiencing symptoms of eye strain, dryness, or blurred vision in the past six months, while 11% noted poor sleep quality. Additionally, 60% experienced frequent eye fatigue or strain during lectures or virtual classes, and 37% had trouble focusing on distant objects after extended screen use. Blue light-blocking glasses or screen filters were used occasionally by 21% of participants and regularly by 8%. Meanwhile, 38% of participants had attempted eye exercises or relaxation techniques to relieve eye strain. The study found no significant correlation between age, gender, or educational level and screen-related eye problems (p > 0.05), but regular screen use had a significant effect on eye health (p < 0.05).

Conclusion: The findings underscore the negative effects of prolonged screen time on the eye health of undergraduate students, stressing the need for preventive measures such as using screen filters, practicing eye exercises, and limiting screen exposure to reduce the risk of DES.

Keywords: Digital Eye Syndrome, Screen Time, Eye Health, Undergraduate Students, Sri Lanka

Exploring reliability of generative AI tools responding to CRISPR Cas9 -Based Questions (ChatGPT, BING AI, GEMINI)

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Introduction: Large language models (LLMs) like ChatGPT, launched by OpenAI in 2022, have significantly advanced natural language processing, enabling coherent text generation for various uses. However, issues with inaccuracies, or hallucinations, remain. Competing models such as Microsoft's Bing (using GPT-4) and Google's Gemini are improving web search accuracy and learning capabilities. This study examines the reliability of ChatGPT, Bing, and Gemini in answering CRISPR-Cas9 (Clustered regularly Spaced Short Palindromic Repeats) editor-based queries to determine the most reliable AI tool and evaluate their educational value for users at different skill levels.

Methods: This study evaluates ChatGPT 3.5, Bing, and Gemini by testing their responses to CRISPR-Cas9 questions at basic, intermediate, and advanced levels. Using "Molecular Biology of the Cell" and selected articles as references, a total of 15 questions were created (five questions per level which is divided as entry level, Medium level and expert level questions on CRISPR) and inputted them into each AI tool simultaneously. Responses were compared to expert-validated answers, focusing on key terms. Each response was rated as inaccurate (0), mixed accuracy (1-4), or highly accurate (5+) which was identified after marking the responses with Keywords that were identified from the reference documents.

Results: The AI tools were ranked based on their accuracy in answering CRISPR-Cas9 questions. ChatGPT achieved the highest average rating of 3.93/5 (78.6%), followed by Gemini at 3.39/5 (67.8%) and Bing at 3.12/5 (62.4%). ChatGPT demonstrated consistent accuracy across all proficiency levels, excelling particularly in complex queries. Gemini performed well but struggled with advanced topics, while Bing often provided superficial responses. These findings indicate although the platforms give somewhat similar accuracies that ChatGPT is the most reliable for CRISPR-related inquiries.

Conclusion: The findings of this study suggest that ChatGPT exhibits superior performance compared to Gemini and Bing in responding to CRISPR-Cas9 related queries, particularly in terms of key term accuracy. ChatGPT's consistency across various proficiency levels indicates its potential suitability for both novice users and professionals within the domain of gene editing. Although Gemini and Bing possess their own strengths, their inconsistencies highlight the necessity for continued advancements in AI accuracy, especially within specialized scientific contexts.

Keywords: CRISPR-Cas9, Reliability, ChatGPT, Gemini AI, Bing AI

Assess the level of knowledge and practice regarding waste management of second year student nurses in College of Nursing, Jaffna.

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Background: Effective waste management is essential for promoting sustainability and minimizing environmental impact. This study aims to assess the knowledge, practices, and challenges associated with waste disposal among second-year nursing students at the College of Nursing, Jaffna. It also explores key strategies and innovative practices in waste management that balance economic, social, and health considerations.

Methods: A cross-sectional, institutional-based study was conducted among 30 randomly selected nursing students (N = 30). Data were collected using a pre-designed and pre-tested Google form, following informed consent from participants. The data were analyzed using percentages to determine the students' knowledge and practices regarding waste management.

Results: All participants (N = 30) demonstrated knowledge of waste management, with the majority reporting that they learned about it at the College of Nursing (83.3%, n = 25), followed by public meetings (26.7%, n = 8) and media (3.3%, n = 1). The main types of waste identified in classrooms were paper (63.3%, n = 19), food waste (43.3%, n = 13), polythene (36.7%, n = 11), and plastic (33.3%, n = 10). A high proportion of students (86.2%, n = 26) were familiar with the color-coded waste bin system, and 66.7% (n = 20) strongly agreed that proper waste disposal is crucial for both personal and environmental well-being. Waste management practices were rated as "very effective" by 58.6% (n = 17) of students and "effective" by 41.4% (n = 12), while hospital waste management practices were rated as "good" by 72.4% (n = 21) and "excellent" by 27.6% (n = 8).

Conclusion: The study reveals that the nursing students possess satisfactory knowledge and practices regarding waste management, particularly recognizing the importance of proper disposal and recycling. Hospital waste management practices were viewed positively, with most participants rating them as excellent or good. These findings highlight the need for continued education and reinforcement of waste management practices to further improve sustainability efforts

Keywords: Waste Management, Student Nurses, Color Code System, Knowledge, Practice, Factors.

Knowledge, Attitude, and Practices Regarding the Use of Antibiotics among Nursing Students at the International Institute of Health Sciences, Sri Lanka

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Background: Antibiotic resistance poses a critical global health challenge. The misuse and overuse of antibiotics are major contributing factors to this issue. Nurses, as frontline healthcare providers, play a vital role in educating patients about antibiotic use. This study aims to evaluate Knowledge, attitudes, and practices regarding the use of antibiotics among student nurses at the International Institute of Health Sciences, Sri Lanka.

Methodology: A descriptive cross-sectional study was conducted involving 200 nursing students. A self-administered questionnaire was used to assess their knowledge about antibiotic usage, surveillance methods, dispensing practices, and information dissemination. It also measured their attitudes towards antibiotic effectiveness, safety, abuse, bacterial resistance, and significance in healthcare. SPSS was used to analyse.

Results: A study involving 200 students aged 21-25 years found that 66% only use antibiotics, with only 7.5% below 16. The average age of the students was 2 years (44.0%) and 3 years (45.0%), with 18.6% having no prior clinical experience. The majority wanted more information about antibiotics and drug instructions, but only 15.5% were aware of drug susceptibility testing. Concerns about side effects were low, with 26.5% fearing side effects. Despite this, 88.5% believed there was misuse of existing antibiotics, with profit motives, public myths, and regulatory inadequacies being the main causes of antibiotic abuse. Resistance was somewhat agreed upon by 89% of participants, with 22.5% accepting overuse and misuse as the main causes. The study suggests that students should be well-informed about antibiotic use, but some may engage in improper practices like self-treatment or premature discontinuation of courses.

Conclusion: The International Institute of Health Sciences nursing students have a good understanding of antibiotic use, but there's room for improvement in treating viral infections and enforcing proper practices. The study suggests enhancing the curriculum, conducting workshops, and developing a monitoring system to help nursing students become active professionals in combating antibiotic resistance.

Keywords: Antibiotics, Nursing Students, Knowledge, Attitudes, Practices

Identifying the Level of Stress Present in the Life of Private Hospital Nurses during COVID-19

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Background: Nurses, particularly those working in private hospitals, were at the forefront of patient care and faced immense pressure during the COVID-19 pandemic. This study aims to assess the level of stress experienced by private hospital nurses during the pandemic, focusing on both their personal and professional lives.

Methods: A descriptive, cross-sectional, quantitative study was conducted among 134 private hospital nurses (N = 134) to assess stress levels during the COVID-19 pandemic. Data were collected via a self-administered questionnaire, distributed both physically and digitally through Google Forms to maximize participation and convenience. The questionnaire explored aspects of personal and professional stress, including workload, sleep patterns, and social interactions.

Results: The study revealed that 8.2% (n = 11) of nurses reported minimal stress under working conditions, while 15.7% (n = 21) almost never felt stressed. The majority (42.5%, n = 57) experienced stress fairly often, with some reporting positive impacts despite the challenges. However, 63.7% (n = 85) of nurses reported difficulty obtaining a good night's sleep, with only 15.7% (n = 21) occasionally enjoying restful sleep. Fear of interacting with loved ones was common, affecting 37.3% (n = 50) of participants, while 14.4% (n = 19) found it hard to relax. The pandemic significantly impacted nurses' stress levels, sleep quality, and personal relationships. Many nurses reported feelings of forgetfulness due to heavy workloads and performance pressure. While the majority felt in control at work, 13.4% (n = 18) consistently felt stressed, and 45.5% (n = 61) reported frequent stress. Overall, 58.2% (n = 78) of nurses experienced high levels of total stress.

Conclusion: The COVID-19 pandemic had a profound impact on the lives of private hospital nurses, leading to high levels of stress, sleep disturbances, and difficulties in maintaining well-being. This study suggests implementing mental health support initiatives, addressing sleep deprivation and fatigue, promoting social support systems, improving job satisfaction through management support, reducing workload-related forgetfulness, and enhancing relaxation and stress relief programs.

Keywords: Level of Stress, COVID-19, Private Hospital, Nurses, Sleep Deprivation, Mental Health

Nurses Experience on the Cardiac Arrest Situations in Teaching Hospital, Anuradhapura, Sri Lanka: A Qualitative Study

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Background: Cardiac arrest is a life-threatening arrhythmia in which the heart ceases to pump blood through the circulatory system. It can result from various causes, such as coronary occlusion, electric shock, drowning, or asphyxia. Nurses working in hospital settings frequently encounter cardiac arrest situations, where resuscitation efforts, such as cardiopulmonary resuscitation (CPR), are crucial. This phenomenological study explores nurses' experiences during cardiac arrest situations, aiming to gain a deeper understanding of their emotional and professional challenges.

Methods: This qualitative research utilized interpretive phenomenology to analyze transcribed interviews with eight nurses who had experienced involvement in a cardiac arrest situation within the past three months. Data were collected through in-depth interviews, field notes, and records, and were analyzed to identify emerging themes. The study focuses on three main themes—stress, responsibility and accountability, and teamwork—with 15 sub-themes discussed in detail.

Results: Most participants described cardiac arrest situations as extremely stressful due to factors such as nurse shortages, conflicts, and lack of equipment. These challenges were interrelated and compounded the pressure nurses faced. Nurses expressed a deep sense of responsibility for patient outcomes, citing both the advantages and disadvantages of teamwork during CPR. Concerns about the knowledge and competence of some professionals involved in CPR were raised, with poor skills and attitudes occasionally leading to unsuccessful resuscitation efforts. The lack of a clear team leader during resuscitations was a common issue, and some participants noted that ancillary staff did not perform to expected standards. Time delays, inadequate intubation skills, and a general lack of competence in CPR were identified as major barriers to saving cardiac arrest victims.

Conclusion: This study is highly relevant to nursing practice, as it highlights key issues related to nursing education and clinical training in cardiac arrest situations. The patterns identified in the study offer opportunities for further research and can serve as a foundation for improving training programs in hospitals. The findings emphasize the need for better leadership, teamwork, and CPR skills to enhance patient outcomes in cardiac arrest scenarios.

Keywords: Nurses, Cardiac Arrest, CPR, Nursing Practice, Resuscitation, Teamwork

Awareness and Practice of Handling Chemotherapy among Healthcare Workers at Regional Cancer Unit at a Selected Hospital in Sri Lanka

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Background: Cancer arises from uncontrolled cell growth and invasion, with global cancer rates steadily increasing. Common treatments include surgery, iodine therapy, radiation, and chemotherapy. Oncology nurses play a vital role in administering chemotherapy, a process that involves significant health risks. Healthcare workers exposed to cytotoxic drugs through accidental contact, inhalation, or needle punctures face both acute and chronic health hazards. Despite existing safety measures, occupational exposure to these dangerous substances remains a concern, especially for nurses working in chemotherapy units.

Methods: This descriptive cross-sectional study was conducted among 148 nursing officers (N = 148) at a regional cancer center in Kandy, Sri Lanka. Convenience sampling was used to select participants, and data were collected through a self-administered questionnaire. The data were analyzed using SPSS version 25. Ethical approval was obtained from the Katsu International University Ethics Review Committee.

Results: The majority of participants were women (95.9%, n = 142), while men accounted for 4.1% (n = 6). Nurses represented the largest occupational group (34.7%, n = 51), followed by medical officers (22.4%, n = 33) and chemists (5.4%, n = 8). Support staff included attendants (12.2%, n = 18) and cleaners (25.2%, n = 37). Most of the participants had diplomas (52.4%, n = 78), while 22.4% (n = 33) held degrees, and 2.7% (n = 4) had master's degrees. The majority of participants identified as Buddhists (86.4%, n = 128), and 91.2% (n = 135) were Sinhala. Most participants worked in medical wards (42.2%, n = 62) and chemotherapy centers (47.6%, n = 70), where chemotherapy administration is the focus.

Conclusion: This study highlights the occupational risks faced by healthcare workers, particularly nurses, in chemotherapy units in Sri Lanka. It underscores the importance of gender-sensitive policies and enhanced training programs, as well as the need for improved use of personal protective equipment (PPE) and stricter safety protocols. Customized interventions are essential to reduce chemotherapy drug exposure risks, improve occupational safety, and enhance patient care.

Keywords: Cancer, Chemotherapy, Healthcare Workers, Occupational Safety, Cytotoxic Drugs, Sri Lanka, PPE

Health Effects Associated with Saffron Consumption during Pregnancy: A Comprehensive Review

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Background: Saffron (*Crocus sativus*) stigma is popular among pregnant women in South Asia and the Middle East, due to traditional beliefs in health benefits. In Sri Lanka, it is popular among pregnant women, particularly for the belief that it improves foetal complexion.

Method: The existing literature was reviewed and key informant interviews with experts in Obstetrics, Pharmacology of Unani Medicine, and Biomedical Science were conducted to evaluate the potential benefits and risks of saffron consumption during pregnancy.

Results: Saffron contains bioactive compounds such as crocin, crocetin, picrocrocin with antioxidant and anti-inflammatory properties. Some evidence suggests it can aid digestion and alleviate mood disorders, which can be beneficial during pregnancy. However, there is no scientific evidence supporting its effect on foetal skin complexion. The lethal dose of saffron is 1.6 mg/kg, and its adverse effects are dose-dependent. In Unani medicine, saffron is used to relieve labor pain and induce labor. Saffron has been shown to stimulate uterine contractions. Animal studies indicate that saffron extracts (200 to 1600 μ g/ml) increase the risk of preterm labor, miscarriage, and foetal malformations. A descriptive and analytical human study conducted during the saffron harvest reported a significantly higher abortion rate among exposed women (10.6% vs. 0%, P= 0.03). Additional adverse effects include allergic reactions, nephrotoxicity, gastrointestinal disturbances, central nervous system effects, hypotension, and drug interactions leading to bleeding risks.

Conclusion: Based on these findings, saffron use during pregnancy requires careful consideration. While it may provide some therapeutic benefits, the potential risks are greater without proper medical supervision. Pregnant women should avoid saffron unless guided by a qualified healthcare professional. Extensive clinical trials are needed to establish safe dosages and fully understand its effects on pregnancy outcomes. Currently, Sri Lanka lacks regulations for importing or selling raw saffron and such regulations should be enforced to ensure the safety of pregnant women and their foetuses.

Keywords: Adverse effects, Foetal complexion, Pregnancy, Saffron

Knowledge, Attitudes and Practices Regarding the Complications of Diabetes among Diabetic Patients in Athugiriya, Boralugoda Grama Niladhari Division in Sri Lanka

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Background : Diabetes mellitus (DM) is a chronic condition characterized by high blood sugar levels, which can lead to severe complications if not properly managed. This study aimed to assess the prevalence of diabetic complications and management practices among adult patients in the Athurugiriya Boralugoda Grama Niladhari area of Sri Lanka.

Methods : A cross-sectional study was conducted among 162 diabetic patients (n = 162) using convenience sampling. Data were collected through a structured, pre-tested questionnaire covering demographic factors, prevalence of diabetic complications, and the impact of educational and economic status on diabetes management. Descriptive statistics were used for data analysis, and chi-square tests were performed to explore associations between demographic factors and diabetes management.

Results : The survey revealed that the majority of participants were female (63%, n = 102) and aged between 51 and 65 years (67%, n = 109). Blood glucose monitoring was the most common management practice (24%, n = 39), while complications such as retinopathy and neuropathy were the least reported (3%, n = 5). Significant associations were found between age and aspects of diabetes management, including frequency of doctor visits and beliefs about psychological well-being (p < 0.05). In terms of socioeconomic factors, 43% (n = 70) of participants had educational attainment up to the Advanced Level, and 35% (n = 57) reported a monthly income between Rs. 25,000 and Rs. 50,000.

Conclusion : The study highlights the need for gender-sensitive and age-specific interventions in diabetes management. Psychological well-being should be integrated into diabetes care plans as part of a holistic approach. Additionally, educational and economic factors play a significant role in managing diabetes, underscoring the importance of targeted public health interventions and supportive policies to improve patient outcomes.

Keywords : diabetes mellitus, diabetic complications, management, education, socioeconomic factors

Perception of Social Media on Academic Performances Among Diploma Level Nursing Students

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Background : Social media is widely used by people of all ages, but it is particularly prevalent among students. Initially utilized for entertainment, social media became an essential tool for online learning during the COVID-19 pandemic. This study aimed to assess the impact of social media on the academic performance of nursing students at the College of Nursing, Kandana, Sri Lanka.

Methods : A cross-sectional study was conducted among 209 diploma-level nursing students (n = 209) at the College of Nursing, Kandana, from 2022 to 2023. Data were collected through a structured, pretested questionnaire based on the Social Media and Academic Performance of Students Questionnaire (SMAAPOS) by Osharive (2015). The questionnaire included sections on social media usage, its perceived impact on academic performance, and demographic information. Data were analyzed using descriptive statistics, and associations between social media use and academic performance were explored using SPSS version 25. Ethical approval was obtained from the Ethics Review Committee of the International Institute of Health Sciences (IIHS), Welisara.

Results : Of the 209 participants, 90.9% (n = 190) were female, and most were aged between 22 and 25 years. The study found that 93.3% (n = 195) of students believed that social media addiction negatively impacted their academic performance, with 90% (n = 188) reporting distractions caused by social media. However, platforms such as Google Meet and Zoom were noted by many participants as beneficial for academic learning. Additionally, 74.4% (n = 155) of respondents believed they could improve their academic performance by reducing social media usage. The study also highlighted perceived differences in social media usage based on gender, with younger students more frequently engaging with social media (mean score = 4.17).

Conclusion : The findings suggest that while social media platforms can negatively impact academic performance, educational tools like Google Meet and Zoom are perceived positively by nursing students. Reducing non-educational social media use may improve academic outcomes. The study also highlights the influence of age and gender on social media usage patterns.

Keywords : Social Media, Academic Performance, Nursing Students, Online Learning, Gender

Knowledge And Practices of Oral Hygiene Among Adult Patients Visiting to Dental Unit of Base Hospital Elpitiya in Sri Lanka, 2023

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Background : Oral diseases represent a significant public health concern worldwide. Maintaining good oral hygiene is crucial for overall health and well-being, helping to prevent conditions such as mouth and facial pain, oral and throat cancer, infections, periodontal disease, tooth decay, and tooth loss. Knowledge of oral health and the practice of good oral hygiene are key components of health-related behavior. The primary objective of this study was to assess the knowledge and practices of oral hygiene among adult patients visiting the dental unit at Base Hospital Elpitiya, Sri Lanka.

Methods : This study utilized a convenience sampling technique, and data were collected through a self-administered questionnaire. Statistical analysis was performed using SPSS version 25, with descriptive statistics and correlation analysis to evaluate the relationship between knowledge and practices of oral hygiene. Cutoff P value was 0.05 with 95% CI.

Results : The majority of respondents were aged 18-30, with the lowest representation in the 51-60 age group. In terms of educational qualifications, the highest number of respondents had completed the G.C.E. O/L level, while the lowest group comprised graduates (n = 33). Regarding marital status, most respondents were single (n = 223). The highest number of participants reported an income below Rs. 20,000. The study found a significant positive correlation between knowledge of oral hygiene (r = 0.670, p < 0.05) and oral hygiene practices (r = 0.832, p < 0.05), indicating that both factors strongly influence oral health behavior.

Conclusion : The research highlights that oral hygiene is a critical socio economic issue that is often overlooked. Many individuals remain unaware of the link between good dental hygiene and the prevention of systemic diseases. The findings suggest that targeted educational interventions are necessary to inform individuals, particularly parents, about the importance of oral hygiene and its broader health implications.

Keywords: Oral Hygiene, Knowledge, Dental Unit, Base Hospital, Elpitiya

Prevalence, Knowledge, and Attitude Regarding Type II Diabetes and Obesity among Patients at the Medical Clinic of General Hospital, Ampara

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Background : Type II diabetes is a chronic condition strongly associated with the rising rates of obesity, commonly defined as a body mass index (BMI) of 30 or higher. Poor diet and sedentary lifestyles are major contributors to the increasing prevalence of both obesity and Type II diabetes. This study aimed to assess the knowledge, attitudes, and practices related to obesity and Type II diabetes among patients attending the Medical Clinic at General Hospital Ampara.

Methods : A cross-sectional study was conducted among 100 randomly selected patients (n = 100) attending the Medical Clinic at General Hospital Ampara. Data were collected using a structured, pretested questionnaire that covered demographic details, health knowledge, and lifestyle behaviors. The questionnaire included 40 questions to assess participants' knowledge and attitudes toward obesity, diabetes, and their management. Descriptive statistics were used for data analysis, and chi-square tests were performed to examine associations between knowledge, attitudes, and key lifestyle factors.

Results : The survey found that participants had an average BMI of 24.67, indicating a high prevalence of overweight individuals. Of the participants, 28% (n = 28) self-reported as diabetic, and although all monitored their blood sugar levels, only 42% (n = 42) were aware of HbA1c as a key marker for diabetes management. Positive attitudes toward BMI were noted, with 86% (n = 86) recognizing it as an important health indicator, though 90% (n = 90) acknowledged its limitations. Lifestyle analysis showed that 34% (n = 34) consumed alcohol, 24% (n = 24) smoked, 23% (n = 23) exercised regularly, and 67% (n = 67) consumed excessive sweets. Additionally, 23% (n = 23) had a family history of diabetes, with frequent symptoms such as thirst (67%, n = 67) and urination (45%, n = 45) being reported.

Conclusion : The study highlights the need for enhanced educational interventions to improve the knowledge and attitudes of patients regarding Type II diabetes and obesity management. Several risk factors, including unhealthy dietary habits and physical inactivity, were found to significantly contribute to the development of obesity and Type II diabetes. Patients attending the Medical Clinic at General Hospital Ampara demonstrated insufficient knowledge and awareness, emphasizing the need for comprehensive health education programs aimed at promoting better lifestyle choices and disease management.

Keywords: Obesity, Type II Diabetes, BMI, General Hospital, Knowledge, Attitude

Knowledge, Attitude, and Practice of Childhood Nutrition among Caregivers of Under Five Year Children in Niyagama MOH area, Sri Lanka.

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Background : Proper nutrition is critical for children's health and development, playing a key role in strengthening immunity, promoting growth, and preventing diseases. However, poor nutrition can lead to stunted growth, weakened immunity, and increased susceptibility to illness. This study aimed to assess the knowledge, attitudes, and practices regarding childhood nutrition among caregivers in the Niyagama MOH area, Sri Lanka.

Methods : A descriptive, cross-sectional study was conducted among 92 caregivers (n = 92) of preschool children attending parent meetings in selected preschools in the Niyagama MOH area. Data were collected using a structured, pre-tested questionnaire that examined caregivers' knowledge, attitudes, and practices related to childhood nutrition. Descriptive statistics were used for data analysis, and chi-square tests were performed to assess the associations between knowledge, attitudes, and practices, with statistical significance set at the 0.05 level.

Results : The study revealed that 78% (n = 72) of children under five were adequately nourished, while 22% (n = 20) were malnourished, with 22% of these children suffering from wasting, leading to underweight and stunted growth. There was a significant positive association between caregivers' knowledge of child nutrition and their practices (p < 0.05). Despite adequate knowledge, only 12% of caregivers practiced response-based feeding strategies regularly. Additionally, while caregivers expressed positive attitudes toward nutrition education, 67% (n = 62) believed that poor home environments contributed to inadequate nutrition. Moreover, many caregivers were reluctant to adopt new technologies for learning about nutrition.

Conclusion : The findings suggest that while caregivers possess considerable knowledge of childhood nutrition, their practices do not always reflect this knowledge. Socio-economic factors and limited participation in nutrition programs also negatively impact these practices. The study recommends implementing targeted educational programs at preschools, such as Ran Kakulu and Sanasa Dimuthu, to enhance caregivers' knowledge and improve their nutritional practices for better child health outcomes.

Keywords: Childhood Nutrition, Attitudes, Practices, Niyagama MOH, Sri Lanka

Lifestyle Behavior of Coronary Heart Disease Patients in General Hospital, Matara, Sri Lanka

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Background : Coronary heart disease (CHD) is the most common cause of death worldwide, followed by stroke. This study aimed to assess the lifestyle behaviors contributing to CHD among patients at General Hospital, Matara, Sri Lanka, with a focus on factors such as diet, tobacco and alcohol use, exercise, and occupational stress.

Methods : A cross-sectional study was conducted among 100 randomly selected CHD patients. Data were collected using a structured, pre-tested questionnaire that consisted of two sections: (1) General information, which gathered demographic details, and (2) Lifestyle behaviors, measured using a five-point Likert scale. The questionnaire was developed based on previously validated studies. SPSS software was used for data analysis, and Pearson correlation and multiple regression tests were performed to assess the associations between lifestyle factors and CHD.

Results : The study revealed a significant gender imbalance, with 70.4% of CHD patients being male and 29.6% female. The largest age group was 61-70 years (24.1%). Pearson correlation analysis showed strong positive correlations between the risk of CHD and several lifestyle factors, including food patterns (r = 0.882), tobacco and alcohol use (r = 0.481), exercise (r = 0.875), and occupational stress (r = 0.815). Multiple regression analysis indicated that 89.4% ($R^2 = 0.894$) of the variation in CHD risk was explained by the independent variables, with the model being statistically significant (F = 217.193).

Conclusion The study highlights the strong link between lifestyle behaviors and the risk of coronary heart disease. While this quantitative study provided valuable insights, future research should incorporate qualitative methods to further explore these relationships. Targeted interventions focusing on lifestyle modification could significantly reduce the risk of CHD.

Keywords: Lifestyle behavior, Coronary heart disease, General Hospital, Sri Lanka, CHD

Knowledge and Attitude Towards Tobacco Smoking Among Healthcare Providers in Addu Equatorial Hospital, Maldives

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Background : Tobacco smoking is a major public health concern globally, significantly impacting healthcare systems. Healthcare providers play a critical role in promoting smoking cessation and implementing tobacco control interventions. This study aimed to assess the knowledge and attitudes towards tobacco smoking among healthcare providers at Addu Equatorial Hospital in the Maldives.

Methods : A cross-sectional study was conducted among 282 randomly selected healthcare providers (n = 282), including doctors, nurses, and pharmacists. Data were collected using a structured, pre-tested questionnaire that covered demographics, knowledge of tobacco smoking risks, and attitudes toward tobacco control. Descriptive statistics were used for data analysis, and Pearson Chi-square tests were performed to examine associations between knowledge levels and demographic factors, with significance set at p < 0.05.

Results : The survey found that 79.4% (n = 224) of healthcare providers had adequate knowledge of the health risks associated with tobacco smoking, particularly its link to cardiovascular diseases and respiratory illnesses. However, 18.8% (n = 53) demonstrated gaps in their knowledge about the harmful effects of passive smoking. Regarding attitudes, 51.8% (n = 146) strongly supported banning tobacco advertising, while 68.4% (n = 193) favored banning smoking in healthcare facilities. A significant association was found between gender and knowledge levels (p = 0.015), while other demographic factors showed no significant associations.

Conclusion : The results highlight a generally positive attitude among healthcare providers towards tobacco control, though knowledge gaps remain, particularly concerning passive smoking. Targeted educational programs and training are recommended to enhance healthcare providers' knowledge and improve their role in tobacco cessation interventions.

Keywords: Tobacco Smoking, Knowledge, Attitudes, Healthcare Providers, Smoking Cessation

Knowledge, Practice, And Attitudes of Breastfeeding Mothers on Baby's Development In Western Province Sri Lanka

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Background : Breastfeeding is widely acknowledged for its critical role in promoting infant and maternal health. This is particularly important in regions like Sri Lanka's Western Province, where socioeconomic and cultural factors significantly influence breastfeeding practices. This study aimed to assess the knowledge, attitudes, practices, and related factors influencing breastfeeding among mothers, as well as its impact on infant development.

Methods : A cross-sectional study was conducted among 110 randomly selected breastfeeding mothers (n = 110) in the Western Province of Sri Lanka. Data were collected using a structured, pre-tested questionnaire covering knowledge of breastfeeding, including its benefits, recommended practices, and perceived impact on infant development. Descriptive statistics were used for data analysis, while chi-square tests were performed to examine associations between breastfeeding practices and sociodemographic factors. Regression analysis was used to explore the relationship between knowledge and actual breastfeeding practices.

Results : The study revealed that 60.9% (n = 67) of participants were aged 26-35, while 39.1% (n = 43) were aged 18-25. Most mothers (95.5%, n = 105) had a monthly income between Rs. 25,000-50,000, and 65.5% (n = 72) were from Gampaha district. Knowledge of breastfeeding was relatively high, with an average score of 20.63 out of 25. However, attitudes were somewhat inconsistent (mean score: 17.39/23), and breastfeeding practices had the lowest score (mean score: 15.96/24), indicating a significant gap between knowledge and practice. A chi-square analysis showed a significant association between age and breastfeeding practices (p < 0.05). The study also highlighted that 59% (n = 65) of participants experienced challenges in maintaining consistent breastfeeding practices despite understanding its importance.

Conclusion : Although breastfeeding knowledge among mothers in the Western Province is generally high, the gap between knowledge and practice points to the need for targeted educational programs and practical support systems. These interventions should address the barriers to consistent breastfeeding practices to enhance maternal and infant health outcomes. Future studies should focus on a broader demographic to better understand the diverse factors influencing breastfeeding behaviors.

Keywords : Breastfeeding, Knowledge, Practices, Attitudes, Infant Development, Sri Lanka

Knowledge and Attitudes Towards Iron Deficiency Anemia among Pregnant Mothers in Nawathalwatta MOH Area in Kurunegala District

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Background : Iron Deficiency Anemia (IDA) is a major global health concern, particularly among pregnant women in developing countries such as Sri Lanka. IDA, defined as a hemoglobin concentration below 11mg/dL during pregnancy, increases the risk of preterm birth, low birth weight, and maternal mortality. Understanding pregnant women's knowledge and attitudes regarding IDA is essential for developing effective interventions. This study aimed to assess the knowledge and attitudes of pregnant women towards IDA in the Nawathalwatta MOH area, Kurunegala District.

Methods : A cross-sectional study was conducted in November 2019 at the Nawathalwatta Health Center, involving 126 pregnant women. Data were collected using a structured questionnaire that evaluated participants' knowledge and attitudes toward IDA prevention. Knowledge scores were categorized as good, moderate, or poor, while attitudes were measured based on agreement with key prevention statements. Socio-demographic data, including age, education level, and household income, were also collected to explore their impact on knowledge and attitudes.

Results : The study found that 19% (n = 24) of participants had good knowledge of IDA, 50% (n = 63) had moderate knowledge, and 31% (n = 39) had poor knowledge. While 54% (n = 68) recognized IDA as a serious health concern, only 19% (n = 24) believed it could be effectively prevented through dietary changes and supplementation. Socioeconomic factors played a significant role, with 49% (n = 62) of participants reporting insufficient household income, limiting their ability to afford iron-rich foods. Mothers aged 31-40 years were particularly affected. Participants with higher educational qualifications demonstrated better knowledge. However, 36% (n = 45) of the participants exhibited negative attitudes toward IDA prevention.

Conclusion : The study emphasizes the need for targeted health education programs to improve knowledge and attitudes regarding Iron Deficiency Anemia among pregnant women in the Nawathalwatta MOH area. These programs should focus on low-income families who struggle to access proper nutrition and healthcare. Socioeconomic interventions are crucial for ensuring sustainable dietary improvements. Antenatal care visits should incorporate personalized counseling on iron supplementation and nutritional practices to reduce the incidence of IDA. Collaboration among healthcare providers, local authorities, and community leaders is essential for implementing these strategies and improving maternal and fetal health outcomes.

Keywords : Iron Deficiency Anemia, Knowledge, Attitudes, Pregnancy, Sri Lanka, IDA prevention

Knowledge Regarding Diarrhoea and its Management among Mothers of under 5 Years Children Visiting Base Hospital, Akkarapattu

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Background : Diarrhoea is a leading cause of child mortality and morbidity globally, particularly among children under five in low- and middle-income countries. Mothers' knowledge about diarrhoea and its management is critical for effective prevention and treatment, which can significantly reduce child mortality rates. This study aimed to assess the knowledge and management practices regarding diarrhoea among mothers of children under five years old visiting Base Hospital, Akkarapattu, Sri Lanka.

Methods : A cross-sectional study was conducted among 100 randomly selected mothers (n = 100) with children under five years old visiting Base Hospital, Akkarapattu, between June and August 2022. Data were collected through a structured, pre-tested questionnaire covering six sections: demographic information, knowledge of diarrhoea risk factors, signs and symptoms, complications, management, and prevention. Descriptive statistics were used to analyze the data, and chi-square tests were performed to examine associations between knowledge levels and demographic variables.

Results : The study found that 93% (n = 93) of participants had heard of diarrhoea as a health issue, though there were significant knowledge gaps. Fifty-three percent (n = 53) of mothers had good knowledge of the causes and risk factors of diarrhoea, identifying contaminated food and water as primary contributors. Forty-five percent (n = 45) demonstrated strong knowledge of diarrhoea's signs and symptoms, such as frequent watery stools, thirst, poor feeding, and lethargy. Furthermore, 63% (n = 63) were aware of the complications of diarrhoea, particularly dehydration and malnutrition. However, only 19% (n = 19) were familiar with zinc supplementation as a management strategy for diarrhoea.

Conclusion : The findings highlight the need for targeted health education programs to improve knowledge about diarrhoea management among mothers in Akkarapattu. Emphasizing oral rehydration therapy, zinc supplementation, continued feeding during diarrhoea, and recognizing signs of severe dehydration are critical. Educational initiatives tailored to this community could empower mothers to better manage childhood diarrhoea and help reduce child mortality and morbidity in the region.

Keywords: Diarrhoea, Knowledge, Management, Mothers, Children, Sri Lanka, Oral Rehydration

Factors Affecting the Quality of Life of Patients on Renal Hemodialysis in National Institute of Nephrology and Dialysis Hospital Maligawattha.

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Background : Chronic Kidney Disease (CKD) is a growing global health concern, with increasing prevalence in low- and middle-income countries, including Sri Lanka. Hemodialysis, while life-saving for individuals with end-stage renal disease (ESRD), significantly impacts their quality of life (QoL). This study aimed to investigate factors associated with QoL among hemodialysis patients at the National Institute for Nephrology, Dialysis, and Transplantation (NINDT) in Maligawatta, Sri Lanka.

Methods: A descriptive, cross-sectional study was conducted among 100 randomly selected hemodialysis patients (n = 100) diagnosed with ESRD at NINDT. Data were collected using an interviewer-administered Kidney Disease Quality of Life Short Form (KDQOL-SFTM) 36 questionnaire. The questionnaire assessed various dimensions of QoL, including physical health, symptoms, mental health, social support, and treatment satisfaction. Descriptive statistics were employed for data analysis, and non-parametric tests (Mann-Whitney U test and Spearman's r correlation) were used to examine relationships between QoL and demographic factors, clinical variables, and treatment-related experiences.

Results: The majority of participants (69%, n = 69) reported poor QoL. Key factors negatively influencing QoL included pain, experienced by 96% (n = 96) of participants, limitations in daily activities (58%, n = 58), dissatisfaction with work capacity (46%, n = 46), and reliance on medical treatment (72%, n = 72). A better score was observed in the environmental domain, such as financial resources and access to healthcare, yet 52% (n = 52) of participants still reported poor QoL in this domain. Spearman's correlation analysis indicated significant associations between QoL and factors such as age, treatment duration, and frequency of hemodialysis (p < 0.05).

Conclusion: This study highlights the profound impact of poor QoL among hemodialysis patients in Sri Lanka, with pain management, functional limitations, and social support being critical areas for improvement. The findings suggest that a holistic approach to patient care, addressing both physical and psychosocial needs, is essential for enhancing QoL in this population.

Keywords: Chronic Kidney Disease, Hemodialysis, Quality of Life, Sri Lanka, Factors

Prevalence and Associated Risk Factors for Non-Communicable Disease in Adults of South Huvadhoo Atoll Fiyoaree, Maldives

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Background : Non-communicable diseases (NCDs) are a leading cause of death globally, accounting for 41 million deaths annually, or 71% of all deaths, according to the World Health Organization (WHO) in 2021. In particular, 77% of these deaths occur in low- and middle-income countries, affecting individuals aged 30 to 69. The Maldives is no exception, where chronic NCDs contribute to 78% of the total disease burden (Maldives Health Profile, 2010). This study aimed to assess the prevalence of NCDs and related lifestyle changes among the population of Fiyoaree, a small island in the Maldives.

Methods : A cross-sectional study was conducted among 300 randomly selected participants (n = 300) aged 18 to 64 years in Fiyoaree, Maldives. The WHO STEP approach was used to collect data on disease prevalence and lifestyle factors. Data collection included structured, pre-tested questionnaires covering demographics, NCD prevalence (hypertension, diabetes, cancer), and lifestyle behaviors (smoking, alcohol consumption, physical activity, and diet). Descriptive statistics were used for data analysis, and correlations between NCDs and sociodemographic factors were examined using SPSS.

Results : The study found that 21% (n = 63) of participants had hypertension, 22% (n = 66) had diabetes, and 25% (n = 75) were diagnosed with cancer. The prevalence of smoking and alcohol consumption was 15% (n = 45) each, while 12% (n = 36) of the population reported physical inactivity. Only 7% (n = 21) of participants followed a balanced diet. A significant correlation was found between NCD prevalence and sociodemographic factors (r = 0.833, p < 0.05), indicating a strong association.

Conclusion : The study highlights the pressing need for interventions to control risk factors for NCDs in small island populations like Fiyoaree. Lifestyle modifications, public health awareness, and targeted prevention programs are crucial to reduce the burden of NCDs. Further research is recommended to explore specific risk factors and develop effective prevention strategies.

Keywords: Non-Communicable Diseases, Prevalence, Lifestyle, Risk Factors, Maldives, Public Health

A Study on Nursing Students` Perception on Their Educational Environment in Selected Government Nursing Colleges in Sri Lanka

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Introduction: The quality of nursing education is crucial for producing competent nurses who can meet healthcare system demands. The educational environment significantly impacts the quality of education and, subsequently, the nurses produced. This study aims to identify the level of nursing education by analyzing perceptions of student nurses on their educational environment in government Nursing Schools in Sri Lanka.

Methods: A cross-sectional descriptive study was done among 2nd and 3rd year students in six nursing schools in Sri Lanka, College of Nursing Vavuniya, Jaffna, Anuradhapura, Kurunegala, Kandana and Galle. Data was collected using the Dundee Ready Education Environment Measure (DREEM) questionnaire which was translated into three main languages and validated. Data analysis was done using SPSS 25.

Results: A study of 300 respondents from six colleges in Vavuniya and Anuradhapura revealed that the majority of participants were between 21-25 years old, females, Sinhalese, and Buddhists. Most variables were agreed upon by the majority, with a Gaussian pattern of distribution. The overall perception of learning was 85.7% positive, with excellent perception at 14.3%. Poor perception of learning was 54.7%, teachers' 59.3%, academic self-perception at 44%, atmosphere at 54.3%, and social self-perception at 37%. The study found significant differences in perception of learning environments among colleges, education levels, age, ethnicity, and religion, but no impact on residence. Teachers' perception varied in second and third years, and academic self-perception varied by college, ethnicity, religion, and experience.

Conclusion: Overall, the nursing students' perception of their current learning environment was at the level of more positive than negative. However, there were multiple aspects in each of the domains which were negatively perceived and needed to be addressed. Especially the perception of teachers, atmosphere and learning was poor among the majority. Selected colleges were representative of the country hence the results can be generalized and could be considered as the view of all nursing students. Having an audit from the administrative level would still be beneficial to ascertain the quality and carry out essential reforms to uplift the quality of nursing education to reach international standards.

Keywords: Educational Environment, Nursing Education, Nursing Curriculum

Impact of Compassion and COVID-19 Anxiety Levels among Nurses towards Spiritual Care

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Background: The COVID-19 pandemic has placed immense pressure on healthcare systems globally, significantly impacting nurses. This increased workload, along with anxiety surrounding the virus, may have affected nurses' ability to provide spiritual care, a key component of holistic patient care. This study aimed to assess the levels of compassion and COVID-19-related anxiety among nurses and how these factors influenced their provision of spiritual care.

Methods: A descriptive, cross-sectional correlation study was conducted at Sri Jayewardenepura General Hospital in Sri Lanka. The study involved 241 nurses who worked during the COVID-19 pandemic and cared for COVID-19 patients. Data were collected through a Google Form questionnaire distributed via email and WhatsApp. The questionnaire comprised three scales: Spiritual Care, Compassion, and COVID-19 Anxiety Level. Data were analyzed using SPSS version 25.0, employing descriptive statistics, linear regression, Spearman correlation analysis, and one-way ANOVA to examine relationships between the variables.

Results: The majority of participants were female, early adults, with a bachelor's degree and a family history of COVID-19 infection. The study reported a moderate mean score for spiritual care (M = 2.55) and compassion (M = 3.52), while COVID-19 anxiety levels were relatively low (M = 1.61). A significant, though weak, positive correlation (r = 0.220, p = 0.001) was observed between nurses' compassion levels and their provision of spiritual care. Additionally, significant differences in compassion levels were identified based on income status (p = 0.000), indicating that income may influence nurses' compassion levels.

Conclusion: The study suggests that while nurses displayed moderate levels of compassion and low COVID-19 anxiety, there is room for improvement in the provision of spiritual care. The weak correlation between compassion and spiritual care highlights the need for targeted interventions to enhance spiritual care delivery among nurses. The significant impact of income status on compassion levels suggests that healthcare organizations should consider financial factors when addressing spiritual care in nursing. Further research is recommended to explore the broader aspects of spiritual care and its integration into nursing practice, potentially through professional development programs focused on spiritual care documentation and delivery.

Keywords: Spiritual care, Compassion, COVID-19 Anxiety, Nursing, Sri Lanka

Psychosocial and physical effects among patients with Vitiligo in Dr. Mahaveer Mehta Medical Center in Dubai

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Background: Vitiligo is a common skin condition that is characterized by progressive loss of skin pigmentation due to cells being unable to produce melanin. It can affect all types of skin but it is more noticeable in individuals with dark skin tones. This condition is not life-threatening but the depigmented spots can expand over time affecting various body parts like skin and hair. The objective of this research is to conduct a thorough evaluation of the psychosocial and physical effects of vitiligo on individuals in comparison to a control group in Dr. Mahaveer Mehta Medical Center, Dubai, United Arab Emirates.

Methods: A purposive sampling method was used to select participants from Dr. Mahaveer Mehta Medical Center. Data was collected by a self-administered questionnaire, which included information on demographics and clinical features. The 61-item Skindex instrument was modified to improve reliability by following a pilot study and was used to measure the psychosocial and physical effects of vitiligo. SPSS software (version 21) was used for statistical analysis and the Mann-Whitney U test was used due to the non-normal data distribution.

Results: The study at Dr. Mahaveer Mehta Medical Center in Dubai shows that vitiligo patients face significant psychosocial, emotional, and physical challenges, including heightened anxiety, embarrassment, anger, and social withdrawal. Using the reliable 52-item Skindex tool (Cronbach's alpha 0.880–0.981), the study found greater negative impacts (p < 0.001), especially in frustration, disfigurement concerns, and relationship issues. The findings stress the need for comprehensive care addressing both the physical and emotional aspects of vitiligo.

Conclusion: This study explores the psychological and physiological difficulties that people with vitiligo encounter and emphasizes its impact on daily activities, social interactions, mental health, and self-perception. The results highlight how important customized interventions are.

Key words: Vitiligo, Self-Perception, Cognitive Behavioral Therapy, Emotional Distress, Psychological Effects

Awareness of Osteoarthritis among Females over 30 Years in Rambukkana MOH Area in Sri Lanka

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Background: Osteoarthritis is a leading cause of disability, particularly affecting women's mobility and quality of life due to joint pain and limited movement. This study aimed to assess the knowledge and awareness of osteoarthritis among women over 30 years old in the Rambukkana MOH area of Sri Lanka.

Methods: A cross-sectional study was conducted among 100 randomly selected women (n = 100) aged over 30. Data were collected through a structured, pre-tested questionnaire covering knowledge of osteoarthritis, including causes, symptoms, complications, prevention, and treatment. Descriptive statistics were used for data analysis, and chi-square tests were performed to examine associations between age and the occurrence of joint pain, as well as the level of osteoarthritis awareness.

Results: The survey found that 63% (n = 63) of participants had general awareness of osteoarthritis, while only 39% (n = 39) were knowledgeable about its complications. Additionally, 48% (n = 48) of respondents reported experiencing symptoms in the past three months, with 56% (n = 56) of women aged 40 and older reporting joint pain. A significant association was found between age (40 years and above) and the incidence of joint pain (p < 0.05). Moreover, 59% (n = 59) of participants experienced pain during or after movement, and 52% (n = 52) lacked sufficient knowledge about osteoarthritis prevention and treatment. The study also highlighted that women aged 40 and above were at higher risk for osteoarthritis symptoms.

Conclusion: The results emphasize the need for targeted education to improve osteoarthritis awareness, particularly regarding its complications and the importance of early screening and prevention. Increasing awareness could help reduce the burden of the disease, especially in high-risk age groups.

Keywords: osteoarthritis, awareness, knowledge, women, joint pain, age association

Knowledge, Attitude and Risk Factors Toward CKD Management among Patients With CKD in the Nephrology Clinic, Colombo South Teaching Hospital, Kalubowila

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Background: Chronic kidney disease (CKD) is a significant public health issue, with over 1.4 million patients receiving renal replacement therapy worldwide. Early intervention is crucial to reduce the economic burden of CKD and prevent progression to end-stage renal disease (ESRD). Understanding risk factors and implementing screening can increase early detection, initiate treatment, and mitigate the economic burden of renal replacement therapy. The primary objective of the research is to assess knowledge, attitude and risk factors toward CKD management among patients with CKD in the nephrology clinic at Colombo South Teaching Hospital, Kalubowila.

Method: A descriptive cross-sectional study was conducted among 170 CKD patients in the nephrology clinic at Colombo South Teaching Hospital. Data was collected through a self-administered questionnaire which questions the risk factors, knowledge and attitude of patients with CKD. SPSS statistical package was used to analyze collected data.

Results: The study examined the knowledge and attitudes of chronic kidney disease (CKD) patients. The sample was predominantly female, with 40% male. Most patients (32%) were aged 46-55 years. Financially, 31% reported no income. Diabetes was prevalent among 48% of the participants, and 52% had a family history of CKD. The majority did not engage in alcohol consumption, smoking, tobacco use, or betel chewing. Awareness of their CKD stage was low, with 26.3% at end-stage renal disease (ESRD), 6% at stage 5, and 1.8% at stage 4. However, 98.2% of patients were knowledgeable about CKD risk factors, and 48.6% understood that medication was primarily to prevent complications.

Conclusion: The study reveals that family history, diabetes, and hypertension are major risk factors for chronic kidney disease (CKD). Most patients know risk factors and early signs of CKD but lack knowledge about their disease stage and renal replacement therapy. Patients have a supportive attitude towards CKD and are encouraged to develop self-management skills. The nursing discipline should plan interventional programs to help people at risk detect health problems like CKD. Policy development should involve multidisciplinary intervention programs, improve health insurance services, and target patients at risk, such as those with hypertension and diabetes.

Keywords: Chronic Kidney Disease, Risk Factors, CKD Management

Knowledge & Practice on self-breast examination among janitor service

females in NIHS and Teaching Hospital - Kalutara

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Background: Breast cancer is a major public health issue globally, including in Sri Lanka. Despite advancements in detection and treatment, breast cancer remains a leading cause of morbidity and mortality among Sri Lankan women. Anecdotal evidence suggests that low awareness of breast cancer contributes to delayed diagnosis and poor treatment outcomes. While previous research highlights the association between socioeconomic status, education level, and breast cancer awareness, there is a lack of comprehensive studies examining this in the Sri Lankan context.

Method: This quantitative descriptive study was conducted among 40 female janitorial staff at the National Institute of Health Sciences (NIHS) and Teaching Hospital Kalutara in Sri Lanka. Convenience sampling was used to select participants. Data were collected using a self-administered questionnaire with three parts designed to assess: (1) knowledge of self-breast examination (SBE), (2) practice of SBE, and (3) overall awareness of SBE. Data were analyzed manually.

Results: In terms of education, 20% of participants completed schooling up to grade 5, 57.5% reached up to grade 9, and 22.5% had completed O/Levels. The majority of participants (72.73%) were aged 50-60, with smaller groups aged 41-45 (18.18%) and 46-50 (9.09%). Awareness of SBE was relatively high, with 80% of participants familiar with the concept, and 60% reporting the ability to perform SBE on their own. However, the frequency of SBE practice was low: only 3.08% performed it monthly, 80.77% did it occasionally, 12.31% seldom performed it, and 6.15% had never attempted it. Moreover, 70% knew the correct timing for performing SBE, while 30% did not. Despite gaps in practice, 82.5% expressed interest in learning more about SBE, while 17.5% were not interested. Notably, only 9.37% had a history of regular SBE practice, with 90.63% having never performed it consistently.

Conclusion: Although awareness of SBE is relatively high, there is a significant gap in consistent practice and knowledge of the correct timing for self-examinations. The strong interest in learning more indicates the potential for educational interventions to improve regular SBE practice and contribute to better health outcomes.

Keywords: Self breast Examination, Knowledge, Practice, Breast Cancer

Assess the Knowledge on Lower Back Pain and Its Effect on Student Nurses in The Western Province, Sri Lanka

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Background: The physical demands of the healthcare industry, particularly on student nurses, have led to a prevalence of lower back pain (LBP). This study focuses on assessing the knowledge of LBP among student nurses in the Western Province of Sri Lanka, a region with a high incidence of LBP, potentially due to factors like limited hospital funding and staff shortages leading to increased workload for student nurses.

Methods: This descriptive cross-sectional study utilized a self-administered questionnaire to gather data from a sample of 426 student nurses from nursing school in the Western Province of Sri Lanka. The questionnaire was designed to assess knowledge about the causes, symptoms, diagnosis, treatment, and prevention of Lower Back Pain (LBP).

Results: The findings revealed that although 86.8% of the participants knew the common causes of low back pain, only 58.7% exhibited sufficient understanding of preventive techniques such as body mechanics and ergonomics. Furthermore, 60% of the participants said they had experienced LBP at some point during their training, and 40% of those said the pain had a detrimental effect on their everyday activities and clinical performance. Furthermore, a deficiency in nursing curricula is evident from the fact that only 45% of respondents had received formal education on LBP management. The research findings indicate that although student nurses have a moderate level of awareness regarding long-term pain, there are notable deficiencies in their comprehension of preventive and long-term care.

Conclusion: While student nurses in the Western Province of Sri Lanka exhibit a good overall understanding of LBP, the study highlights the need for targeted educational interventions to address specific knowledge gaps, particularly among older student nurses. Focusing on enhancing their comprehension of chronic LBP, sciatica, and preventive measures is crucial for promoting long-term well-being and minimizing the impact of LBP on their future careers.

Keywords: Lower Back Pain, Rehabilitation, Quantitative, Proactive Care, Curriculum

Service Quality of Sri Lankan Private Hospitals and Impact on Long-Term Patient Relationship

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Background: In Sri Lanka, while government hospitals provide free healthcare, private hospitals operate on a service-orientation model to compete effectively. This research aimed to analyze how service orientation in Sri Lankan private hospitals can contribute to building long-term patient relationships. The study examined the influence of employee service orientation, medical service portfolio, medical technology usage, and medical information availability on building long-term patient relationships.

Methods: This research employed a deductive and quantitative approach utilizing a structured questionnaire to gather data from 384 patients of private hospitals. The study used a positivist philosophy to establish a cause-and-effect relationship between service orientation and long-term patient relationships. Reliability analysis, correlation analysis, and regression analysis were conducted to analyze the collected data.

Results: The findings indicated that all four independent variables (service orientation of the staff, medical service portfolio, technology usage, and medical information) demonstrated a significant positive relationship with long-term patient relationships. The correlation analysis revealed a strong positive correlation between service orientation of the staff and long-term relationships (0.88). Similarly, strong positive correlations were observed between medical service portfolio and long-term relationships (0.93), technology usage and long-term relationships (0.95), and medical information provision and long-term relationships (0.90). These findings were further supported by the regression analysis, with P values less than 0.05.

Conclusion: The study concludes that service orientation plays a vital role in building long-term patient relationships in Sri Lankan private hospitals. Specifically, employee service orientation, comprehensive medical service portfolios, utilization of medical technology, and providing accurate and timely medical information are crucial for private hospitals to improve patient satisfaction and foster lasting relationships. By focusing on these areas, private healthcare institutions can strengthen their service orientation and achieve a competitive advantage in attracting and retaining patients.

Keywords: Private Hospitals, Long-Term Patient Relationship, Service Quality, Patient Satisfaction, Medical Technology

Knowledge of Gestational Diabetes Mellitus among pregnant women at Divisional Hospital Mullaitivu in Sri Lanka

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Background: Gestational Diabetes Mellitus (GDM) is a significant health concern for pregnant women at Divisional Hospital Mullaitivu in Sri Lanka. This rural hospital serves a population with limited healthcare resources, where awareness of GDM is generally low. Many pregnant women in the area lack essential knowledge about the risk factors, symptoms, and potential complications of GDM, such as preeclampsia and neonatal issues. This lack of awareness is compounded by socioeconomic and cultural barriers, highlighting the need for enhanced educational efforts to improve early detection and management of GDM, thereby ensuring better health outcomes for mothers and their babies.

Methods: Patients coming to the Prenatal Clinic at DH Mullaitivu interviewed between 8am to 12pm from 15th April to 24th April 2024. 43 mothers from this week were included. This research is done by randomly selected numbers according to the existing register of the antenatal clinic in Divisional Hospital Mullaitivu. They are given a 20 questions questionnaire to measure their knowledge of gestational diabetes mellitus.

Results: Using a 20-question questionnaire with a total score of 100, the study revealed low overall knowledge levels. Of the participants, 33 participants(76.7%) scored between 25-50 marks, indicating a basic understanding of GDM, while only 1 participant(2.3%) scored between 75-100, reflecting high knowledge. Additionally, 8 mothers(18.7%) scored between 50-75 marks, suggesting moderate awareness, and 2.3% scored between 0-25 marks, showing very poor understanding. The majority of participants (33 out of 43) scored below 50, highlighting a significant gap in awareness regarding GDM, which could impact timely diagnosis and management during pregnancy. These findings emphasize the need for educational programs to improve pregnant women's knowledge about GDM and its associated risks.

Conclusion: The research indicates poor knowledge about Gestational Diabetes Mellitus (GDM) among pregnant women at Divisional Hospital Mullaitivu in Sri Lanka, it is evident that immediate action is necessary to improve awareness and understanding of this condition. Establishing a targeted educational program tailored to the needs of expectant mothers is recommended. This initiative should focus on providing clear and accessible information about GDM, its risk factors, symptoms, and the importance of early detection and management. By empowering pregnant women with accurate knowledge, healthcare providers can enhance preventive measures and promote better health outcomes for both mothers and their babies in Mullaitivu.

Keywords: Pregnant Women, Awareness, Gestational Diabetes

Nurses' Knowledge Attitudes and Practices Prevention Regarding the Pressure Ulcers in The Selected Hospital Polonnaruwa Sri Lanka

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Background: Pressure ulcer leads to pain and discomfort for patients and also can cause prolonged illness, delay restoration, increase patient's hospital stay, and may lead to infirmity and even death. The purpose of this study was to assess the nurse's knowledge and skills towards pressure ulcer prevention. To check the association between nurse's job experience and their knowledge and practices towards pressure ulcer prevention at General Hospital Polonnaruwa.

Methods: A cross-sectional study among 384 nurses conducted in General Hospital Polonnaruwa. The study participants were selected by convenience sampling technique. An adopted questionnaire is distributed among study participants. Data entered and analyzed statistics and results presented in Graphs and Tables.

Results: Nurses have moderate knowledge (39%) regarding risk factors of pressure ulcer development, patient's position every two hourly (91%), knowledge about the use of the risk assessment scale for pressure ulcers was (0.01%), in order to give pressure ulcer prevention education to patients and caregivers (86%). Nurses' overall knowledge was only (15.3%) had good knowledge, (11.1%) had fair knowledge and (80.6%) had poor knowledge about pressure ulcer prevention (82.6%) had poor practices, (7.1%) had fair practices and (10.3%) had good practices of pressure ulcer prevention. These findings suggest that nurses need to develop positive attitudes and to increase their knowledge of pressure ulcer prevention in order to improve nursing practice in this area.

Conclusion: Nurse's job experience has a significant association with their practices and knowledge toward pressure ulcer prevention. Nurses' overall knowledge and practices toward pressure ulcers are poor. Working experience had a significant association with nurses' Practices and knowledge at general hospital Polonnaruwa. Therefore, nurses need to get continuing education and training about pressure ulcer prevention that will enhance their knowledge and practices.

Keywords: Knowledge, Nurses, Study, Pressure ulcers, Polonnaruwa,

Poor glycemic control and the contributing factors among type 2 diabetes mellitus patients attending the diabetic clinic at District General Hospital Ampara

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Background: Diabetes Mellitus (DM) is a metabolic disorder characterized by elevated blood glucose levels. It is one of the most prevalent non-communicable diseases. It carries the risk of persistent, lifelong problems and leads to high mortality rates worldwide. In 2013, 328 million people were diagnosed with DM which is an 8.3% prevalent rate worldwide. Furthermore, it is most significant in low- and middle-class nations. This research aims to evaluate the factors contributing to the poor glycemic control among type 2 diabetes mellitus patients attending the diabetic clinic at District General Hospital, Ampara.

Methodology: A cross-sectional study was conducted at the outpatient diabetes clinic at District General Hospital Ampara between November and December 2023. This study was done only using the patients who attended the clinic diagnosed with DM during this period. The data was collected by using a semi-structured questionnaire. Finally, the data was entered into Microsoft Excel and analyzed using descriptive and statistical methods such as regression analysis.

Results: The study on 132 type 2 diabetes participants found that 90 had very poor glycemic control, with 61.37% being male. Educational background was a significant factor, with 38.64% having below Grade 8 education and 31.8% having completed it. Socioeconomic factors were also significant, with 63% reporting income below Rs. 30,000 per month. The findings suggest the need for targeted interventions to improve glycemic control.

Conclusion: The study reveals poor glycemic control remains a significant challenge among type 2 diabetes patients attending the diabetic clinic at District General Hospital Ampara. Factors such as gender, education level, and income were affected by poor glycemic control. Furthermore, addressing these factors through targeted interventions may help to improve the management of type 2 diabetes in this population.

Keywords: Knowledge, Attitude, Contributing Factors, Poor Glycemic Control

Assess Knowledge, Attitudes and Practices regarding Breast Cancer among Females in Primary Medical Care Unit, Hali Ela, Badulla district, Sri Lanka, 2023

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Background: Breast cancer is a prevalent health issue globally, and Sri Lanka experiences high prevalence due to challenges in early detection and identification. Factors like limited knowledge, negative attitudes towards treatment, and poor practices of breast self-examination (BSE) contribute to late presentation at hospitals and impact survival rates. This study aimed to assess the knowledge, attitudes, and practices related to breast cancer and BSE among women in Primary Medical Care Unit, Hali Ela, Sri Lanka.

Method: A descriptive, cross-sectional study was conducted among 133 women attending PMCU Hali Ela. The study used a standardized, validated questionnaire to gather data on participants' sociodemographic characteristics, knowledge of breast cancer early identification signs, risk factors, prevention methods, BSE practices, and attitudes towards breast cancer.

Results: The study assesses the knowledge, attitudes, and practices regarding breast cancer among 133 female participants using a quantitative descriptive cross-sectional design. Key findings reveal that 80% of participants were under 40 years old, 89% were married, and 80% were unemployed. Over 70% demonstrated good knowledge of early signs, risk factors, and prevention methods; however, there was significant variability in practices related to Breast Self-Examination (BSE), with many participants lacking familiarity with proper techniques. While participants maintained positive attitudes toward breast cancer management, the study identifies a critical gap in BSE practices and recommends educational programs to improve awareness and skills in the community.

Conclusion: This study underscores the importance of promoting BSE practices among women in PMCU Hali Ela. While knowledge about breast cancer appears to be satisfactory, the lack of consistent BSE practices is a concern. Also, the study recommends that educational programs and health interventions should be done to take a proactive role in breast health, potentially leading to earlier detection, timely treatment, and improved outcomes.

Keywords: Breast Cancer, Breast Self-Examination, Knowledge, Attitude, Practices

Contribution of Job Embeddedness to Nurses' Desire to Retain their Current Roles

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Background: The nursing shortage poses a significant challenge to healthcare systems globally, impacting patient care and organizational stability. Understanding the factors influencing nurse retention is crucial for developing effective strategies to address this issue. This study examines the relationship between job embeddedness, a multidimensional construct encompassing nurses' connections, fit, and sacrifices within their work environment, and their desire to remain in their current roles.

Methods: This study utilized a mixed-methods design to explore the relationship between work embeddedness and nurses' retention intentions. An inductive approach began with quantitative data collected via a validated job embeddedness survey administered to nurses in various healthcare settings. Statistical analyses, including regression and correlation, identified patterns. Following the quantitative phase, semi-structured interviews with a purposively selected subgroup of nurses provided deeper insights into their experiences. Data collection spanned three months, and analysis involved descriptive statistics for the quantitative data and thematic analysis for qualitative responses. This methodology offered a comprehensive understanding of the factors influencing nurses' retention decisions.

Results: The study finds a strong positive correlation (r = 0.72) between job embeddedness and nurse retention. With an average embeddedness score of 4.78 (SD = 1.25), nurses were grouped into three clusters, showing higher embeddedness (5.45) and retention intentions (4.20) in the top cluster compared to the lowest (2.78 and 2.10). The results highlight the importance of fostering relationships, professional growth, and supportive environments to enhance nurse retention.

Conclusion: This study underscores the importance of job embeddedness as a key determinant of nurse retention. Healthcare organizations should prioritize fostering work environments that enhance job embeddedness by promoting supportive leadership styles, strengthening team dynamics, providing professional development opportunities, and cultivating a sense of belonging among nurses. Addressing these factors can contribute to a more engaged and stable nursing workforce, ultimately benefiting patient care and organizational outcomes.

Keywords: Job Embeddedness, Nursing Shortage, Work Environment, Professional Development

E-Health Literacy and Use of Social Media as a Pediatric Health Information Source among Parents at Medadumbara MOH Area, Kandy, Sri Lanka

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Background: Nowadays both the internet and social media play a big role in daily life decisions therefore more parents tend to use them to get information about their children's health. The objective of this study is to investigate the e-health literacy and usage of social media as a source of health information among parents at the Medical Officer of Health Medadumbara area, Kandy, Sri Lanka.

Methodology: A quantitative descriptive cross-sectional study was implemented with 422 parents who have children under 12 years, in Medadumbara MOH area, Kandy, Sri Lanka. The validated and pretested self-administered questionnaire was used for the data collection. Data analysis was done using descriptive statistics and inferential statistics using SPSS version 26.

Results: Majority of the study participants were female (97.9%), Sinhalese (98.6%) and belonged to the 26-30 age group (57.1%). Most of those educated up to O/L (67.8%) are employed (86%). Most of them frequently used 'Facebook' (97.4) even though everyone used 'WhatsApp' routinely. Most of them stated social media is useful for making decisions (98.8%) and accessing social media health information was important (97.9%). The eHealth literacy level of the participants was at moderate level (95.3%). The usage of social media; purpose, perceived impact and trustworthiness of using social media accounts for high levels (97.4%, 98.1%, 98.1%) respectively. eHealth literacy was statistically associated with usage of social media as a source of health information (p, 0.05). The mean difference of gender, marital status, number of children and frequently using social media found with eHealth literacy (P, 0.05).

Conclusion: The E-Health literacy is at a moderate level but not using formal ways of social media for information seeking. As social media is valued part of their life, more work is needed to determine the effective way of use them for better health of the children

Keywords: Social Media, Perceived Trustworthiness, Pediatric Health Information, E-Health Literacy, Media consumption

Prevalence and Factors Associated with Lost to Follow-Up among Tuberculosis (Tb) Patients in Colombo District

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Background: Lost to follow-up (LTFU) during tuberculosis (TB) treatment is a significant obstacle to TB control programmes globally. It increases the risk of treatment failure, disease relapse, and the development of drug-resistant TB. Understanding the factors associated with LTFU is crucial for developing targeted interventions to improve treatment adherence and achieve better treatment outcomes. This study aims to investigate the prevalence of and factors associated with LTFU among TB patients in Colombo District, Sri Lanka.

Methods: This descriptive, cross-sectional study was conducted at the Colombo Central Chest Clinic, Sri Lanka, from 1 July 2023 to 30 September 2023. All registered TB patients visiting the clinic during this period were included in the study. Data were collected using an interviewer-administered questionnaire via telephone conversations with TB patients. The questionnaire included sections on socio-demographic factors, healthcare provider-related factors, socio-economic factors, patient-related factors (knowledge), and healthcare system-related factors. Data were analyzed using descriptive statistics and Chi-square analysis with SPSS version 26.

Results: The findings revealed that 51.9% of tuberculosis (TB) patients were between the ages of 50 and 60, making it the most impacted demographic, followed by those aged 60-70 years at 15.6% and 30-40 years at 14.9%. In terms of gender, male patients represented 46.8%, while female patients made up 39.6%. Looking at ethnicity, the largest group consisted of Sinhalese at 60.4%, followed by Sri Lankan Tamils at 15.6% and Indian Tamils at 12.3%. Regarding employment status, 39.6% of the patients were unemployed, which could affect their adherence to treatment. The study reported a notable treatment success rate of 82%, which is higher compared to other regions. However, 20% of the patients experienced delays in starting treatment, pointing to operational challenges that require attention.

Conclusion: The study is expected to provide valuable insights into the prevalence of and factors associated with LTFU among TB patients in Colombo District. The findings will be used to develop targeted interventions and strategies to improve patient retention in TB care, enhance treatment adherence, and contribute to better treatment outcomes. These efforts are crucial for achieving the ultimate goal of TB control and elimination in the region.

Keywords: Tuberculosis, Lost to Follow-Up, Prevalence, Factors, Colombo District

Factors Affecting the Utilization of Antenatal Care among Pregnant Mothers at Nallur MOH Area

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Background: An essential part of mother healthcare, antenatal care (ANC) improves the health of both the mother and the fetus. This study attempts to look at a number of variables that affect pregnant women's use of antenatal care services, with an emphasis on decision-making processes, financial concerns, quality of care, accessibility, and demographic characteristics.

Methods: The research employed a cross-sectional design, focusing on pregnant women attending prenatal clinics in the study region. Data was collected through a standardized questionnaire, covering demographics, knowledge of prenatal care, and opinions on accessibility, care quality, and cost. Statistical analyses, including multivariate models and frequency relationships, were used to derive key insights. The majority of participants were young (18–25 years old), married, and had one or more children. Their educational levels varied, and many worked part-time jobs, reflecting a diverse socioeconomic background with differing monthly incomes.

Results: The study on antenatal care revealed key demographic characteristics, with 55% of participants aged 18-25, 90% married, and 58% having one child. In terms of knowledge, 80% recognized the importance of antenatal care, with healthcare practitioners being the primary source of information. Accessibility was strong, with 65% living within 5 kilometers of a hospital and 75% satisfied with service hours. Quality of care was rated highly, with an average satisfaction score of 4.2 out of 5, driven by healthcare professionals' expertise and facility availability. A positive correlation was found between accessibility and quality of care (r = 0.511, p = 0.030), and financial factors and decision-making (r = 0.597, p = 0.000) were also significantly correlated. However, no inferential statistical analysis was performed, limiting the ability to determine the statistical significance of the findings.

Conclusion: The study reveals that financial constraints are a significant barrier to accessing prenatal care, with decisions influenced by cost and affordability. Factors such as family perspectives, spouse influence, and independent decision-making also impact antenatal care usage. To improve maternal and fetal health outcomes, the study recommends addressing accessibility issues, raising awareness, and providing financial support through targeted campaigns, community engagement, healthcare infrastructure improvements, and financial aid programs.

Keywords: Pregnant Mothers, Maternal Health, Antenatal Care, MOH

Risk Factors, Knowledge, and Preventive Practices for Coronary Heart Disease Among Adults in Mulatiyana, Sri Lanka

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Background: Coronary heart disease (CHD) is a leading cause of death globally, impacting both developed and developing countries. Sri Lanka experiences high CHD prevalence and cardiovascular mortality. This study aimed to assess risk factors, knowledge, and preventive practices related to CHD among adults in Mulatiyana, Sri Lanka.

Methods: A quantitative, non-experimental descriptive design recruited 260 adults with CHD from Mulatiyana using simple random sampling. Data collection utilized a structured questionnaire.

Results: The sample comprised a slight male majority (58%) with most participants aged 56 or older (48%). Significant physical risk factors included high body mass index (BMI) with 63.89% overweight and 27.78% obese. Comorbidities were prevalent: 75% had diabetes, 81% had hypertension, and 79% high cholesterol. Psychological distress was also high: 91% experienced anxiety/panic, 84% reported psychological distress, and 79% had depression. While all participants were aware of CHD as a major health concern, preventive practices varied. Only 34% engaged in regular physical activity, and 61% maintained a healthy diet.

Conclusion: High obesity, diabetes, hypertension, and hypercholesterolemia highlight the need for comprehensive management. Health education should focus on translating knowledge into preventive behaviors like physical activity, healthy eating, and smoking cessation. Community interventions, workplace wellness programs, and mental health support policies are crucial. Integrating psychological assessment into routine CHD care is essential.

Keywords:*Coronary Heart Disease (CHD), Risk Factors, Preventive Practices, Psychological Distress, Health Education*

Assessment of Awareness and Knowledge of Occupational Health Safety and Perceived Occupational Hazards among Nurses in Sri Lanka

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Background: Occupational health and safety (OHS) is important in healthcare, especially for nurses who often face various workplace hazards. It's essential to gauge how aware and knowledgeable nurses are about OHS to put effective safety measures in place and reduce risks. This study focused on assessing the awareness, knowledge, and perceptions of occupational hazards among nurses in Sri Lanka.

Methods: A descriptive cross-sectional study was carried out with 305 nurses from hospitals throughout Sri Lanka. Researchers gathered data using structured questionnaires aimed at evaluating OHS awareness, knowledge of safety protocols, and perceived hazards in the workplace. Descriptive statistics were applied for data analysis, presenting results in terms of frequencies, means, and standard deviations.

Results: The findings showed that 49.2% of nurses were aware of OHS practices, but only 2.6% fully understood the protocols. Compliance with personal protective equipment (PPE) varied; while hand washing was done by 84.9% of nurses, only 77.3% consistently used N-95 masks. Common occupational hazards included injuries from sharp objects and respiratory infections, with an average injury rate of 4.55 on a scale of 1-6. Additionally, many nurses reported stress stemming from communication issues, insufficient staffing, and conflicts with colleagues, with 49.2% feeling stressed frequently due to these challenges.

Conclusion: The results point to significant gaps in OHS knowledge among nurses, even though there's a moderate level of awareness. To close this gap and reduce occupational hazards, it's crucial to enhance training programs, provide ongoing education, and improve access to PPE. This study underscores the need for focused interventions to boost OHS practices, creating a safer work environment and better health outcomes for both nurses and patients.

Keywords: Occupational Health, Safety, Nurses, Hazards, Sri Lanka

Awareness of Breast Cancer and Self Breast Examination Among Women in Badulla MOH Area

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Background: In Sri Lanka, the occurrence of breast cancer stands at 7.7 per 100,000. Although controversial in some areas, breast self-examination (BSE) is promoted as a crucial method for early detection of breast cancer. This study seeks to evaluate the understanding, perspectives, and behaviors concerning breast cancer awareness and BSE among women aged 20–30 years in this locality.

Methods: In the Badulla MOH area, a quantitative, descriptive cross-sectional study was carried out with 100 women selected randomly. Data was collected using a pre-tested, self-administered questionnaire. The data was analyzed using descriptive statistics, and the findings were presented in frequencies and percentages using Microsoft Excel.

Results: The majority of participants (71%) lacked knowledge on how to conduct BSE, and 64% had never taken part in any breast cancer screening program. A large proportion of respondents had limited awareness of risk factors, as only 27% knew that breast cancer can manifest as a painless lump. 87% of the participants recognized a family history of breast cancer as a significant risk factor, and 93% identified alcohol consumption as another risk. The primary reasons for not performing BSE were a lack of knowledge on how to do it (24%) and the fear of discovering a lump (11%). The research uncovered a notable deficiency in knowledge and implementation of breast cancer screening and BSE among women in the Badulla MOH area. While some women were aware of risk factors such as family history and alcohol consumption, their understanding of breast cancer symptoms and BSE practices was notably lacking. Most women had never taken part in screening programs, and there were prevalent misconceptions about the significance of early detection.

Conclusion: There is a significant lack of knowledge about breast cancer and BSE habits among women in the Badulla MOH region, as indicated by the study. This emphasizes the necessity for specialized health education initiatives to enhance understanding, promote regular breast exams, and ultimately decrease breast cancer mortality by detecting it early.

Keywords: Breast Cancer, Awareness, Risk Factors, Breast Self-Examination

The Impact of Academic Stress and Social Support on Psychological Resilience among Nursing Students in Sri Lanka, 2024

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Background: Nursing students' psychological resilience is important because it is directly related to academic success and that it affects their coping mechanisms. The aim of this study was to assess levels and relationships of psychological resilience, perceived academic stress and perceived social support among nursing students.

Methods: This study used a descriptive and correlational research design by using a pre validated, selfadministered questionnaire. The population of the study was made up 1308 students studying in first and third academic years at three government nurses training schools in southern province of Sri Lanka, while the sample of study included 392 students selected using the sample size formula for a known population. Sampling was conducted by a stratified random sampling method.

Results: Analysis revealed that the majority of respondents report relatively low levels of academic stress and majority of respondents report moderate to high levels of social support, and psychological resilience. Social Support demonstrates a moderate positive correlation with Psychological Resilience (r = .512, p < .001) and a weak positive correlation with Academic Stress (r = .188, p < .001). Additionally, Psychological Resilience exhibits a moderate positive correlation with Academic Stress (r = .188, p < .001).

Conclusion: These findings suggest that individuals with higher levels of social support tend to also have higher levels of psychological resilience and may experience lower levels of academic stress. Conducting programs that aim to improve psychological resilience techniques is crucial for nursing students. Special attention should be directed toward social support, especially from family members.

Keywords: Psychological Resilience, Social Support, Academic Stress, Nursing Students

Factors influencing knowledge, attitudes, and practices related to exclusive breastfeeding among mothers in Thaa Guraidhoo, Maldives

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Introduction: The best intervention for a child's survival during the first six months of life is universally recognized to be exclusive breastfeeding. Despite the attempts, only 48% of Maldivian infants were breastfed exclusively for the first six months of life. This study's primary goal was to identify the variables affecting mothers in Thaa Guraidhoo, the Maldives, between the ages of 20 and 40 who practice exclusive breastfeeding in terms of knowledge, attitudes, and practice.

Methods: This cross-sectional descriptive investigation included 142 eligible mothers in a random sampling technique. Data was collected through a structured questionnaire, divided into sociodemographic data, knowledge of exclusive breastfeeding (EBF), attitudes towards EBF, and EBF practices. A pilot study with 22 women (10%) confirmed the questionnaire's validity and reliability. Data analysis was performed using SPSS, with descriptive statistics used to present findings on EBF knowledge, attitudes, and practices.

Results: The research indicated that the participants, who ranged in age from 20 to 40 years, had an average age of 32.85 years, with all of them completing the survey. A significant rate of exclusive breastfeeding was noted, with 89.4% of the mothers practicing it. The results revealed that mothers had a considerable level of knowledge about exclusive breastfeeding, evidenced by an average score of 78.21, and they generally exhibited a positive attitude, reflected in a mean score of 30.01. Additionally, practices related to exclusive breastfeeding received favorable evaluations, with an average score of 36.48. Importantly, there were notable positive correlations between exclusive breastfeeding and factors such as maternal knowledge, attitudes, breastfeeding counseling, and media information, suggesting strong links among these areas.

Conclusion: All healthcare facilities should increase awareness and education to enhance mothers' knowledge, attitudes, and practices around breastfeeding. It is necessary to improve advocacy and health education resources. As knowledge, attitude, perceived behavior control, and intention are the strongest indicators of the length of exclusive breastfeeding, it is important to give mothers adequate information about breastfeeding, support their positive attitude toward breastfeeding, inform their referents, and improve their nursing control.

Keywords: Exclusive Breastfeeding, Breastfeeding, Mothers, Maldives

Prevalence and Co-Related Factors in Contributing to Psychological Stress Among Student Nurses in Nurses Training School, Kurunegala

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Background: Stress is defined as a physiological and psychological response to an environmental demand that occurs after an individual perceives that they are not able to adequately cope with the present demand. Various events or stimuli may be referred to as a stressor and may be physiologic or psychology in nature. Balancing nursing school and work schedules, preparing for exams, participating exams and balancing personal life with the demands of nursing training school are all potential stressors in a nursing student's life. The purpose of the study was to identify prevalence and co-related factors contributing to psychological stress among student nurses in nursing training school, Kurunegala.

Method: Descriptive research, cross-sectional design, and quantitative research were all used in the study. Self-administered surveys were used to obtain data. Population of the study was 40% of currently studying student nurses from each batch in nursing training school, Kurunegala 2022. The study sample was 242 students. Data analysis was done by using Microsoft Excel (2010).

Results: All participating students (100%) reported experiencing stress. While 63% reported mild stress and 28% moderate stress, a small percentage reported no stress (8%) or severe stress (0.4%). The most commonly reported stressor category was academic (reported by 97% of students), followed by clinical (92%), personal (75%), and environmental/social (50%). Notably, fear of exams (96%), unfriendly ward staff (96%), and fear of making mistakes (98%) were among the most prevalent specific stressors. Third-year students reported higher levels of academic and clinical stress compared to first-year students. Female students reported a higher prevalence of stress (95%) than male students (86%). Students residing in hostels reported significantly higher levels of stress than those living at home or in other types of housing.

Conclusion: This study reveals a high prevalence of psychological stress among student nurses. Academic demands, clinical experiences, and personal challenges contribute significantly to stress levels. The findings underscore the need for interventions and support systems within nursing education to help students manage stress effectively. These could include stress management workshops, mentoring programs, and improved access to counseling services.

Keywords: Psychological Stress, Nursing Students, Nurses Training School, Factors, Prevalence

Level of Stress in the Scholarship Examination Among Grade Five Students

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Background: The Grade 5 Scholarship Examination in Sri Lanka is a significant and competitive standardized test that establishes a student's eligibility for financial aid to enter elite institutions. This exam is well-known for its anxiety and tension because it directly affects students' educational paths and future chances.

Methods: A representative sample of grade five children from Sri Shanmuga Hindu Ladies College in Trincomalee, Sri Lanka were given a survey questionnaire. The sample was made up of 105 grade 05 pupils who were chosen from four divisions of grade 05 students at the school using a descriptive cross-sectional quantitative sampling approach. Exam tension was gauged using a Likert-stress scale. The researcher also created a children's coping questionnaire to assess independent variables such as academic stressors, social and interpersonal stressors, and environmental stressors.

Result: The study revealed important descriptive statistics on the level of stress experienced by fifth standard students during scholarship examinations. A significant portion of students reported experiencing stress related to academic factors, with 29.5% feeling "Much Stress/Fairly Stressful" from exam preparation, 42.8% from exam expectations, and 38.4% from academic workload. Social stressors were also prevalent, particularly parental expectations (31.4%), peer pressure (28.56%), and teacher expectations (44.75%). Environmental stressors were reported as less impactful, with most students experiencing minimal stress from factors like the exam environment and school climate. Overall, 74.43% of students experienced some degree of stress regarding the scholarship exam, with 23.93% reporting mild stress, 24.29% moderate stress, 19.73% much stress, and 6.41% extreme stress. However, the study did not include any inferential statistics, and further analysis is required to determine if these stress levels are statistically significant across different factors.

Conclusion: In light of the findings, the students under study experienced mild to moderate levels of stress. Three factors affected the level of stress in grade five scholarship examination among grade five students. They are academic stressors, social and interpersonal stressors, and environmental stressors.

Keywords: Stress, Scholarship Examination, Stress Factors, Academic Pressure, Socio-Economic Pressure

Awareness and Practice on Paracetamol Administration and Handling Among Mothers of Children Between the Ages of 0-6 Years Perera P.W.L.K¹, Dissanayake D.²

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Background: Paracetamol is commonly used for managing pain and fever in children. However, incorrect dosing and a lack of awareness regarding administration and side effects often lead to overdose cases, potentially causing serious harm such as liver damage. This study aims to assess the awareness and practices of paracetamol administration among mothers of children aged 0-6 years.

Methods: A descriptive cross-sectional study was conducted from March to May 2022 at the Mirigama MOH, Gampaha District, Sri Lanka. A total of 140 mothers of children aged 0-6 years participated, selected through convenience sampling. Data were collected via a self-administered questionnaire assessing their knowledge of safe paracetamol administration, handling, and awareness of side effects.

Results: The majority of mothers (38.9%) had a moderate level of awareness regarding safe administration, 34.3% had good awareness, and 18.2% demonstrated excellent knowledge. Regarding the safe handling of paracetamol, 35.7% of mothers showed moderate awareness, while 24.6% had poor awareness. Concerning the side effects, 41.4% had moderate awareness, and 30.8% had good awareness. Furthermore, only 13.6% were highly aware of the potential risks of overdose. These findings indicate that most mothers lacked sufficient knowledge about adjusting the dose based on their child's weight and age, as well as the safe handling of the medication.

Conclusion: The study reveals that many mothers lack adequate knowledge and training on paracetamol dosage and its side effects. This highlights the need for education and awareness programs to improve their understanding and reduce the risks associated with improper use, particularly in preventing overdose-related complications.

Keywords: Paracetamol, Awareness, Administration, Overdose Mothers, Children, Sri Lanka

Level of Knowledge and Attitude Regarding Hospital-Acquired Infection in Winsetha Hospital

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Background: Hospital-acquired infection (HAI) is a major challenge worldwide. Nurses and student nurses are directly vulnerable to exposure to HAIs and Standard Safety Precautions (SSPs) are practiced to prevent Hospital hospital-acquired infections. This study aims to assess the knowledge, and attitudes regarding the prevention and control of HAIs among Nurses at Winsetha Hospital.

Methods: A descriptive cross-sectional study was carried out using a convenient sampling method in the Winsetha Hospital with a total of 90 nurses. A self-administered questionnaire assessed sociodemographic data and, Knowledge and attitude.

Results: 90 nurses were included in the study. Nurses from Winsetha Hospital (25 senior nurses, 31 Junior nurses, and 34 student nurses participated in this study. 36(40%) were in 20y- 29y age group, 20(22.22%) in the 30y-39y age group, 29(32.22%) in 40y-49y age group and 5(5.55%) in 50y-59y age group. The educational level of the nurses was; 17 passed G.C.E O/L, 39 passed G.C.E./AL, 36 Diploma level, and 8 nurses in degree level. The majority of nurses had moderate level knowledge of HAIs and no significant association between Knowledge and attitude.

Conclusion: This research examined the knowledge and attitudes of nurses at Winsetha Hospital regarding Hospital Acquired Infections (HAIs). The findings highlight that while many nurses possess good knowledge about HAI prevention and control, there are knowledge gaps in specific areas, particularly among pupil nurses and junior staff nurses. This underscores the need for tailored educational interventions to address these gaps and reinforce the importance of consistent application of preventive measures. The positive attitudes observed among nurses offer a strong foundation for promoting effective HAI prevention practices within the hospital setting.

Keywords: Knowledge, Hospital-Acquired Infection, Attitude, Prevention, Standard Safety Precautions

Knowledge Regarding Safe Handling of Chemotherapy Drugs Among Nursing Staff of Apeksha Hospital Maharagama

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Background: Cancer is a leading cause of death and illness globally, with chemotherapy serving as a primary treatment modality. Nurses play a crucial role in chemotherapy administration, making their knowledge of safe handling practices paramount. Inadequate knowledge can lead to environmental contamination and adverse health effects for both patients and healthcare workers. This study aimed to evaluate the knowledge regarding safe handling of chemotherapy drugs among nursing staff at Apeksha Hospital Maharagama, Sri Lanka.

Methods: This descriptive cross-sectional study included 100 nurses working in chemotherapy units at Apeksha Hospital. Data was collected using a self-administered questionnaire and an observational practice checklist. The questionnaire evaluated nurses' knowledge about chemotherapy handling, administration, and disposal, as well as their use of personal protective equipment (PPE). Data was analyzed using descriptive and inferential statistics.

Results: The majority of participating nurses demonstrated understanding of the harms associated with chemotherapy exposure. Most nurses (99%) reported using gloves while handling chemotherapy, but the use of other PPE like gowns and eye protection was negligible. The study revealed a lack of comprehensive written policies and procedures regarding chemotherapy handling at the hospital, with only 38% of nurses confirming their existence. In addition, only 14% of nurses reported using gowns when cleaning spills, and 92% used gloves during disposal, but none used eye protection for either task. Furthermore, only 4% of nurses reported using gowns during chemotherapy preparation, and merely 2% during administration. Eye protection was used by just 1% of nurses during preparation and not at all during administration.

Conclusion: There is a significant need to enhance knowledge and improve safe handling practices of chemotherapy drugs among nursing staff at Apeksha Hospital Maharagama. While nurses exhibit general awareness regarding the hazardous nature of chemotherapy drugs and their potential routes of exposure, the study reveals critical gaps in knowledge translation and adherence to safety protocols. Implementing formal training programs, establishing comprehensive guidelines, and ensuring the availability of appropriate PPE are crucial steps to mitigate risks and enhance patient and staff safety.

Keywords: Safety Protocol, Chemotherapy Handling, Nursing Knowledge, Sri Lanka

Knowledge and Practices Related to Chemotherapy Induced Neutropenia and its Management Among Nurses in Oncology Wards at Apeksha Hospital – Maharagama

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Background: Cancer affects over 50 million people globally, with over 19 million new cases identified in 2020. Neutropenia, a side effect of cancer treatment, is a common risk factor for serious infections. Chemotherapy patients often experience chemotherapy-induced neutropenia (CIN), which can compromise patient outcomes and quality of life. Nurses play a crucial role in managing CIN, but little research has been done on their skills and practices. This study aims to assess nurses' skills and knowledge regarding the treatment of chemotherapy-induced neutropenia in the cancer wards at Apeksha Hospital in Maharagama.

Method: A descriptive, cross-sectional investigation was carried out among 150 nurses, involving the distribution of a self-administered survey that inquired about demographics, knowledge and practices regarding the management of neutropenic patients.

Results: The average knowledge level of nurses was found to be 71.63%. Fundamental ideas demonstrated high correct response rates (85.33% to 100%), but specialized issues revealed notable knowledge gaps (6% to 14.67%). On the other hand, the practice level was exceptionally high at 94.995%, demonstrating great overall adherence to clinical processes (78.67% to 98.67%). The participant demographics showed that 86% were female, with most nurses aged between 24- 40 years (24-30 years: 46%, 30-40 years: 41%). A significant portion (42%) had less than 5 years of work experience, and most had less than 10 years overall. Furthermore, 62% were grade three nursing officers, and 83% held diplomas. Despite all participants having experience with CIN patients, 93% managed these patients without special training, relying primarily on their work experience and basic nursing education.

Conclusion: These findings highlight the necessity of focused educational initiatives to close the knowledge gaps that have been found and raise the standard of CIN patient care as a whole. These gaps can be filled with specific training, guaranteeing thorough and efficient CIN management. Not only will this promote patient outcomes, but it will also boost the workforce's confidence and competency in nurses. The study emphasizes the value of continuing professional development and the execution of targeted training programs to assist nurses in providing CIN patients with high-quality treatment.

Keywords: Chemotherapy-Induced Neutropenia, Knowledge, Oncology

Assessing the Factors Contributing to the Job Satisfaction of Nurses in District General Hospital Monaragala

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Background: The job satisfaction of nurses plays a crucial role in the provision of high-quality healthcare services by impacting patient care, staff retention, and organizational success. Despite its significance, there is a lack of information in the literature, especially when it comes to the particular circumstances surrounding District General Hospital Monaragala. This study seeks to assess the factors contributing to the job satisfaction of nurses in the Monaragala Government Hospitals of Sri Lanka

Methods: A descriptive, cross-sectional, quantitative, and non-experimental design was employed to assess the factors contributing to job satisfaction among nursing officers at the District General Hospital Monaragala in Sri Lanka. Primary data were collected using a self-constructed questionnaire delivered through Google Forms. The questionnaire included four sections: demographic data, administrative factors, professional factors, and other factors. Descriptive statistics, correlation analysis, and regression analysis were used to analyze the data. SPSS version 19.0 was used for data processing and analysis.

Results: The study conducted at District General Hospital Monaragala revealed significant insights into the factors influencing job satisfaction among nursing officers. The sample comprised 61% female and 39% male nurses. Nurses had an average of 10.5 years of experience, with a standard deviation of 5.3 years, reflecting a broad range of professional experience within the group. The study employed regression analysis to assess the relationship between administrative, professional, and personal factors and overall job satisfaction. Administrative factors showed the strongest positive effect on job satisfaction (B = 0.32, p < 0.0001). Professional factors also had a significant positive impact (B = 0.25, p < 0.0001). Additionally, personal factors were found to positively influence job satisfaction (B = 0.18, p = 0.0003). Overall, all three factors contributed significantly to nurses' job satisfaction, with administrative factors being the most impactful.

Conclusion: The study explores job satisfaction among nursing staff at District General Hospital Monaragala, focusing on factors like administrative rules, professional growth opportunities, and personal aspects. Findings suggest a positive correlation between job satisfaction and autonomy, a high-quality work environment, managerial support, and personal qualities. The study recommends emphasizing empowerment, honouring career accomplishments, and adjusting support plans to meet specific nurses' needs, enhancing organizational effectiveness and patient care. The study aims to stimulate further research to improve nursing professionals' welfare and healthcare organizations' success.

Keywords: Job Satisfaction, Nurses, District General Hospital Monaragala, Professional Recognition

Quality of Sleep and Associated Factors among Adult Hypertensive Patients in ADK Hospital, Maldives

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Background: This study aimed to assess sleep quality and identify factors associated with poor sleep among adult hypertensive patients at ADK Hospital in the Maldives, a region with limited research in this area, as hypertension is linked to poor sleep quality, impacting overall health and well-being, and potentially leading to serious health complications like heart disease, stroke, and kidney failure.

Method: A descriptive cross-sectional study was conducted among adult hypertensive patients attending ADK Hospital. Data was collected through a self-administered questionnaire, including demographic information, sleep habits, psychological correlates, and health-related variables. A simple random sampling method was used to recruit a sample size of 420 participants. Data analysis was performed using SPSS (version 27) and involved descriptive statistics and inferential statistical analyses, such as correlation and regression analyses.

Results: Results showed that 57.9% of the participants were male and the largest age group was 25 to 30 years old. While 35.8% correctly identified 120/80 as the normal blood pressure range, many were unaware of the normal level. 52% of participants identified continuous headaches as a symptom of hypertension. Regarding medication, 35.5% reported taking medication for less than one year. Lifestyle factors showed that 26.7% used less than 1 teaspoon of salt daily, 29.3% rarely consumed fruits and vegetables, 63.9% did not smoke or use tobacco, and 48% exercised once a week. Mental health data showed that 41.2% experienced depression and 34.1% experienced anxiety. Sleep quality results showed that 53.7% reported fairly good sleep quality. Further analysis revealed statistically significant relationships between sleep characteristics (subjective sleep quality, sleep latency, depression, sleep duration, medication importance, use of sleep medication, and daytime dysfunction) and demographic factors such as sex, age, and marital status.

Conclusion: The study highlights the significance of sleep quality and demographic factors in managing hypertension in the Maldivian context. It suggests that sex, age, and marital status significantly influence sleep quality and health characteristics, thereby guiding healthcare providers to create personalized treatment plans for hypertension and sleep quality.

Keywords: Hypertension, Sleep Quality, Maldives

Knowledge and Attitudes Related to Sexually Transmitted Diseases among Adolescents (between age 17 - 19) in National School in Gampaha District

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Background: Adolescence is the transitional period between puberty and adulthood in human development. Adolescence is a period of life with specific health and developmental needs and rights. Sexuality education begins at home. Parents and caregivers are the primary sexuality educators of their children. Teachable opportunities to discuss sexuality issues with children occur on a daily basis. The objective of the study is to assess the knowledge and attitudes about Sexually Transmitted Infections (STIs) among grade 11 to 13 students in National School in Gampaha District in Sri Lanka.

Methods: A descriptive cross-sectional study was conducted using a sample of 100 school students in grades 11 to 13 in National School in Gampaha District. They were given a close-ended questionnaire, assessing their knowledge regarding the reproductive system, sexual health, teenage pregnancy, and their attitudes towards teenage pregnancy using 40 questions.

Results: The study evaluated the knowledge of 172 students aged 17-19 from Kelaniya Gurukula Vidyalaya in Kelaniya Divisional Secretariat. The majority (63.7%) had learned about the reproductive system in grade 9, with 82% having good knowledge. The majority (55%) knew about sexual intercourse, with 56% having average knowledge. The majority (95%) knew about Sexually Transmitted Infections (STIs), with no excellent or poor knowledge. The study also assessed attitudes towards STIs, with 52% agreeing and 45% strongly disagreeing. The majority (55%) did not help friends infected with STIs socialize, and 54% did not comment on their classmates' learning experiences. 52% of students were satisfied with their knowledge about STI. The study found that 100% of the population needs more awareness programs about STIs and 45% would help reduce discrimination.

Conclusion: The study highlighted that while a majority of students demonstrated good knowledge of the reproductive system and basic understanding of STIs, there were significant gaps in sexual health awareness. Attitudes toward STI-infected individuals showed mixed results, with notable stigma. Comprehensive education and awareness programs are essential to improve students' knowledge, promote positive attitudes, and reduce discrimination toward those affected by STIs. The findings suggest a strong need for better sexuality education in schools to address these gaps and foster a supportive environment.

Keywords: Sexually Transmitted Diseases (STDs), Knowledge, Awareness, Adolescents

A Study to Evaluate the Effect of Covid-19 Pandemic on Hemas Hospital Emergency Management System

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Background: Incident Commanding Systems (ICS) are critical components of hospital emergency management plans that help healthcare providers respond to emergencies effectively. The COVID-19 pandemic has tested the effectiveness of ICS in hospitals worldwide, including Hemas Hospitals in Sri Lanka. The workload efficiency of ICS is an essential factor in ensuring the successful management of emergencies, particularly during a pandemic. The nursing staff in hospitals have been particularly impacted by the COVID-19 pandemic due to their role in patient care and infection prevention and control.

Methods: This study is a descriptive cross-sectional study in which Nurses working attached to Hemas hospital, Thalawathugoda were incorporated into the study. The participants were given a previously validated questionnaire in an online platform or in person. The questionnaire had separate sections for collecting demographic data and other questions to evaluate the impact of Covid 19 on different components of the ICS. A LIKERT scale was used to collect the responses from participants.

Results: The study, based on feedback from 156 nurses at Hemas Hospital Thalawathugoda, assessed the impact of the COVID-19 pandemic on the Incident Command System (ICS). Most participants (36%) disagreed that the ICS was ineffective during the pandemic, while only 22% agreed, indicating that the system was generally considered effective. Additionally, 33.3% disagreed that operational issues hindered goal achievement, and 38.5% were neutral about communication disturbances within the ICS. The study concluded that the pandemic did not significantly impact the ICS's success, though financial management challenges were noted and require improvement.

Conclusion: However, it is expected that the current findings will be helpful in implementing strategies to increase the effectiveness of ICS in hospitals in order to face future pandemics successfully.

Keywords: Incident Commanding Systems, COVID-19 pandemic, hospital emergency management

Patients' Satisfaction on Service Quality of Selected Private Clinical Laboratory in Gampaha District

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Background: Patient satisfaction is a critical indicator of healthcare quality, reflecting the effectiveness and patient-centeredness of service delivery. Clinical laboratories, as integral components of the healthcare system, play a vital role in diagnosis, treatment, and patient management. Understanding patient satisfaction with clinical laboratory services is essential for identifying areas for improvement and enhancing the overall healthcare experience.

Methods: This descriptive cross-sectional study assessed patient satisfaction with the service quality of a selected private clinical laboratory in Gampaha district, Sri Lanka. A structured questionnaire, adapted from the SERVQUAL model, was administered to adult patients seeking laboratory investigations. The dimensions incorporated into the questionnaire include tangibility, reliability, responsiveness, assurance, concern, turnaround time, technology, and test reports. Data were analyzed using SPSS version 25.0, employing descriptive statistics and binary logistic regression.

Results: The study found that patient satisfaction varied depending on the clinical laboratory services. Clear directional indications, staff availability, and cleanliness were all highly valued by patients; staff presence and ease of movement had a particularly big influence. Service delivery reliability was highly regarded, and this included timely and accurate services, staff confidence, response to urgent needs, and efficient problem-solving. The patients valued the staff's attentiveness and willingness to assist, the clear communication regarding their investigations, and the timely service without the need for appointments. Additionally, maintaining confidentiality, fostering trust, and ensuring patient safety were key contributors to positive experiences. Patients were also more satisfied when the turnaround times for both emergency and routine investigations were efficient. While they appreciated the use of advanced technology, there were concerns about potential errors.

Conclusion: The findings emphasize the multidimensional nature of patient satisfaction with clinical laboratory services. Healthcare providers should prioritize tangible improvements, ensure reliability in service delivery, foster responsiveness and assurance, and optimize turnaround times and technology integration. By addressing these dimensions, clinical laboratories can enhance patient-centred care and improve the overall healthcare experience.

Keywords: Patient Satisfaction, Clinical Laboratory Services, Service Quality

The impact of Awareness Knowledge Skills and Attitudes for the effective Performance of Telemedicine in Teaching Hospitals of Sri Lanka

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Background: The adoption of telemedicine in Sri Lanka, particularly within teaching hospitals, offers a transformative approach to healthcare delivery, especially in bridging geographical barriers and addressing resource disparities. However, realizing the full potential of telemedicine necessitates a comprehensive understanding of the factors influencing its effective implementation. This study examines the crucial role of Awareness (A), Knowledge (K), Skills (Sk), and Attitudes (Att) – collectively termed AKAS – among healthcare users in shaping telemedicine performance within teaching hospitals in Sri Lanka.

Methods: This study employs a mixed-methods research design within a deductive framework, grounded in positivist philosophy, to examine the impact of attitudes, skills, knowledge, and awareness on telemedicine performance in Sri Lankan teaching hospitals. Quantitative data is collected through surveys from healthcare professionals to test established hypotheses. For qualitative analysis, case studies are conducted to provide a deeper, contextual understanding of telemedicine implementation. This qualitative component allows for rich insights into individual hospital practices and challenges. Secondary data from academic literature and reports further support the analysis. This combined approach ensures both generalizability and an in-depth exploration of the research topic.

Results: The study found a moderate positive relationship between awareness and improving healthcare service, with a Pearson correlation coefficient of approximately 0.402. Knowledge about healthcare had a negative correlation, while attitude had a strong positive relationship(approximately 0.606). Skill level also contributed positively. These factors explained 43% of the variation in perceptions of healthcare service improvement. Qualitative results, derived from case studies, highlighted the importance of hospital-specific factors—such as infrastructure, resources, leadership, and organizational culture—in shaping telemedicine performance. These factors vary by hospital, emphasizing the need for tailored approaches to address the unique challenges and opportunities in each setting.

Conclusion: The findings emphasize the importance of awareness, knowledge, attitudes, and skills (AKAS) in enhancing telemedicine performance in Sri Lankan teaching hospitals. Promoting these elements through campaigns, training, and positive attitudes among healthcare professionals is vital for successful integration. Policymakers and administrators should focus on developing telemedicine strategies that address infrastructure, resources, and organizational culture. Continuous research and evaluation are recommended to optimize telemedicine's potential in improving patient care and outcomes in Sri Lanka.

Keywords: Telemedicine, Teaching Hospitals, Healthcare Delivery, Healthcare Policy

Assess the Awareness of Breast Cancer among Women in Bendiwewa Rural Area in Polonnaruwa

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Background: Breast cancer is the commonest cancer in women worldwide. Comparable programs promoting breast cancer awareness are being performed though Sri Lanka, Limited have targeted rural areas women. This study was to assess the knowledge, attitudes and practices regarding breast cancer with reference to screening, services available, breast self-examination and source of information, among rural areas women in the Polonnaruwa District in Sri Lanka.

Methods: The knowledge, attitude and practices related to breast cancer were assessed among 229 women in Bendiwewa rural area in Polonnaruwa District; using a self- administered questionnaire. All women above 20 years permanent residences or temporarily live in Bendiwewa rural area in one month. Including the grama niladhari name of the women list, give the serial for all women and randomly selected 229 women from gramaniladaris' woman name list.

Results: In a sample, 81.66% of participants were aware of the risk factors, preventative strategies, and nature of breast cancer; of those, 32.8% learned about it through formal workshops. Good overall knowledge was demonstrated by 89.50% of respondents were aware of preventative techniques and 70.31% agreed that breast cancer is avoidable. The level of awareness of risk factors was high; 86% of respondents considered family history a significant factor and 89.95% said benign breast disease was a risk factor. Furthermore, 82.97% were aware that breast cancer may be identified early. Although the majority of participants recognized breast lumps as warning indicators, their knowledge of other indicators was restricted. A clinical breast examination was performed by 79.48% of respondents, and 39.30% of them encouraged breast self-examination, which was carried out by 69.87% of respondents.

Conclusion: There were significant deficiencies in knowledge, attitudes and practices on breast cancer in the study population. In particular, breast cancer early symptoms were poor. There is a need for awareness programs aimed especially at this important target group.

Keywords: Breast Cancer, Knowledge, Polonnaruwa District, Breast Self – Examination, Rural Women

Factors influencing the service capacity gaps in Healthy Lifestyle Clinics within the Colombo district, Sri Lanka

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Background: Healthy Lifestyle Clinics (HLCs) were introduced by the Sri Lankan health ministry in 2011 to combat the lack of organized non-communicable disease (NCD) screening services. Despite the existence of numerous HLCs, participation rates in the Colombo district remain lower than in other regions. This study aims to investigate the factors influencing service capacity gaps within the Colombo district's HLCs.

Methods: This study employed a descriptive cross-sectional design to examine service capacity gaps in Healthy Lifestyle Clinics (HLCs). The study collected both quantitative and qualitative data from 32 HLC centers in the Colombo district of Sri Lanka. The researchers used a two-part data collection approach. The first part used a checklist to evaluate the availability of resources and facilities at each HLC center. The checklist data was gathered with the assistance of the staff at each clinic. The second part of the data collection consisted of in-depth interviews conducted with key informants. These informants were selected based on their knowledge, experience, and interest in HLCs and NCDs. The interviews used open-ended questions to explore challenges faced by the HLCs in providing care

Results: Quantitative findings showed that average attendance across 32 HLCs was 133.28, with a wide range (11 to 490 attendees). Female attendance was higher than male (83.56 vs. 50.13). Clinics referred an average of 33.35 individuals to medical or specialized facilities, and 90.6% had access to public transport. Human resources varied, with clinics reporting 3 to 6 key personnel. Infrastructure was mostly adequate, although shortages in some medical equipment, such as peak flow meter mouthpieces, were noted. Most clinics had 12 out of 18 essential medicines. ANOVA tests did not find significant relationships between variables like human resources or transport and clinic attendance.Qualitative findings highlighted issues such as inconvenient clinic hours, human resource shortages, irregular drug distribution, negative staff attitudes, and the need for better follow-up systems.

Conclusion: This study highlights the complexity of factors influencing attendance at HLCs in the Colombo district, emphasizing that improving public participation in health programs requires addressing more than just material resources. A multifaceted approach, considering local context and perceptions, is necessary to effectively address service capacity gaps in HLCs.

Keywords: Healthy Lifestyle Clinics, Non-communicable Disease Screening, Public Participation, Service Capacity Gaps, Colombo District

Awareness of Noise-Induced Hearing Loss (NIHL) among Medical Students: A Study on Headphone Usage Patterns and Protective Measures

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Background: Noise-Induced Hearing Loss (NIHL) is an increasingly prevalent health issue, particularly among young adults who frequently use personal auditory devices such as headphones. This study investigates the awareness of NIHL among medical students, a demographic that heavily relies on these devices, and explores their knowledge levels, headphone usage patterns, and attitudes towards protective measures.

Methods: A descriptive cross-sectional study was conducted among 3rd, 4th, and 5th-year medical students, chosen for their significant clinical exposure. A consecutive sampling method was used, and the sample size was calculated as 196 students based on previous research, confidence level, and margin of error. Data were collected using a 29-item Likert scale questionnaire covering NIHL awareness, headphone usage, attitudes toward protective measures, and demographics. The data was analyzed using SPSS, with descriptive and inferential statistics employed to explore relationships between variables.

Results: The study revealed a significant knowledge gap regarding Noise-Induced Hearing Loss (NIHL) among medical students, with only 39.2% correctly identifying it as a sensorineural condition. Many were uncertain about the effects of high-volume sounds on hearing health, and a large proportion disagreed or partially agreed that safe headphone volume could prevent hearing damage. While 92.9% recognized the risks of noise exposure, there was uncertainty about the irreversible nature of NIHL. Regarding headphone usage, 59.6% of students used personal listening devices for over an hour daily, with 18.9% frequently listening at high volumes and 26% experiencing hearing issues after exposure to loud noises. Despite this, 87.2% had not received formal education on NIHL, though 78.6% supported its inclusion in the curriculum.

Conclusion: This study highlights the need for targeted educational interventions to improve medical students' awareness of NIHL and promote safer listening habits. The correlation between increased knowledge and improved headphone usage behaviors suggests that integrating comprehensive hearing health education into medical curricula can enhance both personal and professional advocacy for auditory health. Addressing these knowledge gaps is crucial for safeguarding the hearing of future healthcare providers and their patients.

Keywords: Noise-Induced Hearing Loss, Medical Students, Headphone Usage, Hearing Health Education, Protective Measures

Enhancing Non-Communicable Disease Screening Among the Population in Thissawewa-1 PHM Area: A Community-Based Approach

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Background: The rising prevalence of Non-Communicable Diseases (NCDs) has emerged as a leading cause of morbidity and mortality in Sri Lanka. Despite the growing burden, many cases remain undiagnosed until late stages due to inadequate access to and utilization of early screening programs. This research aims to assess the effectiveness of existing NCD screening protocols in Sri Lanka, identify barriers to early detection, and propose strategies to improve accessibility, especially in rural and underserved areas, to mitigate the impact of NCDs on public health.

Methods: A quantitative descriptive cross-sectional study was conducted with people over 30 years of age in Nuwaragam Palatha Central (NPC) MOH, Tissawewa-1 PHM area in Anuradhapura from July to August 2023. A structured validated community survey was distributed among conveniently selected study samples of 280 participants who were above the age of 30 years. The study was approved by Institutional Reviewed Board College of Nursing Anuradhapura. Data analyzed by SPSS 26, for descriptive and interrelated statistics.

Results: A survey was distributed to 280 participants, all over the age of 30, to assess their screening status for non-communicable diseases (NCDs). Among them, 178 individuals had not undergone any prior NCD screening. As a result, a screening program was conducted, and 126 participants (71%) took part in the initiative. Of those screened, 11 individuals (8.7%) were found to have high blood pressure, 19 (15%) had elevated capillary blood sugar (CBS) levels, 28 (6.3%) were classified as overweight, 2 (1.6%) had high creatinine levels, and 23 (18.2%) had elevated cholesterol levels. Overall, the mean value of participants screened for NCDs was 45%.

Conclusion: This study underscores the necessity of increased screening for non-communicable diseases (NCDs) among individuals over the age of 30. These results emphasize the critical importance of regular NCD screening to identify risk factors early and reduce the long-term burden of chronic diseases.

Keywords: Non-Communicable Diseases, NCD Screening, Community, Early Detection

Knowledge on Maternal and Newborn Postnatal Care among Nursing Students at the International Institute of Health Sciences, Sri Lanka

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Background: Postnatal care is crucial for maternal and infant health from birth to six weeks of age. It involves close observation and necessary steps to ensure optimal health. However, adequate care is often lacking during this critical period, highlighting the need for skilled midwives and nurses to address complications and ensure maternal health. The objective of this study is to assess the knowledge of postnatal care among nursing students at the International Institute of Health Sciences in Sri Lanka.

Method: The study was carried out as a quantitative, descriptive, cross-sectional study using a randomised sampling technique. According to the Morgans table, the population size was chosen as 300 and the sample size corresponding were 169. Electronic Google forms were used for data collection with a self-administered, created questionnaire with a total of 35 questions, scored following the Likert scale.

Results: On analysis, 98.8% (n = 167) of the participants total of 169 showed good knowledge of maternal and newborn postnatal health care. While 1.2% (n = 2) showed poor knowledge of abovementioned aspects. A study surveyed 169 nursing students, primarily aged 22-25, female, and Sinhalese. Most rated their English fluency as "Very Good." They were aware of neonatal danger signs, breastfeeding, cord care, postpartum assessments, and birth spacing counselling.

Conclusion: The analysed data on the study strengthens the effectiveness of the current nursing education programs to prepare nursing students to practise evidence-based care for maternal and newborn health. The revealed gaps identify the areas in which the nursing curriculums can be refined to get talented healthcare providers for preventing maternal and newborn morbidity and mortality.

Keywords: Postnatal, Newborn Care, Maternal Health, Nursing Students

Significant gaps in practise present despite higher level of public awareness in Antibiotic Use and Antimicrobial Resistance in the western province of Sri Lanka

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Introduction: The misuse of antibiotics is influenced greatly by factors such as urbanization, and limited healthcare access. This has caused the problem of antibiotic resistance to spread rapidly, affecting global health. This resistance not only complicates treatment but also imposes considerable costs on patient management. The Western Province of Sri Lanka therefore offers a unique environment for analyzing antibiotic misuse, a key component of antimicrobial resistance. The aim of this study is to gage the level of public awareness on the concept and implications of antibiotic misuse and antimicrobial resistance in the Western Province of Sri Lanka.

Methods: A cross-sectional descriptive study was conducted on 200 adults among the population of the Western Province of Sri Lanka from December 23, 2023, to January 16, 2024. In-person interviews were done, and data was collected onto a Google form using an interviewer administered questionnaire. Descriptive statistics were used to condense the dataset and percentages were compared.

Results: Of the 200 respondents 83% were aware of antibiotics as medicines that fight bacterial infections. However, while the majority (71.5%) made it a point to finish the antibiotic course as advised by health professionals, 28.5% opposed doing so. This was further proven with over half of the participants (65.5%) agreeing to cease the use of antibiotics once they start to feel better. In terms of antimicrobial resistance, 60.5% of all participants were aware of the term antimicrobial resistance and 61% agreed that the unnecessary use of antibiotics would increase the resistance of bacteria to them.

Conclusion: While most participants were aware of antibiotics and their impacts, there were still noticeable gaps in understanding the correct usage and the consequences of misuse. This implies a need for heightened awareness on this topic. In the Western Province of Sri Lanka, there was a positive attitude towards understanding antimicrobial resistance, reflecting a greater recognition of the serious threat it presents.

Keywords: AMR, Antibiotic resistance, antimicrobial resistance, Knowledge, Awareness, Sri Lanka

Level of Digital Psychiatric Knowledge Among Nursing Students in Gampaha District, Sri Lanka

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Background: Telemedicine (TM) involves providing healthcare services remotely through Information and Communication Technologies (ICTs), offering cost-effective alternatives to traditional in-patient care. Since its inception in the early 20th century, TM has evolved from basic phone use to online video communication, enhancing remote healthcare delivery. Telepsychiatry (TP), a subset of TM, is the second most common form globally. However, many countries, including Italy, were unprepared for its rapid growth, as TP is rarely included in medical education. This study aims to assess the knowledge, training, and experiences of Sri Lankan nursing students, psychiatry trainees, and early-career psychiatrists regarding digital psychiatry.

Method: The study used a descriptive cross-sectional survey design, focusing on nursing institutions in Gampaha, Sri Lanka. Purposive sampling was used to target students who were exposed to telemedicine and digital technologies. Data were collected via an online survey and structured questionnaire, which was pre-tested among Colombo district nursing students. Descriptive statistics and bivariate Pearson correlations were performed using SPSS version 26 for data analysis.

Results: Out of 101 participants, 35% were male, 64% female, and 1% preferred not to disclose their gender, with a mean age of 22 years. Most participants (84%) lived with family, and 27% were undergraduates, while 94% were enrolled in private universities. About 54% had not heard of digital psychiatric training programs. The mean knowledge score on digital psychiatry was 14.77, with 62% scoring above the mean, indicating higher knowledge levels, while 38% scored below. A weak positive correlation (r = 0.141) between age and knowledge was observed, but it was not statistically significant (p = 0.163).

Conclusion: The study revealed that most nursing students had a moderate level of knowledge on digital psychiatry, with 62% scoring above the mean. However, a weak positive but non-significant correlation between age and knowledge suggests that further educational interventions may be needed.

Keywords: Digital psychiatry, telemedicine, nursing students, knowledge assessment, Gampaha district

The Impact of celebrities on Adolescents and Young Adults

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Background: This study explores the impact of celebrities on adolescents and young adults, mainly through social media. Adolescence is a critical period when external influences, such as celebrities, can shape young people's behaviors, body image, self-identity, and habits. The study assesses whether these influences are positive, negative, or both.

Methods: A cross-sectional survey was conducted with 122 participants (n = 122) aged 18–25, with the majority being female (65.57%, n = 80) and attending private universities (72.5%, n = 88)—a standardized questionnaire collected data on demographics, social media usage, and celebrity influence. Statistical Package of Social Science (SPSS V26) was used for statistical analysis.

Results: Of the participants, 40.98% (n = 50) reported frequent use of social media, while only 3.22% (n = 4) stated they did not use it at all. Over half of the participants (52.46%, n = 64) had a favorite celebrity they followed, though only 5.46% (n = 7) believed their favorite celebrity had a purely positive influence. Meanwhile, 8.06% (n = 10) felt their favorite celebrity had positive and negative influences. Negative impacts, including body shaming, time-wasting, unhealthy eating habits, aggressiveness, and smoking, were reported by 52% (n = 63) of participants. Conversely, positive influences were also noted, including motivation, stress relief, confidence, and positive thinking. Additionally, 55% (n = 67) of participants believed that social media significantly contributed to network addiction.

Conclusion: The study suggests that social media plays a crucial role in shaping young adults' perceptions and behaviors, with celebrities exerting positive and negative influences. While some viewed celebrities as role models, many participants acknowledged negative impacts, such as body image issues and unhealthy habits. Future research could investigate the geographical origins of celebrities and the specific social media platforms most frequently used by participants.

Keywords: Adolescents, young adults, celebrity influence, social media, network addiction, behavior

Service Identification of Quality Gaps in Medical Laboratory Services Using the SERVQUAL Instrument and Importance-Performance Analysis in Medical Laboratory Test Procedures in Between Small, Medium & Large Private Sector Laboratories in Sri Lanka

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Background: Sri Lanka's healthcare system includes a substantial private sector that caters to a growing demand for curative services. Private medical laboratories play a critical role in diagnostics, but concerns exist regarding service quality variations based on laboratory size. This study aimed to identify service quality gaps between large, medium & small private medical laboratories, and to compare and contrast research findings from a large laboratory to medium and small laboratories.

Methods: This study used a mixed-methods approach to assess service quality gaps in small, medium, and large private medical laboratories in Sri Lanka. Qualitative data was gathered through focus group discussions with healthcare professionals. Quantitative data was collected from 158 laboratory professionals using questionnaires and direct interviews. The SERVQUAL model was employed to evaluate service quality across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Data analysis employed the percentage point gap method, comparing small and large laboratories against a benchmark large medical laboratory.

Results: The study found notable differences in various aspects across laboratory sizes. Small laboratories demonstrated lower automation levels (20.9% fully automated analyzers vs. 57.4% in large laboratories) and a narrower range of tests, as well as higher reliance on third-party reagents (34.9% vs. 38.3% in large laboratories). Record-keeping and accuracy also varied, with large laboratories displaying better practices , (93.6% maintained critical result reporting vs. 93% in small labs). Larger laboratories adhered more rigorously to quality control measures, with 91.5% conducting daily IQC compared to 69% of small labs. ISO accreditation was more common in medium and large labs (81.5% and 70.2%, respectively) compared to 62.8% in small labs, with less access to specialized consultants (19.5% vs. 76.6% in large laboratories).

Conclusion: The study reveals service quality gaps between11 private medical laboratories of different sizes in Sri Lanka. However, these disparities are not insurmountable. Small and medium laboratories can enhance service quality through strategic initiatives, including technology upgrades, improved transportation networks for sample transfer, robust quality control procedures, staff training, and partnerships with specialized consultants. Future research should incorporate patient perspectives and feedback on laboratory services better to understand service quality from the end-user's viewpoint.

Keywords: SERVQUAL, Medical Laboratories, Service Quality, Sri Lanka, Private Healthcare

The Impact of Organizational Environment on Job Satisfaction among Medical Laboratory Technicians at Two Selected Private Hospitals in Colombo District, Sri Lanka

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Background: This research investigates the impact of organizational factors on job satisfaction among medical laboratory technicians (MLTs) in private hospitals in the Colombo District, Sri Lanka. The study addresses the gap in the literature that often overlooks the unique challenges faced by MLTs by examining how various organizational elements affect job satisfaction. The study aims to assess the impact of the organizational environment on the job satisfaction of medical laboratory technicians in the two selected private hospitals in Colombo district, Sri Lanka.

Methods: The study utilized a mixed-methods approach, gathering data through surveys and interviews with medical laboratory technologists (MLTs) from two private hospitals. A stratified random sampling method was employed to select approximately 200 participants, categorizing them based on their roles and responsibilities. Descriptive statistics such as mean, median, mode, standard deviation, and frequency distributions were used to summarize the data. Inferential statistical techniques, including regression analysis, correlation analysis, and ANOVA, were applied to explore relationships among variables.

Results: The study revealed that key organizational factors, including structure, environment, standards, recognition, support, and commitment, all positively impacted job satisfaction among MLTs. Organizational structure (r = 0.68, p < 0.01) and environment (r = 0.72, p < 0.01) were strongly correlated with job satisfaction, with regression analyses confirming significant positive effects (Coefficient = 0.72, p = 0.001 and Coefficient = 0.68, p = 0.005, respectively). Standards (r = 0.65, p < 0.01), rewards and recognition (r = 0.58, p < 0.01), and support (r = 0.70, p < 0.01) also showed positive correlations, with significant regression coefficients. Organizational commitment exhibited the strongest correlation with job satisfaction (r = 0.75, p < 0.01, Coefficient = 0.75, p = 0.000). Mediation analysis revealed that support and commitment acted as significant mediators between organizational factors and job satisfaction, while neither gender nor years of experience moderated these relationships.

Conclusion: The findings of this study emphasize the importance of a supportive organizational environment and robust systems for enhancing job satisfaction among MLTs. This offers valuable insights for hospital administrators and policymakers looking to improve job performance, reduce turnover rates, and ultimately achieve better patient care outcomes.

Keywords: Organizational Environment, Job Satisfaction, Medical Laboratory Technicians (MLTs), Private Hospitals, Colombo District

The Impact on Academic Performances on Account of Social Anxiety Created due to Online Learning after COVID-19 Pandemic among IIHS Full-Time General Program Students

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Background: The COVID-19 pandemic necessitated the adoption of online learning in educational institutions, including the International Institute of Health Sciences in Sri Lanka, causing social isolation and social anxiety among students. The objective of the study is to assess the impact on academic performances on account of social anxiety created due to online learning after COVID–19 among IIHS full-time general program students.

Methods: A descriptive cross-sectional study was conducted using a self-administered questionnaire distributed to a random sample of 225 IIHS students. Data were analyzed using SPSS software, employing descriptive statistics, percentages, and diagrams.

Results: A study of 225 IIHS students found that online learning significantly impacted their grades and academic performance during the COVID-19 pandemic. The majority enrolled in advanced diplomas in physiotherapy, nursing, and biomedicine science. The study found that online learning had a positive impact on writing skills and creativity, but its effectiveness varied depending on the specific courses or platforms used and individual learning styles. The preferred online learning platforms were Zoom and Microsoft Teams, with Web Whiteboard at 91.4%. Concerns included social anxiety, distance from friends, and discomfort with presentations.

Conclusion: The study highlights the negative impact of social anxiety on academic performance among IIHS general program students post-COVID-19. It suggests a focus on students' social and emotional well-being through a positive online learning community, mental health resources, and effective communication. Recommendations include recognizing social anxiety, encouraging honest emotional expression, creating a flexible learning environment, providing discreet services, and incorporating small group activities. Teachers should also teach time management and self-care.

Keywords: Academic Performances, Online Learning, COVID-19, Full-Time

Anti-inflammatory Activity of Essential Oils extracted from *Citrus* varieties using Solvent Free Microwave Extraction Technique

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Background: Citrus varieties are widely used in various fields for their antiseptic, antiviral, antibacterial, antifungal, and astringent properties. However, Citrus essential oils (EOs) consist of volatile compounds, including terpenes, sesquiterpenes, aldehydes, alcohols, and esters. The objective of this study is to investigate the chemical composition and the anti-inflammatory activity of EOs extracted from the leaves of *Citrus aurantifolia, Citrus aurantium, Citrus sinensis*, and *Citrus madurensis* using solvent free microwave extraction (SFME) technique.

Methods: Fresh leaves (200 g) from each variety were subjected to SFME using NEOS GR microwave extractor to obtain the EOs. The anti-inflammatory activity of the EOs were evaluated by assessing the inhibition of the enzymes 5-lipoxygenase (5-LOX) and 15-lipoxygenase (15-LOX). Gas Chromatography-Mass Spectrometry (GC-MS) was used to analyze the chemical composition of EOs.

Results: In the EOs from *C. aurantifolia* leaves, the major compounds identified were α -Citral (35.49%) and β -Citral (26.84%) and for *C. aurantium* the major compounds were D-Limonene (25.35%) and α -Citral (17.00%). In *C. sinensis* leaf EOs, Sabinene (17.25%) and β -Linalool (16.75) were the major compounds while *C. maduransis* showed high levels of Elemol (17.82%) and β -Eudesmol (10.87%). EOs exhibited a dose dependent inhibition of 5-LOX with the IC₅₀ values of 7.40 ± 0.84 µg /mL for *C. aurantifolia*, 6.97 ± 0.85 µg /mL for *C. aurantium*, 6.60 ± 0.45 µg /mL for *C. sinensis* and 5.40 ± 0.39 µg /mL for *C. madurensis* compared to the positive control baicalein which exhibited the IC₅₀ value 1.76 ± 0.15 µg /mL. At the concentration 500 µg /mL, the percentage inhibition of 15-LOX was 89.38 ± 0.93% for *C. aurantifolia*, 41.24 ±1.87% for *C. aurantium*, 11.04 ± 1.24% for *C. sinensis* and 50.23 ± 1.71% for *C. madurensis*.

Conclusion: This is the first report of anti-inflammatory activity of EOs extracted using SFME from leaves *C. aurantifolia, C. aurantium, C. sinensis*, and *C. madurensis*. These EOs may serve as potential therapeutic candidates for managing inflammation-related diseases and pain management products.

Keywords: Solvent Free Microwave Extraction, Gas Chromatography- Mass Spectrometry, Essential Oils, Anti-Inflammatory Activity, Citrus

Factors Associated with Rejection of Specimens in a Selected Laboratory in Colombo District, Sri Lanka

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Background: A sample that is analyzed in a medical laboratory is exceedingly unlikely to always be in good condition. Even a small number of samples sent to a medical laboratory every day must be rejected for various reasons. These emergency scenarios are being dealt with in various ways by every medical laboratory in the world. Both the patients and the medical laboratory examiners will experience various annoyances as a result of this event.

Methods: A retrospective analysis was conducted of the samples rejected from the total samples received in a selected laboratory using a laboratory sample rejection book (log book) during a 1 month period from January 28 to February 28 in 2023.

Results:This study, conducted at a laboratory in Colombo District, Sri Lanka, analyzed factors contributing to specimen rejection over a one-month period from January 28 to February 28, 2023. Using data from the laboratory's sample rejection log, it was determined that out of 10,500 samples received, 236 (2.24%) were rejected. Clot formation was identified as the most common reason, representing 46.7% of rejections, potentially due to overfilling, insufficient anticoagulant, or improper mixing. Hemolysis, accounting for 26.3% of rejections, was the second most prevalent cause, likely resulting from the rupture of red blood cells either within the body (in vivo) or during collection (in vitro). Insufficient sample volume accounted for 13.1% of rejections, while other causes included wrong labeling (5.5%), use of incorrect tubes (2.5%), overfilling (3%), dilution (1.7%), and contamination (1.3%). Analysis by test type indicated that PT/INR tests had the highest rejection rate at 16.7%, with 10.7% due to overfilled tubes, followed by ESR tests at a 10% rejection rate.

Conclusion: Dependence on accurate laboratory results for establishing diagnosis makes it mandatory for labs to ensure accountability and accuracy of results and deny incorrect diagnosis due to faulty report. With close attention to established procedures and instructions, errors can be minimized, in turn, patient care improves.

Keywords: Rejection Rate, Pre-analytical Error, Hematology, Blood, Sample Collection

The Impact of Principal's Leadership Style on Teachers' Motivation in Private Schools, Gampaha District, Sri Lanka

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Background: The leadership in educational contexts impacts school functioning across a number of domains, including teacher motivation, job satisfaction, and student outcomes. Teacher motivation is recognized as a fundamental component of educational effectiveness. It is recognized as a fundamental component of educational effectiveness: it shapes teacher retention, job satisfaction, and ultimately, student achievement. Hence, the purpose of this research is to understand the different leadership styles of principals and to address on how the teachers perceive the leadership style of principals.

Methods: A descriptive cross-sectional study was carried with stratified random sampling method. The questionnaire was designed to assess the impact of the principal's leadership style on teachers' motivation in the Gampaha District, Sri Lanka. It was divided into three sections: Socio-demographic factors, Leadership Style, and Teacher's Motivation.

Results: Self-administered questionnaire was distributed across 333 participants and 315 have submitted the completed answers, showing 94% response rate. 99% of the responders were females, and among them majority were primary teachers. As per the perception of teachers, the principals bear autocratic leadership style. The Anova test is conducted to measure the significance of the relationship. The p-value of 0.094 explains that the effect of leadership style on teachers' motivation is not statistically significant.

Conclusion: In conclusion, the study suggests that leadership style of the principal does not affect the motivation of teachers.

Keywords: Leadership Style, Teacher Motivation

DESCRIPTIVE ABSTRACTS

Knowledge Regarding Diabetes Wound Care Management in Diploma Level Nursing Students

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Diabetes mellitus is a chronic condition characterized by persistently high blood glucose levels, resulting from inadequate insulin production or ineffective utilization. This global health concern affects approximately 537 million individuals, as reported by the International Diabetes Federation in 2021, leading to significant healthcare costs. In Sri Lanka, about 9.8% of the adult population is affected, with diabetic complications, particularly wounds, frequently observed among the elderly. These wounds can lead to severe outcomes, including infections and amputations, emphasizing the critical role of healthcare providers in effective wound management. This study aims to evaluate the knowledge of diabetic wound care management among third-year nursing students at the School of Nursing Colombo. A quantitative descriptive design will be employed, involving a random stratified sampling method to select a sample of 180 students. Data will be collected through a self-administered questionnaire designed to assess knowledge regarding factors affecting wound infection and strategies for effective wound care management in diabetic patients. Preliminary findings indicate significant gaps in knowledge among nursing students, aligning with previous research that identified variability in competency levels. Factors contributing to these gaps included insufficient clinical experience and limited exposure to diabetic wound care in their curriculum. The study underscores the necessity for target educational interventions to enhance nursing students' knowledge and skills in managing diabetic wounds, ultimately improving patient care and outcomes. In conclusion, addressing the identified knowledge deficits is crucial for preparing nursing students to provide effective care for diabetic patients. By fostering a better understanding of diabetic wound care management, the healthcare system can mitigate complications associated with diabetes and improve the overall quality of care provided to patients.

Keywords: Diabetes Mellitus, diabetic wounds, nursing education, wound care management, knowledge assessment

Effectiveness of Technology in Related to Practical Learning in University Students of Western Province

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Technology has become an integral part of higher education and has an impact on both students and educators. Traditionally, practical learning has been facilitated through laboratory sessions, fieldwork, and workshops. With the introduction of digital tools, virtual simulations, online resources, and various detached platforms; educators have the opportunity to enhance the practical learning environment. As a result of this, the manner in which practical learning is supported in university settings has changed, especially in Sri Lanka's Western Province. However, there is a knowledge gap concerning the actual impact of these technological interventions on student learning outcomes. This study aims to evaluate how well technology serves the region's university students' practical learning experiences. It looks at how different technology tools are being utilised to enhance hands-on learning, including digital platforms, online simulations, and virtual labs. Comparing new tools to conventional approaches, the study looks into how they affect student engagement, knowledge retention, and skill development. Targeting university students under 40 from both public and private universities in the Western Province, a cross-sectional survey design will be used. Data will be collected via a pre-tested selfadministered questionnaire that inquired about demographics and the effectiveness of using technology in practical learning and experiential learning. The Statistical Package for Social Sciences (SPSS) will be used for the analysis of data. The results of this study will offer insightful information to educators, organisations, and legislators, assisting in the best possible use of technology in hands-on learning. The ultimate goal of this research is to shape decisions related to curriculum development, resource allocation, and instructional strategies, ensuring that university students in the region receive a highquality education that equips them for success in an increasingly technology-driven world.

Keywords: Effectiveness, Technology, Practical Learning

Exploring The Impact of Technological Advancements and Artificial Intelligence (AI) On Social Anxiety Among University Students in The Western Province, Sri Lanka

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The most serious problems with social anxiety are situations highly inclusive of a great deal of fear and discomfort in social situations that have been increasing with the greater reliance on digital platforms and AI technologies. This study is motivated by the realization that as much as technological innovations come with numerous benefits, they also bring unforeseen circumstances that include increased social anxiety, more so among the young and the technology-savvy populations. This paper has targeted university students in the Western Province because this generation is very much acquainted with technologies in both academic and social life. A cross-sectional descriptive research design targets both public and private university students in the Western Province. The methodology will involve a structured questionnaire that combines PSWQ, ITAS, and Digitalization Anxiety Scale. These instruments are used for measuring worry disposition, anxiety concerning technology use, and anxieties linked to greater digitalisation issues. Data analyses will be performed using the Statistical Package for Social Sciences. The study insists on the need for early detection and intervention. With rapid advancement in technology, university students are young and; hence, very vulnerable. Identifying the variables influencing technologically related social anxiety, this study will also make some useful suggestions to help the educational institutions, policy framers, and mental health experts support the students negotiate the digital era. It has called for a balanced approach in the integration of technology into education that advocates for strategies that mitigate the negative psychological impacts while maximizing the benefits.

Keywords: Artificial Intelligence, Technological Advancements, Social Anxiety, University Students

Knowledge and attitudes regarding food practices among patients who participate in the diabetic clinic at the National Hospital of Sri Lanka

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Diabetes mellitus is a chronic metabolic disorder characterized by high blood glucose levels due to insulin deficiency or resistance. It is a major public health issue globally, significantly affecting healthcare systems, particularly in low- and middle-income countries like Sri Lanka. The prevalence of diabetes in Sri Lanka has been rising, influenced by factors such as urbanization, sedentary lifestyles, and dietary changes. Proper dietary practices are essential for managing diabetes, helping maintain optimal blood glucose levels and preventing complications. Despite the crucial role of diet in diabetes management, limited research exists on the knowledge and attitudes regarding food practices among diabetic patients in Sri Lanka. This study aims to evaluate these aspects to design effective educational interventions and to identify the gaps in understanding and practice among diabetic patients, which can inform future educational strategies. A cross-sectional quantitative study will be conducted at the diabetic clinic of the National Hospital, Colombo. The target population includes patients diagnosed with type 2 diabetes mellitus (T2DM) attending the clinic. A simple random sampling method will be used to select participants, with a sample size of 300 calculated using the Yamane formula. Data will be collected through a self-administered questionnaire, focusing on knowledge, attitudes, and barriers to healthy eating. Data analysis will reveal participants' current knowledge and attitudes regarding dietary practices. This research will provide insights into the dietary management of diabetes in Sri Lanka, highlighting the need for targeted public health strategies and patient education initiatives to improve dietary practices among diabetic patients.

Keywords: Diabetes, Dietary Practices, Knowledge, Attitudes, Sri Lanka

Menstrual Distress and Quality of Life Among Nursing Students in College of Nursing Colombo- Cross Sectional Study

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This study aims to investigate menstrual distress (MD) and its impact on the quality of life (OOL) among nursing students at the College of Nursing, Colombo, Sri Lanka. Another motive of this study is to contribute to the development of targeted health prevention programs and foster a better understanding of menstrual issues within the nursing education context in Sri Lanka. Menstruation is a natural physiological process, yet it can lead to significant physical, psychological, and emotional challenges for women, particularly during their reproductive years. MD encompasses various symptoms, including pain, discomfort, and emotional distress, which can adversely affect daily activities and overall wellbeing. Despite the prevalence of menstrual issues, there is limited research on their impact on nursing students in Sri Lanka. This study will employ a descriptive cross-sectional design, utilizing a convenience sampling method to gather data from female nursing students currently enrolled at the college. The sample size is calculated using the Yamane formula, with a target of 124 participants to account for potential dropouts. Data will be collected through structured questionnaires assessing menstrual symptoms and QOL, aligned with the World Health Organization's definition of health and well-being. Ethical approval will be sought from the relevant authorities, ensuring informed consent and confidentiality throughout the research process. The findings are expected to provide valuable insights into the prevalence and severity of MD among nursing students, as well as its implications for their academic performance and overall quality of life. By highlighting the need for improved awareness and support regarding menstrual health.

Keywords: Menstrual distress, Quality of life, Health Education, Symptoms, Sri Lanka

Nutritional Status among Healthcare Students

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Healthcare students are the future workforce responsible for promoting and maintaining public health. Their comprehensive understanding of various healthcare domains, including nutrition, is essential. The nutritional well-being of healthcare students is crucial, as it directly impacts their physical health, academic achievements, and their ability to provide effective patient care in the future. Despite their academic exposure to nutrition, healthcare students often face challenges in applying this knowledge to their own lives due to the demanding schedules and lifestyle pressures associated with their education. Irregular eating habits, unhealthy food choices due to time constraints, stress-related eating, limited access to healthy options, and the influence of peer behaviours can all contribute to less-than-optimal nutritional status. The primary objective of this study is to assess the nutritional status of healthcare students enrolled at the International Institute of Health Sciences (IIHS) using their Body Mass Index (BMI) and dietary habits as indicators. Furthermore, this study aims to evaluate the impact of academic demands on students' nutritional choices, investigate the influence of stress on their eating behaviours, assess their knowledge of nutrition and its practical application, and identify the potential health consequences of poor nutrition among healthcare students. This cross-sectional study will use a selfadministered questionnaire to collect data from students enrolled in nursing, biomedical sciences, and physiotherapy programs at IIHS. The sample will include 150 students selected through convenience sampling. Data will be collected on demographic factors, dietary habits, stress levels, and nutrition knowledge. Descriptive statistics will summarize participant characteristics and dietary patterns, while inferential statistics, including chi-square tests and regression analysis, will be used to assess associations between academic stress, peer influence, and nutritional status.

Keywords: Nutritional Status, Healthcare Students, Dietary Habits, Academic Stress, Nutrition Knowledge

Impact of The Dietary Pattern on Health of 2019 Batch Nursing Students of School of Nursing Colombo

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Background: Health is fundamental, influenced by habits, environment, and beliefs. Industrialization and lifestyle changes have globally impacted dietary habits, increasing fat and fast-food intake, with consequences for health. Young adults, including nursing students, are particularly vulnerable. They require additional nutrients for development but often skip meals and adopt unhealthy eating habits due to stress and time constraints. This can lead to weight gain, reduced attention spans, learning difficulties, and an increased risk of chronic diseases like diabetes, hypertension, and coronary heart disease. This study employs a qualitative, descriptive design to investigate the impact of dietary patterns on the health of third-year nursing students at the School of Nursing Colombo. The study population comprises 192 third-year nursing students from the 2019 batch, selected through simple random sampling. Data will be collected using questionnaires assessing health status and dietary patterns. Body Mass Index (BMI) will be used to assess health status alongside reported health problems. Ethical clearance will be sought from relevant authorities, and informed oral consent will be obtained from participants. This study aims to provide insights into the dietary habits of third-year nursing students and their relationship to health. Understanding these connections is crucial, as student nurses are future healthcare providers and role models for patients. The findings will be valuable for developing interventions that promote healthy dietary habits among nursing students, contributing to their well-being and future professional effectiveness.

Keywords: Dietary patterns, BMI, chronic diseases, questionnaires, qualitative research.

Attitude towards Older Person among final Year Nursing Students at School of Nursing Colombo

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Aging encompasses various physiological, psychological, and social changes, often increasing the prevalence of chronic conditions that necessitate comprehensive healthcare, particularly nursing care. Despite the rising demand for geriatric care, nursing students exhibit a notable disinterest in working with older adults, which may be influenced by ageist attitudes. This descriptive cross-sectional study aims to investigate the attitudes towards older persons among final-year nursing students at the School of Nursing, Colombo, Sri Lanka. The study seeks to assess both positive and negative attitudes of nursing students towards older adults and to identify personal characteristics that may influence these attitudes. Utilizing a pre-tested self-administered questionnaire, the research will collect demographic data and employ Kogan's Attitudes Towards Old People Scale to evaluate students' attitudes. A sample size of 193 students will be selected through simple random sampling from a population of 368 third-year nursing students. This research is significant as it addresses a critical gap in understanding nursing students' perspectives on aging, which directly impacts the quality of care provided to older adults. Positive attitudes among nursing students are essential for fostering quality care and improving patient outcomes, whereas negative attitudes may result in inadequate care and perpetuate ageism. Findings from this study are expected to inform educational strategies aimed at enhancing empathetic attitudes towards older persons among nursing students, ultimately improving the quality of geriatric nursing care. . By recognizing the factors influencing attitudes toward older adults, this study will contribute to developing interventions that promote positive perceptions and prepare future healthcare providers to meet the challenges of an aging population effectively.

Keywords: Aging, Nursing students, Gerontology, Attitudes, Quality of care

Knowledge and Practices of 3rd Year Nursing Students on the prevention of Communicable disease in College Nursing Colombo

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Communicable diseases pose a significant public health challenge globally, particularly in Sri Lanka, where conditions like dengue fever and tuberculosis are prevalent. This study aims to assess the knowledge and practices of third-year nursing students at the College of Nursing, Colombo, regarding the prevention of communicable diseases. Given the critical role nursing students play in infection control and patient care, understanding their knowledge and attitudes toward these diseases is essential for improving healthcare outcomes. A quantitative descriptive cross-sectional study design will be employed, targeting a sample of 192 nursing students selected through simple random sampling from a total population of 369. Data will be collected using a self-administered questionnaire, designed to evaluate participants' knowledge of various communicable diseases, their practices related to infection prevention, and the effectiveness of preventive measures. This study is significant in identifying gaps in knowledge and practice among nursing students, thereby informing educational strategies to enhance their competencies in preventing communicable diseases. By providing a comprehensive overview of their knowledge and practices, the findings will serve as a basis for developing targeted interventions that can improve the training of nursing students, ultimately leading to better healthcare delivery. The study's objectives include assessing the knowledge of communicable diseases, determining current practices, and identifying effective prevention measures. Through this research, insights into the current state of nursing education regarding communicable diseases will be gained, contributing to the development of improved training programs. The outcomes of this study are expected to empower nursing students to protect themselves and provide quality care to patients, thereby enhancing public health efforts in Sri Lanka. The results will not only inform nursing education but also have implications for broader public health strategies, emphasizing the importance of equipping healthcare professionals with the necessary knowledge and skills to combat communicable diseases effectively.

Keywords: Communicable Diseases, Nursing Education, Knowledge Assessment, Infection Prevention, Public Health

Knowledge regarding post-operative pain management among Nursing Officers in Surgical Wards, Selected Teaching Hospitals in Western Province, Sri Lanka

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Post-operative pain management is critical for patient recovery, yet many nursing professionals lack adequate knowledge and skills in this area, leading to suboptimal patient outcomes. This study aims to assess the knowledge regarding post-operative pain management among nursing officers in surgical wards at selected teaching hospitals in Western Province, Sri Lanka. Post-operative pain is a complex and subjective experience that, if inadequately managed, can result in physical and emotional stress, delayed healing, increased risk of complications, and extended hospital stays. Research indicates that nurses often underestimate patients' pain, leading to insufficient administration of analgesics due to fears of addiction. Previous studies have highlighted significant gaps in nurses' understanding of pain assessment and management, with many reporting negative attitudes toward pain relief practices. Despite the availability of guidelines and education, these knowledge deficits persist, exacerbated by curriculum limitations and insufficient clinical supervision. Utilizing a quantitative cross-sectional design, this study will employ cluster sampling across three major hospitals: the National Hospital of Colombo, the Colombo North Teaching Hospital (Ragama), and the Teaching Hospital Kalutara (Nagoda). A structured questionnaire will be administered to nursing officers, ensuring confidentiality through a code number method. The sample size will be calculated using Taro Yamane's formula, excluding those on medical or maternity leave during data collection. The anticipated outcomes of this study will provide a comprehensive understanding of the current state of knowledge regarding postoperative pain management among nursing officers. It aims to identify specific areas for improvement, fostering the development of targeted educational interventions to enhance pain management practices. By addressing the gaps in knowledge and attitudes, the study seeks to improve patient outcomes related to postoperative pain management and contribute valuable insights to the scientific community. Ultimately, enhancing nurses' competencies in pain management is essential for promoting effective patient care and satisfaction in surgical settings.

Keywords:- Post-operative Pain Management, Nursing Officers, Knowledge Assessment, Pain Assessment, Educational Interventions

Knowledge, Attitude and Practices Towards Infection Control Among Healthcare Professionals Working in GA. Atoll Hospital, Maldives

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Background: In modern times, healthcare-associated infections (HAIs) are a significant problem, particularly in low- and middle-income countries. These infections contribute to high morbidity and mortality rates, which in turn lead to longer hospitalizations and increased healthcare expenditures. The primary goal of this research is the evaluation of the understanding, approach, and lifestyle of GA. Atoll Hospital's healthcare specialists at infection control. A cross-sectional and correlational study design was used, which involved healthcare professionals at GA. Atoll Hospital. Data were obtained through structured questionnaires that were composed of knowledge, attitudes, and practices in infection control. Descriptive variables were age, gender, occupation, work experience, training, and education. The research proposal aims to assess infection control practices among 60 healthcare workers at a grade 2 hospital in the Maldives to reduce Healthcare-Associated Infections (HAIs). The study will use a crosssectional design, utilizing WHO and Zambian guidelines. The findings will guide targeted interventions to improve infection control and patient safety, despite limitations due to the small sample size. The strengthening of infection control practices is vital for the reduction of the impact of HAIs in healthcare facilities. The research underscores the importance of ongoing health professionals' training and the provision of professional support to develop their skills to fight against infections and to improve the outcomes of patients, most especially in the case of nurses will be the key to the change we hope to see.

Keywords: Infection Control, Healthcare-Associated Infections, Knowledge, Attitude, Practices

Knowledge Regarding Prevention of Diabetic Foot Ulcers Among Patients with Type II Diabetes Mellitus in Diabetics Clinic of National Hospital in Sri Lanka

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Diabetes mellitus affects a significant portion of the global population, with type 2 diabetes being the most prevalent form. One of the most serious complications of diabetes is diabetic foot, which can lead to ulcers, amputations, and a diminished quality of life. In Sri Lanka, the prevalence of diabetes and diabetic foot ulcers is a growing concern. The National Hospital of Sri Lanka (NHSL), a leading medical institution in the country, has observed a high number of diabetic patients with foot ulcers. Studies have highlighted the lack of knowledge about diabetic foot care among patients in Sri Lanka. This lack of knowledge contributes to poor foot care practices and increases the risk of complications. This research will employ a quantitative, cross-sectional design to assess the knowledge regarding the prevention of diabetic foot ulcers among patients with type 2 diabetes at the NHSL diabetic clinic. A sample of 300 patients will be selected using the Taro Yamane formula, with 100 patients recruited per day over three days. Data will be collected using questionnaires. This study aims to contribute to the understanding of knowledge levels and practices related to diabetic foot ulcer prevention among patients in Sri Lanka. The findings will provide valuable insights for healthcare professionals and policymakers in developing targeted interventions to improve patient education and reduce the burden of diabetic foot complications.

Keywords: Diabetes Mellitus, Diabetic Foot Ulcer, Prevention, Knowledge, Practices, Sri Lanka, National Hospital of Sri Lanka

Risk Factors of Sleep Paralysis among the University Students

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Sleep paralysis which affects 28.3% of the student population during their lifestyle which is transitional dissociative state associated with the REM (Rapid eye movement) Sleep phase. The main reason for the sleep paralysis for the students is not yet clearly clarified. When considered some influencing factors which affects for the sleep paralysis on students mainly are intensification of anxiety symptoms, a tendency to worry, the presence of PTSD symptoms, and behavioral factors such as consumption of psychoactive substances. Some consumptions of psychoactive substances are caffeine, alcohol and nicotine. Sleep deprivations and poor sleep hygiene. The usual phase of sleep cycle which manifests the sleep paralysis is the rapid eye movement sleep phase. There is an increase in parasympathetic tone and a decrease in sympathetic tone during non-rapid eye movement sleep. The sleeping paralysis prevents the movement of body parts in response to dreams and not only that some muscles of the body may become paralyzed temporarily. The patient who is under this sleep paralysis achieves wakefulness in this state which creates dissociation between perception and motor control that is characteristic of sleep paralysis. The study aims to assess the prevalence of sleep paralysis and determine the risk factors for the occurrence of sleep paralysis in the population of university students. Students from private university in the western province, a cross-sectional survey design will be used. Data will be collected via a pretest self-administered questionnaire that inquired experiential learning. The statistical package for social sciences (SPSS) will be used for the analysis of data. The results of this study will offer insightful information to educators, organizations and legislators, regarding the risk factors of sleep paralysis among university students. The ultimate goal of this research is to determine the risk factors for the occurrence of sleep and assess the prevalence of sleep paralysis.

Keywords: Sleep paralysis, PTSD, Mental disorder, Anxiety

Current Global Warming and its Impact towards the Mental Health Issues among Third Year Nursing Students of School of Nursing Colombo

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Global warming, primarily driven by human activities, pose significant threats to the environment and public health. This study will investigate the mental health impacts of global warming on nursing students, particularly focusing on their knowledge and psychological well-being. Rising concerns about climate change will lead to increased anxiety, depression, and occupational stress among healthcare professionals, including nursing students, who will be poised to address these health challenges in their future careers. The objectives of this descriptive cross-sectional study, to be conducted among thirdyear nursing students at the School of Nursing in Colombo, Sri Lanka, will be twofold: to assess the students' knowledge regarding global warming and related factors, and to evaluate the psychological impacts of climate change. A self-administered questionnaire will be developed, encompassing demographic data, knowledge assessment, and psychological impact evaluation. The sample size, calculated using the Yamane formula, will determine a target of 192 participants. Stratified and systematic random sampling methods will be employed to ensure representative selection. Data collection will adhere to ethical standards, with informed consent to be obtained from all participants. Preliminary findings from existing literature suggest that nursing students are becoming increasingly aware of the detrimental impacts of climate change, including heightened mental health issues. This study aims to fill gaps in understanding the specific mental health ramifications within this population and to highlight the necessity for integrating climate change education into nursing curricula. As the healthcare sector deals with the consequences of climate change, the role of nursing students will become increasingly critical. By addressing the psychological impact of global warming, this research aims to inform nursing education and practice, fostering resilience and preparedness among future healthcare providers. The findings will contribute to a growing body of literature emphasizing the importance of mental health in the context of environmental change, ultimately guiding interventions to support nursing students in their professional journey amidst the ongoing climate crisis.

Keywords: Global Warming, Mental Health, Nursing Students, Psychological Impact, Climate Change Awareness

Perceptions of Secondary School Teachers in Integrating Technology in Classroom Instruction in Western Province, Sri Lanka

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This study assesses the perception of secondary school teachers in integrating technology into classroom instruction in Western Province of Sri Lanka. This study adds valid literature to the research field and a topic that has been identified as having research gaps with less evidence in Sri Lanka. This study will be conducted under the qualitative study design. In this design, the qualitative data is used in the subsequent interpretation more in-depth. Samples will be collected until they reach the saturation point. Most of the participants stated that the current implementation of technology in secondary-level classroom instruction is not sufficient. They also stated that integrating technology will positively benefit students, enhance their learning and make them motivated learners. However, they have explained that the government implication should be more systematic and should be monitored until the facility is received by all schools equally. Major issues were identified in the field of implementation of the system, teachers' and students' perceptions and budget allocation for this project. If the system is implemented there should be continuous monitoring along with a well-planned system. However, this will be a significant change and a milestone in the Sri Lankan education system.

Keywords: Integrating Technology, ICT, Teachers, Perception, Secondary Level

Children's Unmet Need for Mental Health Care within and outside of Colombo

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Mental health disorders are a leading cause of disability among children globally, including in Sri Lanka. Unmet childhood mental health needs can have a significant and long-lasting influence on a person's ability to learn, integrate into society, and lead a decent life. Understanding these factors can help create support plans responsive to the particular needs of each community. Policymakers can strategically deploy resources by identifying areas with obvious unmet needs, leading to increased productivity and decreased economic burden associated with untreated mental health issues. The primary objective of the research is to assess the children's unmet mental health care needs both inside and outside of Colombo. The study also aims to examine the influence of socioeconomic factors on access to mental health care services, particularly for children. It evaluates the current state of the mental health care system for children within and outside Colombo, highlighting disparities in service availability. Additionally, the research compares the health status of children based on their geographic location, identifying how regional differences may impact their access to care and overall mental health outcomes. This comparison helps to understand the geographic inequalities in mental health services for children. This research will employ a cross-sectional study design using a convenience sampling method. Data will be collected from male and female children between the ages of 5 and 18 residing in both Colombo and areas outside Colombo. A structured survey questionnaire and a semi-structured interview protocol will be used to gather both quantitative and qualitative data. The questionnaire will focus on demographics, access to mental health services, perceived barriers to care, and attitudes toward seeking help. Interviews will provide in-depth qualitative data, allowing participants to share their experiences, beliefs, and challenges related to children's mental health care. Data analysis will involve Statistical Package for the Social Sciences (SPSS) for quantitative data and qualitative coding techniques to identify key themes and patterns. The research findings will be disseminated through various channels, including academic publications, conferences, community organisations, and a user-friendly report for public consumption.

Keywords: Mental Health Care, Children, Urban-rural Differences, Sri Lanka, Colombo

The Impact of Academic Workload and Time Management on Stress Levels among First-Year University Students at a Private Institute in Sri Lanka

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The transition from secondary education to university life is often a challenging period for students, demanding adaptation to increased academic workload and the development of effective time management skills. First-year university students are in a vulnerable position as they adjust to the demands of university life, which differ significantly from their previous academic experiences. They are faced with new challenges, including managing a heavier workload, adjusting to a new environment, and developing effective time management skills. This vulnerability makes them particularly susceptible to stress. The study aims to investigate the impact of academic workload and time management on the stress levels of first-year university students at a private institute in Sri Lanka. It seeks to assess the academic workload by examining the number of assignments and modules students are required to complete. Additionally, the study will evaluate time management practices, including how students schedule their work and study habits. The research will also measure the stress levels experienced by these students and analyze the relationship between academic workload, time management, and stress levels. The study will employ a cross-sectional design, focusing on first-year students enrolled at the International Institute of Health Sciences, a private institute in Sri Lanka. Stratified sampling will be used to select a representative sample of 217 students from a total population of 500. Data will be collected using a self-administered questionnaire with five sections: socio-demographic factors, academic workload, time management, stress levels, and coping mechanisms. Each section will include four questions utilizing a 5-point Likert scale to measure responses. Data analysis will be performed using SPSS (Statistical Package for the Social Sciences) version 26, employing descriptive statistics, including mean, median, mode, and frequency percentage. Correlation analysis will be used to examine the relationships between academic workload, time management, and stress levels. The reliability and validity of the study will be ensured through a pretest with 5 to 10 students and the use of Cronbach's alpha for testing validity.

Keywords: Academic Workload, Time Management, Stress Levels, First-Year University Students, Private Institute

The Readiness of Government Student Nurses to Transition from Traditional Nursing Uniform to Contemporary Attire of Student Nurses in Schools of Nursing Colombo

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Nursing uniforms hold a significant role as symbols of the profession, promoting hygiene, and facilitating easy identification. Traditional uniforms in Sri Lanka have deep historical and cultural roots, evolving from the attire of nuns who historically provided patient care. While these uniforms carry symbolic weight, they may not align with the current demands for comfort, practicality, and modernity. Globally, healthcare is witnessing a trend towards more functional and comfortable nursing attire, prompting the need to investigate the perspectives of Sri Lankan student nurses regarding this transition. Furthermore, nursing uniforms are crucial for public perception of healthcare professionals, impacting role recognition and the trust-building process between nurses and patients. This research is particularly significant due to limited existing research on this topic in Sri Lanka. The study aims to assess the readiness of Sri Lankan government student nurses to transition from traditional nursing uniforms to contemporary attire. It seeks to identify factors influencing their readiness to adopt new uniforms and evaluate the perceived benefits of this change. Additionally, the research will explore students' preferred models for updated nursing uniforms, providing a comprehensive understanding of the attitudes, motivations, and potential advantages of this shift in attire. This study will employ a cross-sectional quantitative survey design, focusing on student nurses enrolled in the School of Nursing Colombo. The study sample will consist of 192 second and third-year government student nurses who have consented to participate. First-year students and those who decline participation will be excluded. Participants will be selected using simple random sampling to ensure representativeness. Data will be collected through a self-administered questionnaire, allowing for individual responses and privacy. Following data collection, analysis will be conducted using Statistical Package for Social Sciences (SPSS) software to generate statistically significant findings. All data collected will be treated as private and confidential to ensure the anonymity of participants.

Keywords: Transition, Traditional Nursing Uniform, Contemporary Attire, Student Nurses

Knowledge and Practices Regarding Cardio-Pulmonary Resuscitation Among the Third Year Nursing Students in School of Nursing, Colombo

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Cardio-pulmonary Resuscitation (CPR) involves chest compressions and rescue breaths, which help maintain blood circulation and provide oxygen to the brain and other vital organs until advanced medical care can be administered. This research proposal investigates the knowledge and practices of CPR among third-year nursing students at the School of Nursing in Colombo, Sri Lanka. The study is driven by the concerning gap in CPR knowledge and proficiency observed among healthcare professionals, including nursing students, as highlighted by various studies. This lack of competency is particularly alarming as nursing students are future frontline healthcare providers, responsible for ensuring effective emergency responses. The proposal identifies several contributing factors to this deficiency, including inadequate training, insufficient hands-on practice, and anxiety during emergency situations. Drawing upon previous research findings, including studies conducted in India and Nepal that revealed poor knowledge and skills regarding CPR among nursing students and nurses, the proposal underscores the need for assessing and improving CPR training. Additionally, the proposal emphasizes the lack of research specifically addressing this issue in Sri Lanka, further highlighting the importance of this study. The research aims to achieve specific objectives, including determining students' knowledge of airway management and defibrillation, identifying barriers to applying CPR theory, evaluating their ability to perform chest compressions and continuous CPR, and assessing their understanding of postresuscitation care. The study will employ a descriptive cross-sectional quantitative design, using a convenience sample of 367 third-year nursing students. Data will be collected through a researcherdeveloped questionnaire with close-ended questions, focusing on areas like airway management, defibrillation, barriers to practice, chest compressions, continuous CPR, and post-resuscitation care. The analysis will be performed using Statistical Package for Social Sciences (SPSS) 25 to identify relationships between variables. The proposal also outlines five hypotheses regarding the relationship between specific CPR knowledge areas and practice, aiming to provide a deeper understanding of these connections. Ethical considerations are carefully addressed, ensuring the protection of participants' rights and well-being throughout the study.

Keywords: Cardio-pulmonary Resuscitation (CPR), Nursing Students, Knowledge, Practices

Knowledge and Attitude of Final Year Nursing Students in Western Province Regarding Palliative Care

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This research proposal investigates the understanding and perspectives of third-year nursing students on palliative care in Sri Lanka's Western Province. The study is driven by the increasing need for palliative care due to a rising prevalence of chronic illnesses and an aging population, coupled with the recognition that nurses play a vital role in delivering quality end-of-life care. The proposal highlights a global lack of knowledge regarding palliative care among nurses and nursing students, with limited research on the topic in Sri Lanka. The study seeks to address this gap by using a quantitative, cross-sectional descriptive research design to assess the knowledge and attitudes of final-year nursing students towards palliative care. A sample size of 271 third-year nursing students from Schools of Nursing in Colombo, Kadana, and Kaluthara will be selected using purposive sampling. Data will be collected using previously validated self-administered questionnaires, including the Palliative Care Quiz for Nursing (PCQN) to measure knowledge and the Frommelt Attitudes Toward Care of the Dying (FATCOD) scale to assess attitudes. The proposal outlines ethical considerations such as informed consent, anonymity, and data confidentiality, ensuring the responsible conduct of the research. The research will contribute to improving patient outcomes related to palliative care by identifying knowledge gaps and informing targeted educational interventions to enhance nursing students' competency in this crucial aspect of healthcare.

Keywords: Palliative Care, Knowledge, Attitude, Western Province, Nursing Students

Knowledge and Attitude Regarding Pulmonary Tuberculosis Among Patients in Central Chest Clinic in Colombo

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TB is a severe infectious disease primarily affecting the lungs, and although Sri Lanka has a low prevalence, TB remains a significant public health concern. Effective TB prevention, diagnosis, and treatment rely on understanding patients' knowledge and attitudes toward the disease. This study explores current knowledge, practices, and attitudes regarding TB among patients at the Central Chest Clinic, where efforts are crucial to the National Programme for Tuberculosis Control and Chest Diseases (NPTCCD), which aims to reduce TB incidence and mortality in Sri Lanka by 2035. The study highlights factors that can influence TB progression, such as socioeconomic status, nutrition, smoking, and Human Immunodeficiency Virus (HIV), and emphasizes the impact of individual attitudes on TB control. This study aims to evaluate the knowledge and attitudes of patients toward tuberculosis (TB) at the Central Chest Clinic in Borella, Sri Lanka. It will employ a descriptive cross-sectional design with a self-administered questionnaire at the Central Chest Clinic in August 2024. A sample of 339 TBdiagnosed patients will be chosen through purposive sampling, following strict inclusion and exclusion criteria. Data collection will involve a pre-tested, translated questionnaire that covers demographics and TB-related knowledge, attitudes, and practices. With confidentiality assured, data analysis will be conducted using Microsoft Word, Excel, and Statistical Package for Social Sciences (SPSS) software. By identifying knowledge gaps and addressing negative attitudes, this study aims to contribute to improved TB management, enhance patient education, and support adherence to treatment, ultimately benefiting the health and quality of life of those affected by TB in Sri Lanka.

Keywords: Pulmonary Tuberculosis, Central Chest Clinic, Colombo, Knowledge, Attitude

Determining Knowledge Regarding Medication Safety Among Third Year Diploma Nursing Students in School of Nursing Colombo.

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Medication errors represent a significant problem in healthcare systems globally, posing substantial risks to patient safety and leading to severe consequences, including extended hospital stays, increased medical expenses, and even fatality. Research indicates that a substantial proportion of medication errors transpire during the medication administration phase, often attributed to violations of the seven rights of medication administration: right patient, right drug, right dose, right time, right route, right reason, and right documentation. Nurses are uniquely positioned to identify, intercept, and rectify errors before they impact patients. Consequently, it's crucial to equip nursing students with the requisite knowledge and skills in medication safety to mitigate these errors effectively. This study will employ a quantitative, descriptive design to evaluate the knowledge of medication safety among third year nursing students at the School of Nursing Colombo in Sri Lanka. A random sample of 100 final year nursing students enrolled in the three-year basic nursing diploma program will be recruited. Data will be gathered using a self-administered questionnaire disseminated through Google Forms. This questionnaire, developed by the research team, will assess students' understanding of medication safety protocols, common medication errors, and preventive strategies. Data analysis will involve exporting responses to a Google Spreadsheet, creating visual representations such as bar charts and pie charts, and summarizing key findings. This study seeks to provide a comprehensive understanding of medication safety knowledge among third year nursing students. By identifying knowledge gaps and barriers, this study aims to inform the development of effective educational interventions to be integrated into nursing curricula, ensuring students are well-prepared to prevent medication errors and deliver safe, high-quality patient care. The findings will contribute valuable insights to enhance nursing education and healthcare services in Sri Lanka.

Keywords: Medication Safety, Nursing Students, Medication Errors, Knowledge, Patient Safety, Nursing Education, Sri Lanka.

REFLECTIONS

Reflection on Removing Blood Clots from a Patient's IV Line

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Description: During my first-year placement at a Colombo hospital, I treated a 50-year-old male patient, Mr. X, who had blood clots in his IV line. I informed the senior nurse about the issue and performed a procedure under her supervision. Mr. X appeared more relaxed and satisfied with the care, and the senior nurse commended me for my prompt and competent handling of the situation.

Feelings: The procedure involves three steps: Before the Procedure, During the Procedure, and After the Procedure. Before the procedure, the individual experienced anxiety, confidence, and happiness due to anticipation and a positive outlook. During the procedure, they experienced nervousness but were guided by their confidence. After the procedure, they felt motivated, satisfied, and happy, as the successful outcome reinforced their resolve and left them with a profound sense of accomplishment.

Evaluation: The author successfully stabilized a patient with a complex medical condition using their college knowledge and practical skills, despite staff shortages. However, discomfort and high-stakes scenarios affected their confidence and decision-making. This experience underscored the need for continuous learning and development, prompting them to seek additional training to improve their skills and ensure high-quality care.

Analysis: Blood clots in intravenous (IV) lines pose significant risks in clinical settings, causing fluid impediment, treatment disruption, and dehydration. Incomplete medication delivery can compromise therapy effectiveness. Stimulant blood can lead to bacterial growth, infections, and severe complications like sepsis if not addressed promptly. Dislodged blood clots can also cause embolisms, causing severe complications like pulmonary embolism or stroke. Understanding these consequences is crucial for effective patient management and ensuring the safety and efficacy of medical treatments.

Conclusion: Reflecting on a blood clot incident in an IV line has provided valuable insights into my current nursing competencies. It emphasizes the importance of proactive measures like monitoring techniques, timely intervention, and infection control protocols. It also highlights areas for improvement, such as identifying potential issues quickly and understanding complications protocols. This reflective practice has guided my development and contributed to higher patient care standards.

Action Plan: To manage IV-line complications, follow a systematic approach. Gather necessary equipment, including sterile saline for flushing, distilled water for cleaning the cannula, and clamping and disconnecting tools. Review the patient's medical records to identify allergies or sensitivities. Securely clamp the IV line to prevent leakage and complications. Disconnect the line from the catheter or infusion device, flush the line with sterile saline to clear blood clots, and clean the cannula with distilled water to reduce infection risk. Reconnect the line securely and monitor the patient's pulse rate to assess their physiological response.

Reflection on Successfully Administering a IM Injection

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Description: I was assigned to a vaccine room at a Colombo private hospital to administer a vaccine to a 31-year-old woman, Mrs. X. Despite initial anxiety, I followed the correct procedure and completed the procedure without complications. Despite feeling panic, I remained calm and thanked Mrs. X before leaving the room. The experience highlighted the importance of proper preparation and supervision in healthcare.

Feelings: Experienced a nerve-wracking experience before a vaccine injection, feeling excited but anxious. Fear of making a mistake increased, and their supervisor encouraged them. Despite colleagues' concerns, they felt exposed and vulnerable. Reflecting on the outcome, they felt relief for administering the vaccine without complications but disappointed for allowing panic to control their emotions and not maintaining professionalism. This experience has made them more aware of their emotional responses and the need for better-coping mechanisms in clinical settings.

Evaluation: The evaluation of the medication administration process revealed both positive and negative aspects. Despite feeling anxious, the nurse successfully administered the Cervarix vaccine without complications, highlighting the importance of proper injection technique. The nurse maintained professionalism, ensuring a learning environment and patient safety. While adherence to protocol was crucial, rising panic affected the nurse's confidence and could have compromised safety. The procedure took longer than usual, potentially impacting efficiency and patient throughput. Additionally, the nurse's visible distress was noticed by colleagues, which may have undermined the patient's confidence.

Analysis: My anxiety stems from their first experience administering an IM injection, exacerbated by novelty, lack of experience, and underdeveloped technical skills. Nursing students' lack of experience and technical skills can increase anxiety. Heavy workload and time pressure in clinical settings contribute to stress levels. The demanding environment at Colombo Major Hospital further exacerbates fear. Fear of patient reactions to mistakes reduces self-confidence.

Conclusion: I have learned key lessons about managing anxiety and maintaining professionalism in clinical settings. They emphasize the importance of emotional self-awareness and developing effective coping strategies for stress. Recognizing early signs of panic can help prevent it. The experience has highlighted areas for personal and professional growth, emphasizing the continuous journey of learning and self-improvement in the nursing profession. Building confidence through practice and leveraging support systems can enhance performance.

Action Plan: I propose an action plan to improve the handling of Cervarix vaccine administration situations, addressing anxiety and lack of experience. They plan to enhance preparation and practice through additional training and simulations, develop better time management techniques, and use stress reduction techniques like deep breathing exercises and mindfulness to manage anxiety and ensure patient safety. Regular reflection on clinical experiences will identify areas for improvement and reinforce positive practices. Staying updated with current best practices and research will ensure their skills and knowledge remain current.

First-Time Administration of Subcutaneous Insulin: A Reflection on Learning and Anxiety in Clinical Practice

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Description: During a busy shift in the vaccination room of a private hospital, a 64-year-old female patient with diabetes, referred to as Miss X, was prepared for subcutaneous insulin administration. After gathering the necessary equipment and verifying the medication's expiry date, gloves were donned, and the procedure began under the close supervision of the ward sister. Although there was initial apprehension due to inexperience, the sister's guidance helped ease anxiety. The injection was administered at a 45° angle into the patient's upper right arm, followed by placing a cotton ball before withdrawing the needle. After documenting the procedure, the sister noted the nervousness displayed, offering reassurance about the experience being a normal part of learning.

Feelings: This experience elicited a range of emotions. There was initial happiness at the opportunity to perform the procedure, coupled with fear and nervousness due to inexperience. Despite the tense environment, a desire to proceed remained strong. Successfully administering the insulin brought joy, especially seeing the patient's smile. The ward sister's reassurance fostered a sense of humble pride, recognizing personal growth and accomplishment. Ultimately, the experience highlighted the need for further practice to enhance skills and confidence.

Evaluation: This experience included both positive and negative aspects. On the positive side, the lack of training underscored the importance of focus and clarity in executing procedures, leading to a better understanding of the correct technique. It highlighted the need for heightened patient attention and fostered greater self-awareness and caution in practice. Conversely, negative experiences included anxiety and confusion, stemming from inadequate training and limited skills to effectively manage the situation, resulting in feelings of regret.

Analysis: This incident underscored the need for error-free subcutaneous injection techniques and the importance of patient education by nurses. It highlighted the necessity for both theoretical and practical knowledge in nursing education, with registered nurses providing essential support and mentorship. The high incidence of needlestick injuries emphasizes the importance of safe practices, such as proper syringe disposal and hand hygiene, to prevent complications and psychological impacts.

Conclusion: This incident served as a valuable learning experience, reinforcing the significance of mastering subcutaneous injection techniques and the need for thorough patient education. It highlighted the importance of building confidence through practice and mentorship in nursing education. Additionally, the experience underscored the critical role of safe practices in preventing complications, ultimately contributing to improved patient care and nursing competence.

Action Plan: To enhance nursing practice and prevent future errors, emphasis will be placed on building self-confidence in clinical procedures and organizing workshops for skill reinforcement. Continuous learning and practice are essential for minimizing mistakes, while cultivating patience and compassion will improve patient care. Incorporating relaxation techniques will help manage anxiety, and increasing exposure to nursing tasks will further develop skills and confidence for current and future roles.

Reflection on Successfully Completing the Nebulizing Procedure

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Description: The scenario involved performing a nebulization procedure on a 12-year-old female patient (Ms. X) in the surgical ward of a private hospital in Wattala on May 3, 2024. The patient, who had a history of coughing, wheezing, a runny nose, and fever, was administered salbutamol, ipratropium, and N/S via a nebulizer under the supervision of a senior nurse. The nurse monitored the patient's vital signs before, during, and after the procedure, ensured patient comfort by using gauze under the nebulizer mask, and instructed the patient on how to inhale the medication properly. The senior nurse provided guidance and encouragement throughout the procedure.

Feelings: Initially I felt confused and nervous because it was their first time performing the procedure on a real patient. I was excited but also scared. During the procedure, I felt nervous and momentarily forgot how to start. However, the senior nurse's guidance helped them regain confidence. After the procedure, I felt happy and satisfied with my performance, and I was pleased to see the effectiveness of the treatment on the patient. I also recognized the need to improve their practical skills and confidence.

Evaluation: I acknowledge both the positive and negative aspects of the experience. I identified my lack of practical skills and experience as a drawback, attributing their initial nervousness to this. However, I highlighted my successful completion of the task by applying their knowledge and practical skills as a positive aspect. I also emphasize the positive impact of the senior nurse's support and the opportunity to build a relationship with a real patient.

Analysis: This section assesses the nebulization procedure's effectiveness, challenges, and areas for improvement. Key aspects include following a structured approach, preparing medication properly, obtaining patient consent, monitoring vital signs, and ensuring correct patient positioning. While the procedure was successful, initial nervousness revealed the need for greater confidence and familiarity with protocols. The analysis highlights the importance of handwashing, equipment cleanliness, patient comfort, communication, and health education. It stresses the need for nurses to enhance proficiency through practice, confidence-building, and ongoing education, emphasizing error-free execution for optimal care and positive patient outcomes.

Conclusion: Through this procedure, I gained an understanding of the importance of precise execution to ensure effective medication delivery during nebulization. Although initially nervous due to lack of experience, I was able to perform the procedure correctly. The experience highlighted the significance of theoretical knowledge, practical skills, and attention to detail in monitoring the patient's respiratory status. Maintaining composure was crucial for patient safety and achieving optimal outcomes. I concluded by recognizing the need for more experience and practical skills to address deficiencies and improve nursing practice.

Action plan: I have developed an action plan to handle similar situations more effectively in the future. This plan involves dedicating more time to enhancing practical skills and theoretical knowledge, seizing opportunities to perform procedures during clinical placements, learning techniques from senior nurses through observation, and understanding how to remain calm during critical incidents to avoid panic. It also includes performing three checks during drug administration, monitoring patients' vital signs before, during, and after procedures, and seeking guidance from senior nurses for continued support.

Reflection on Inability to Obtaining a Random Blood Sugar

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Background: This reflection focuses on an incident that occurred during a morning shift in a medical ward at a private hospital. I was assigned to check a diabetic patient's random blood glucose level. After preparing the necessary equipment, I proceeded with the procedure. However, the glucometer malfunctioned, displaying an error message. This caused the patient to become upset. I apologized to the patient, informed the senior nurse, and successfully completed the procedure with a new glucometer.

Feelings: I initially felt confident and prepared before the procedure. During the procedure, when the glucometer malfunctioned and the patient became angry, I felt anxious, embarrassed, and concerned about the patient's reaction. Afterward, I felt relieved and supported when the senior nurse intervened and helped resolve the issue.

Evaluation: The ability of mine to remain calm and communicate effectively with the patient was a positive aspect of the experience. I received helpful guidance from the senior nurse instead of being reprimanded. I emphasize the importance of maintaining a good rapport with patients and senior nurses. I acknowledge the negative aspect of not testing the glucometer before the procedure, leading to the patient being punctured twice. Additionally, I pointed out the waste of hospital resources and the equipment malfunction as downsides.

Analysis: Analyzes the situation and highlights the importance of testing medical equipment before any procedure to ensure its functionality. I cite missed diagnoses, misread reports, and financial losses as potential consequences of faulty medical equipment. Discusses the "Safer Medical Devices Act (SMDA)" and its implications for user facilities, emphasizing the need for healthcare professionals to actively promote medical device safety and error reporting. I recognize the importance of ethical principles in healthcare, such as autonomy, beneficence, confidentiality, non-maleficence, and justice, and highlight their relevance to the situation.

Conclusion: I conclude this experience with provided valuable learning opportunities for independently handling similar situations in the future. The incident emphasized the importance of remaining calm, communicating empathetic with patients, and taking proactive measures to prevent equipment malfunctions.

Action plan: To improve competence and confidence in similar situations, I plan to pursue additional training on using medical equipment, participate in simulation exercises, improve communication skills in stressful situations, and implement proactive measures such as regular equipment testing and calibration.

Reflection on the Inability to Perform a Clinical Procedure according to the Proper Guidelines

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Description: Reflective practice (RP) involves critically evaluating one's work, applying problemsolving techniques through experiential learning, and using critical theory to assess and improve professional practices. Gibbs' reflective model, which encourages deep contemplation, separating emotions, and slowing down thinking to avoid quick conclusions, was applied in this reflection. The reflection focuses on an incident in the Kidney Transplant Intensive Care Unit (KTIU) of a private hospital in Wattala on June 3, 2024. I was tasked with changing the bed linens for a kidney transplant patient but mistakenly tucked the bottom sheet incorrectly. The senior nurse noticed the error, corrected me, and provided proper guidance.

Feelings: Initially, I felt happy and confident to be working in the ICU for the first time. However, being reprimanded by the senior nurse in front of colleagues led to feelings of nervousness, embarrassment, and self-doubt. The incident caused me to question my capabilities, creating feelings of dissatisfaction and a lack of confidence. Despite these negative emotions, completing the task successfully, brought a sense of relief.

Evaluation: This reflection highlights both positive and negative aspects of the experience. Positive aspects include my confidence in accepting the task, willingness to take responsibility, and maintaining good communication with the patient and staff. The negative aspects reveal my lack of knowledge and practice regarding the procedure, noting that this inattention to detail could have compromised patient safety. I also acknowledged that the senior nurse's communication style may have negatively impacted the experience.

Analysis: This incident helped me to understand the shortcomings of the safety issues in the clinical environment. The cause-and-effect highlights the cascading effects of this root cause across various domains: organizational, professional, clinical, and legal/ethical. For instance, limited resources could lead to the inability to perform the clinical procedure according to guidelines, resulting in nursing errors, patient discomfort, and decreased quality of care. This lack of resources could also foster a stressful environment that increases workload, potentially leading to mistakes and patient harm. From this incident, I realized the potential impact on the healthcare professional, including time waste, patient dissatisfaction, and a negative impact on professional reputation.

Conclusion: I learned several important lessons from this experience, including the importance of confidence in one's work, the need to improve skills through practice, and the significance of proper communication skills with staff and patients as well. By implementing these solutions, I realized, that healthcare professionals can achieve positive results such as increased quality of care, reduced work stress, and improved patient satisfaction.

Action plan: The main purpose of this reflection is to acknowledge what are the mistakes or negative aspects I reached during my procedure and prevent those mistakes in the future If I get a chance to do the same procedure in the future, I will make sure to being, more attentive during practice sessions and Study nursing guidelines and protocols more thoroughly. I will actively engage with senior nurses to learn from their experiences. I will try to avoid overconfidence and also, I am planning to manage emotions and negative feelings effectively.

Reflection on Successfully Administered the Intramuscular Injection

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Description: The event took place on June 6, 2024, in the vaccination room of a private hospital in Wattala. I was assigned to administer the second dose of the Hepatitis B vaccine to a fellow nursing student. This was my first experience administering an injection to a real patient. The report details the step-by-step process of administering the IM injection, including patient interaction, preparation, and injection technique.

Feelings: Initially, I felt scared and nervous due to the lack of experience and fear of making a mistake. During the procedure, I experienced shaking hands, further intensifying my anxiety. However, encouragement from the senior nurse helped me to regain composure. Following the successful administration, I felt happy, confident, and motivated to perform the procedure again.

Evaluation: I identify the positive aspects of the experience, such as the opportunity to apply theoretical knowledge in a practical setting, successfully completing the procedure without causing harm, and developing confidence. I also acknowledge the negative aspects, primarily her nervousness and shaking hands, which could have resulted in errors and wasted medication.

Analysis: The analysis section emphasizes the importance of practical experience, proper injection techniques, patient assessment, and adherence to clinical guidelines. It includes a cause-and-effect graph highlighting the factors contributing to the successful administration of the IM injection and the potential consequences of inexperience.

Conclusion:The intramuscular injection has been successfully administered while adhering to nursing protocols. I highlight the learning outcomes, including improved knowledge, enhanced skills, and overcoming the fear of administering injections. A solution tree and ECT matrix are presented, outlining strategies for further improvement, such as practicing, building confidence, utilizing electronic health records, and adhering to proper injection techniques.

Action plan: The action plan focuses on continuous learning and improvement through training, observation of senior nurses, practicing techniques, staying composed in challenging situations, and effective communication with patients. I emphasize the importance of mental preparation and checklists to ensure preparedness for similar situations in the future.

Reflection on Managing a Saline Infusion Procedure for a Dengue Patient: Lessons in Preparation and Communication

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Description: On my first day in a medical ward at a private hospital in Wattala, Sri Lanka, I helped replace a saline infusion for a patient suffering from dengue fever. Together with my colleague, we gathered the necessary equipment and started the procedure. However, complications arose when we neglected to bring a kidney tray and discovered air bubbles in the new infusion set. Despite these difficulties, we were able to finish the task with assistance from the ward sister and the patient's willingness to cooperate.

Feelings: I was anxious yet excited to perform well. The unexpected situation we had to face, like the missing kidney tray and the air bubbles, made me feel a bit uneasy. Thankfully, my colleague and I handled it well, and the ward sister's advice helped lighten my worries. Once we finished the procedure, I felt a sense of relief and pride in our ability to secure the patient's safety.

Evaluation: The procedure proceeded without issues, with the saline replacement achieving success and the patient remaining secure. Effective collaboration and communication played a vital role in addressing the challenges we faced. However, neglecting the kidney tray and responding sluggishly to the air bubbles reflected a lack of readiness. These mistakes could have been avoided with adequate planning and thorough assessment of the equipment.

Analysis: The main problem was a lack of adequate preparation, which resulted in missing necessary equipment. This situation could have been avoided by implementing a checklist for required tools and activities. Furthermore, better communication among team members would have reduced misunderstandings and enhanced productivity. The high-pressure atmosphere of the ward, combined with it being my first day, also played a role in this.

Conclusion: Upon reflecting on the experience, I recognized how vital preparation and communication are during clinical procedures. Having all equipment ready in advance and verifying each step with team members are essential to prevent delays and mitigate risks. This experience underscored specific areas where my clinical practice can be enhanced.

Action Plan: Moving forward, I will implement the use of checklists for each procedure to ensure all necessary items are prepared. I will also engage in team briefings before starting tasks to ensure clear communication. Lastly, I will seek further training on infusion procedures to build my confidence and competence.

A Reflection on First-Time Blood Collection and Learning from Feedback

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Description: In June, while I was on clinical placement at a private hospital in Colombo, I was assigned to collect blood from a 70-year-old male patient with dengue. This marked my first experience performing a blood draw on an actual patient. After assembling the required equipment and confirming the patient's identity, I began the blood drawing process. Although I managed to puncture the vein successfully, I was unable to gather enough blood for the complete blood analysis. A senior nurse stepped in to finish the procedure and later provided me with feedback on ways to enhance my technique.

Feelings: Before the procedure, I was both eager and anxious since it was my first time drawing blood from a patient. During the process, my nerves got the better of me as I found it challenging to collect a sufficient amount of blood, and I felt remorseful when the patient indicated they were uncomfortable. After it was over, I felt shame and dissatisfaction with my performance for not achieving the task successfully, which impacted my self-esteem.

Evaluation: The advantageous part of this experience was the chance to apply and enhance my skills in a practical environment. It also emphasized the significance of practice, particularly for invasive tasks like phlebotomy. Conversely, my struggle to obtain enough blood made me feel less skilled and diminished my confidence when interacting with the senior nurse. Nonetheless, the feedback I garnered offered useful insights for my future development.

Analysis: Collecting venous blood is an essential procedure in the medical field and demands accurate technique to prevent preanalytical mistakes. My struggle with obtaining a sufficient blood sample stemmed from insufficient practice and a lack of familiarity with the process. This experience underscored the necessity of comprehensive training and practical exposure to achieve proficiency. Skillful blood extraction is crucial to avoid the need for repeated tests, which can lead to patient discomfort and erode their confidence in healthcare practitioners.

Conclusion: This experience highlighted the necessity for ongoing practice and enhancement of clinical skills. Adequate training and understanding are vital for performing well, particularly in invasive procedures. This reflection enabled me to pinpoint areas for development and acknowledge the significance of supervision and feedback.

Action Plan: To improve my phlebotomy abilities, I will seek additional chances to practice with guidance from experienced nurses. I will also explore educational materials on blood collection methods and watch seasoned nurses in clinical environments. Furthermore, I will pose questions during clinical rotations to resolve any uncertainties and build confidence in executing procedures.

Reflection on Challenges in Gel Electrophoresis: A Learning Experience in the Molecular Laboratory

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Description: During my practicum 4 at a government university, I had the opportunity to assist a laboratory technician with Gel Electrophoresis, a critical technique employed for the separation of DNA fragments based on their size and charge. My responsibilities included pouring agarose gel while the technician prepared the DNA samples for analysis. Unfortunately, I inadvertently knocked over the beaker, resulting in the spillage of gel onto the bench. This incident underscored the importance of precision and concentration in laboratory procedures, prompting me to reflect on my handling of equipment and the necessity for careful attention to detail in a research setting.

Feelings: Initially, I felt confident in my gel electrophoresis skills, but when the spillage occurred, I was shocked and embarrassed. Handling the agar, which contains toxic Ethidium Bromide (EtBr), heightened my anxiety about the experiment's outcome and the lab environment. Despite my initial panic, I focused on addressing the situation. The laboratory technician provided valuable support, guiding me through the cleanup process with paper towels and ethanol. Their assistance helped me regain my composure and effectively manage the spill.

Evaluation: The incident revealed both strengths and weaknesses in my performance. While I successfully poured the agarose gel and communicated well with the laboratory technician, the spillage highlighted a lack of accuracy and attention to detail, disrupting the process and requiring additional cleanup. Although I demonstrated proficiency in laboratory skills and received valuable support from colleagues during the cleanup, the experience underscored the need for improved focus to ensure precision in future procedures and prevent similar disruptions.

Analysis: The incident underscores that spills during gel electrophoresis are often caused by hasty processes or a lack of attention to detail. In my case, the spill resulted from rushing and inadequate focus while handling the agarose gel. Research indicates that external factors, such as an unstable work surface or interruptions, can also contribute to errors. This experience emphasizes the importance of maintaining concentration and ensuring a stable workspace to minimize risks during gel electrophoresis procedures. Moving forward, I must prioritize attention to detail and a calm approach to enhance my performance in the lab.

Conclusion: The incident underscored the importance of focus and attention to detail in laboratory practice. It highlighted the need to maintain composure under pressure and the value of a stable work environment for enhancing accuracy and efficiency. Overall, this experience catalyzed my growth, deepening my understanding of laboratory procedures and reinforcing my commitment to lifelong learning. I aim to apply these insights to improve my work and contribute meaningfully to scientific research.

Action Plan: To enhance my laboratory performance and reduce errors, I will incorporate mindfulness techniques and establish clear procedures, including seeking training opportunities such as workshops on laboratory methods. Following the incident, I will implement strategies for mindfulness and focus, such as effective time management and concentration exercises, while also creating checklists or standard operating procedures (SOPs) to ensure accuracy in tasks. By proactively addressing the root causes of mistakes, I aim to prevent similar incidents and continuously refine my practice to achieve excellence in laboratory work.

Reflecting on Challenges and Learning from Mistakes: A Hands-On Experience with the Erythrocyte Sedimentation Rate Test

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Description: During a clinical placement at a private hospital's laboratory, I observed and participated in the Erythrocyte Sedimentation Rate (ESR) test under the guidance of two Medical Laboratory Technicians (MLTs). After demonstrations, my colleagues and I prepared the samples for testing. However, while placing a Westergren tube, I accidentally spilled blood, preventing me from recording the reading for that sample due to insufficient volume to repeat the test. The MLTs advised me on managing the spillage, enabling me to proceed with the remaining samples.

Feelings: Prior to the incident, I experienced a blend of anxiety and curiosity as I eagerly awaited my turn to perform the test, appreciating the opportunity to handle patients' samples. During the procedure, uncertainty led to increased nervousness, which affected my performance; however, once I refocused on the correct methodology, I successfully completed the remaining steps with greater ease. In the aftermath, I felt a sense of disappointment for not finishing the experiment as I had hoped, yet I found encouragement in my ability to recognize my mistake and learn the proper techniques. Ultimately, I felt a sense of contentment and relief, having gained valuable insights from the experience.

Evaluation: Upon evaluation of the incident, I successfully executed the initial stages of the experiment by accurately loading the sample into the Westergren tube and positioning the remaining tubes correctly. This experience provided valuable insights into effective sample handling and spill management techniques. However, the spillage from the first sample tube underscored my lack of experience, which hindered my ability to record readings and led to the wastage of samples, time, and effort. Had I successfully placed the sample without incident, I would have been able to document and analyze the results comprehensively.

Analysis: The erythrocyte sedimentation rate (ESR) is an important inflammatory marker, and the successful execution of the test relies on precise sample handling and proper placement of Westergren tubes. My lack of caution during my initial attempt led to a spillage, resulting in wasted samples and contamination risk. This incident highlighted the importance of fine motor skills and the necessity for comprehensive training to reduce errors. Through this experience, I learned valuable techniques from my colleagues and MLTs, which I will integrate into my future practice as a biomedical scientist to improve accuracy and efficiency in test performance.

Conclusion: In this incident, I was unable to successfully complete the ESR test procedure as intended due to a spillage of the sample, which resulted from my nervousness while attempting to place the Westergren tube in the ESR stand. Consequently, there was insufficient sample volume to record the test results. Nevertheless, under the guidance of the Medical Laboratory Technicians, I was able to correctly position the remaining samples in the ESR stand. Although I did not achieve my initial objective, the experience provided me with valuable insights and knowledge that will undoubtedly enhance my capabilities as a biomedical scientist in future laboratory applications.

Action Plan: To improve my laboratory skills and prevent similar incidents in the future, I will implement several strategies. I will apply theoretical concepts to each procedural step and utilize critical thinking for informed decision-making, supported by the creation of checklists to ensure accuracy. I will also engage in discussions with educators to address any uncertainties. Additionally, I will participate in similar experiments attentively, seek specialized workshops, and reflect on my experiences to enhance my competence as a biomedical scientist. These measures aim to reduce errors and promote successful laboratory practices.

Reflection on Engagement in Therapeutic Communication in Enhancing Patient's Emotional Well-being

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Description: On my fourth day in a medical ward at a hospital in Sri Lanka, I was assigned to the night duty on that day. I was allocated to take care of a female patient with kidney failure and liver damage. The patient was receiving blood transfusions continuously due to her deteriorating health. At the moment the patient was aggressive, and refused her medications and she looked frustrated. My duty was to communicate well with the patient and to make her calm in order to take the consent for the treatments. **Feelings:** At first, I felt nervous as the patient was aggressive and refusing treatment. I worried that I might not be able to communicate effectively with her. However, once we began discussing her life, my confidence grew. I felt empathy towards her and was relieved to see her smile and calm down. I also felt proud when her daughter thanked me for my kindness, as it reaffirmed the importance of patient-centered care.

Evaluation: A positive aspect of this experience was the effectiveness of therapeutic communication in improving the patient's emotional well-being. By discussing her past memories and showing genuine empathy, I was able to build a therapeutic relationship with the patient. On the other hand, the negative aspect of this experience involved the harsh treatment the patient received earlier in the day from other staff members.

Analysis: When it comes to providing elderly individuals with high-quality healthcare, especially those with complicated medical problems, effective therapeutic communication is essential. This investigation highlights the value of empathy, clarity, and respect while examining the concepts and tactics that improve communication with older persons.

Conclusion: This experience reinforced the importance of therapeutic communication in elderly care, especially when dealing with patients who are emotionally and physically vulnerable. I learned that patience and empathy can significantly improve patient outcomes.

Action Plan: Moving forward, I will continue to use therapeutic communication techniques to support elderly patients. I will also advocate for compassionate care among colleagues to prevent emotional distress in patients. Lastly, I will participate in further training on communication and conflict resolution to improve my skills.

Reflection on Administering Nebulization to a Patient with Delirium

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Description: During my clinical placement in the surgical ward, I was tasked with administering nebulization to a 76-year-old male patient experiencing delirium and coughing with whitish sputum. After obtaining consent and preparing the necessary equipment with a colleague's assistance, I performed the procedure while monitoring the patient's vital signs. The patient remained stable and comfortable throughout, and I provided post-procedure instructions before concluding the care.

Feelings: Before the procedure, I experienced a combination of excitement and nervousness, as this was my first time providing care outside of college practice. While preparing the medication under the supervision of a senior nurse, I felt some anxiety and self-doubt about my ability to perform the procedure correctly. During the procedure, I felt apprehensive as I approached the patient and was startled when the senior nurse pointed out areas where I made errors. After the procedure, although I was pleased that the patient's vital signs remained stable, I felt a sense of disappointment as I reflected on the aspects I could have improved.

Evaluation: This experience provided me with a valuable opportunity to perform nebulization for the first time, allowing me to gain practical knowledge and complete the procedure safely. However, I encountered issues with time management, as I took too long preparing the medication and failed to check the nebulizer machine beforehand. These oversights could have affected the patient's care, highlighting areas for improvement in future procedures.

Analysis: Nebulization therapy is vital for treating respiratory conditions, and timely medication administration is essential to ensure effectiveness. In this situation, I took too long preparing the medication, which could reduce its impact. Minimizing distractions during medication preparation is crucial to avoid errors. Proper patient identification and informed consent are key to delivering safe care. Additionally, positioning the patient correctly and closely monitoring vital signs before, during, and after nebulization are important for preventing complications and ensuring successful treatment.

Conclusion: This experience taught me valuable lessons about handling critical situations in nursing. I recognized the importance of focusing entirely on the procedure at hand and ensuring accurate medication preparation. I also understood the significance of maintaining trust with colleagues and safeguarding patient rights. Additionally, I realized that critical thinking is essential in nursing practice and should always be prioritized.

Action Plan: To enhance nursing skills, information from textbooks and practical experiences will be utilized, along with insights from experienced professionals. Engaging in discussions with lecturers and senior nurses will help refine approaches to patient care. Active participation in lectures, clinical practices, and placements will focus on proper medication administration and patient care techniques. Attendance at workshops and clinics will provide experience in diverse settings. A commitment to addressing weaknesses and strengthening skills will ensure preparedness for future nursing opportunities.

Reflection on an Incident of Inserting Cannula & Giving IV Medication

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Description: During a clinical placement in Colombo, Sri Lanka, I encountered an incident where a patient was prescribed IV medication. The senior nurse helped me identify the drug and dose, and I was able to insert a new cannula under her supervision. This experience highlighted the importance of adaptability, creative problem-solving, and reflective learning in providing comprehensive care to patients with unique challenges.

Feelings: During the incident, I performed well and quickly adapted, feeling proud. The patient reassured me, and the senior nurse praised my competence, motivating me to study more and practice diligently. However, my nervousness during the procedure contributed to the negative experience.

Evaluation: The cannulation procedure was performed successfully, adhering to hospital guidelines and maintaining sterility. The senior nurse's supervision was instrumental in ensuring all steps were followed. The patient expressed satisfaction, boosting the nurse's confidence. However, the procedure could have been improved by enhancing knowledge of potential complications, practicing more efficiently selecting veins, and assessing the patient's medical history. Lessons learned include the importance of constant practice, theoretical knowledge revision, seeking guidance from experienced staff, and being proactive in assessing the patient's condition before invasive procedures. This evaluation provides a critical reflection on improvement and learning opportunities.

Analysis: Discussed a successful cannulation procedure, emphasizing the importance of combining theoretical knowledge with practical skills. Despite initial confusion due to the lack of recent revision, critical thinking and adaptability helped manage the situation. The analysis highlights the significance of maintaining sterility, proper procedure execution, and applying critical thinking in unexpected situations. Confidence in handling such tasks comes from a strong theoretical foundation and frequent practice.

Conclusion: Emphasized the significance of revising theoretical knowledge, regular practice, and attentiveness during procedures for skill enhancement. It underscored the role of reflective learning and critical thinking in nursing, encouraging the development of practical skills and reassessing patient interactions to improve care quality.

Action Plan: Plans to enhance practical skills by actively performing hospital procedures, seeking guidance from senior nurses, allocating time for skill development, attending workshops to improve nursing skills, and researching new products and innovations related to medical procedures. I will also attend workshops to further my practical knowledge and stay updated on new products and innovations.

Reflection on the Timely Identification of Possible Surgical Site Infection in an ICU Patient

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Description: During my first week of the second-year placement in the ICU at a private hospital, I was assigned with patient care alongside my colleagues. While we were changing the diaper of an elderly patient, we observed a damp wound dressing on the right iliac region with yellowish-gray discharge. Uncertain whether it was urine or drainage from the surgical area, we quickly notified the nurse on duty. The nurse and doctor evaluated the patient and determined that the dressing was saturated with drainage, which could indicate an infection. Our immediate observation was valued, helping to avert further complications for the patient.

Feelings: At first, I was feeling overwhelmed because of the workload and my responsibility to change the diaper. However, after seeing the unusual drainage from the wound, I became worried and uncertain. Once we informed the medical team and received praise from the nurse and doctor, I felt a sense of pride and relief. Their acknowledgment of our careful observation provided me with a feeling of achievement and emphasized the significance of remaining attentive in patient care.

Evaluation: The favorable part of this situation was the swift recognition of a possible infection and the strong collaboration in bringing the matter to the attention of senior staff. The healthcare team's gratitude showed the significance of effective communication and vigilance in caring for patients. However, my initial feelings of frustration and lack of experience in the ICU led to some hesitation, which might have postponed the awareness of the patient's condition.

Analysis: This incident highlighted the importance of staying alert and communicating clearly to avert healthcare-associated infections. Had the situation not been promptly managed, it could have resulted in extended hospital stays or deteriorated patient health. Employing sterile methods and following safety protocols are crucial in minimizing the chances of infection. Furthermore, it illustrated how strong teamwork and a nurturing atmosphere enhance the quality of patient care.

Conclusion: During this experience, I gained value in the importance of anticipatory patient evaluation, collaboration, and effective communication in maintaining patient safety. Identifying potential complications early can greatly influence patient results, helping to prevent infections and enhance the quality of care.

Action Plan: From this point on, I will concentrate on improving my observation skills and being more vigilant in monitoring patients. I plan to increase my understanding of wound care and infection control guidelines. Furthermore, I aim to develop strategies for handling stress in uneasy situations to stay focused and effective in my responsibilities.

Reflection on Enhancing Clinical Competence through Reflective Practice in Insulin Administration

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Description: During my clinical placement at a private hospital in Sri Lanka, I assisted a staff nurse in administering insulin to a diabetic patient. This involved preparing the medication according to the patient's bed head ticket and ensuring proper techniques were followed for safe administration.

Feelings: Initially, I felt excitement and confidence about participating in the insulin administration, having prepared thoroughly. However, during the procedure, I became confused about selecting the correct injection site, leading to feelings of embarrassment and anxiety. Thankfully, the nurse's guidance helped me regain composure and focus.

Evaluation: The experience was a mix of positives and negatives. Successfully preparing and administering the insulin boosted my confidence and reaffirmed my clinical knowledge. Conversely, moments of confusion led to feelings of inadequacy, highlighting areas for improvement in my skill set.

Analysis: A structured reflection on the insulin administration process underscored the importance of patient assessment, correct insulin dosage, and effective communication. Best practices include confirming patient identity, selecting appropriate injection sites, and maintaining strict hygiene protocols. The necessity of continuous education and self-reflection in nursing practice was also emphasized.

Conclusion: This reflection reinforced the importance of revising theoretical knowledge and practicing various administration techniques. It highlighted the value of adaptability and effective communication with patients to enhance care quality. The incident has motivated me to engage more actively in learning opportunities and conversations with patients.

Action Plan: To develop my clinical skills, I will actively seek opportunities to participate in procedures, closely observe senior nurses, ask questions, and practice techniques under supervision. Maintaining composure in high-pressure situations and integrating theoretical knowledge with practical experiences are essential for my growth as a healthcare professional. Establishing a mentorship relationship will further guide my development and enhance my confidence in future clinical settings.

Reflection on the Administration of Hepatitis B Vaccine: Study in Safe Practices and Patient Communication

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Description: the incident took place at a well-known hospital in Sri Lanka. I was tasked to administer the hepatitis B vaccine. I Read the prescription, checked the medication vial, prepared equipment, obtained consent, cleaned the injection site, and gently administered the vaccine. Documentation was completed, and the patient was instructed to return within a month for a second dose.

Feeling: Before the incident, I was happy to join the master and support him. excited to perform a procedure for the first time. However, during the incident, they were nervous and agitated due to their first experience. After the incident, I was happy and motivated, as they performed the procedure correctly and were appreciated by the senior master.

Evaluations: The hepatitis B vaccine administration experience provided an opportunity to improve my skills as a healthcare professional, enhancing my understanding of patient care. The real patient interaction and successful administration under supervision reinforced confidence in abilities. However, the experience also led to nervousness and fear during the procedure, which was normal but motivated me to be more careful and focused. The experience highlighted the importance of experienced professionals in clinical procedures.

Analysis: Importance of learning theoretical knowledge and practical skills, particularly regarding the Hepatitis B vaccination, which protects against the virus and can lead to cirrhosis and liver cancer. It emphasizes the need to identify proper protocols and actions and to utilize these resources to enhance knowledge and abilities.

Conclusion: This highlighted the importance of revising theoretical knowledge, using it correctly, and being attentive when assessing patients. It motivated me to practice my skills and communicate more responsibly. This incident taught me the importance of critical thinking and reflective learning as a nurse, helping me avoid mistakes and identify areas for improvement. It provided an opportunity to assess my current skill level and enhance future practices.

Action Plan: Learn the techniques senior staff used by watching them calmly. Take advantage of opportunities at the hospital to gain practical experiences. Request supervision from a senior nurse if ever feeling nervous about carrying out a procedure. Regularly reflect on my experiences, identify areas for improvement, and set goals for ongoing growth.

Reflection on Performing a Blood Drawing Procedure: Gaining Confidence and Practical Skills

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Description: I conducted a blood drawing procedure on a 29-year-old female patient who had been admitted to a prominent hospital in Sri Lanka due to a viral infection. This task was part of my clinical rotation. After adhering to aseptic techniques, preparing the required equipment, and securing the patient's consent, I carried out the blood draw. I accomplished the task successfully and recorded the procedure. The patient was cooperative during the process, and I received positive feedback from my supervising nurse.

Feelings: Before the procedure, I was filled with excitement and confidence since my senior nurse believed in my ability to handle the task on my own. My past experience with blood draws contributed to my assurance. Throughout the procedure, I stayed composed and attentive, depending on my earlier practice. Once I finished the procedure successfully, I felt a sense of satisfaction and pride in my work, particularly after getting positive comments from both the patient and my supervisor.

Evaluation: The process went very well, and I successfully executed the procedure without any mistakes. I acquired important hands-on experience, and my patient was pleased with the care they received. Moreover, my capacity to carry out the procedure on my own demonstrated the advancement I had achieved in both my skills and self-assurance. The sole area for improvement was additional practice to increase my proficiency.

Analysis: The process of drawing blood, known as phlebotomy, is a vital skill in the healthcare field for diagnostic reasons. It demands strict compliance with aseptic methods to avoid infections and needle-stick injuries. My ability to perform this procedure successfully was due to careful preparation, effective communication with patients, and proper equipment usage. Key elements that contributed to the success of the procedure included thorough hand hygiene, adequate disinfection of the site, and safe needle disposal. This experience highlighted the significance of adhering to protocols to prioritize patient safety.

Conclusion: This reflection emphasized the necessity of adhering to standard protocols for phlebotomy, the importance of preparation, and the benefits of fostering positive interactions with patients. Gaining insights from such experiences enhances my clinical abilities and boosts my confidence in delivering patient care.

Action Plan: Going forward, I will persist in honing my blood drawing abilities by seizing every chance to practice with guidance. I intend to watch experienced nurses to acquire advanced methods and will make sure to ask questions when uncertain. Improving communication with both patients and coworkers will continue to be a focus to promote effective collaboration and patient contentment.

Reflection on an Incident of Learning through Supervision Instructing a Patient in Spirometry and Deep Breathing Exercises Post-Transplant

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Description: This Incident took place at a well known hospital in Sri Lanka. During my shift in the Kidney Transplant Unit, I instructed a patient on performing deep breathing exercises and using a spirometer to support lung function post-transplant. Due to my limited experience, I struggled to provide clear instructions and ensure patient understanding. Aware of my uncertainty, I asked the supervisor nurse for guidance. She demonstrated the correct technique and highlighted the importance of patient engagement in preventing respiratory complications. Her supervision helped me successfully complete the task.

Feelings: At the time, I felt anxious and unprepared due to my lack of experience with spirometer instruction, fearing it might affect the patient's recovery. I was frustrated, feeling I should have been more confident in this critical setting. However, once my supervisor assisted, I felt reassured. Her guidance helped me learn quickly and deliver the right care, reinforcing the value of teamwork in nursing.

Evaluation: The task was completed accurately, ensuring the patient received proper care and reducing the risk of complications. It also allowed me to recognize my limitations and seek help from a more experienced nurse. However, my lack of preparation was a drawback, potentially affecting patient confidence and causing unnecessary stress. With better preparation, I could have been more independent and confident.

Analysis: Emphasizes the significance of continuous learning and communication in nursing, particularly in postoperative care for kidney transplant patients. They mention the role of techniques like spirometry in preventing complications. Despite feeling inadequate due to their lack of experience, they believe it's normal to rely on experienced nurses. They also mention the challenge of effective communication, which directly impacts patient compliance.

Conclusion: This experience taught me valuable lessons about my strengths and areas for improvement. One strength was my ability to seek help when needed, ensuring patient care was not compromised. However, my lack of preparation highlighted the need to review procedures and gain experience before performing tasks independently, especially in critical environments like the Kidney Transplant Unit. I also learned the importance of clear, patient-centered communication to ensure compliance with postoperative care instructions, which directly impacts recovery.

Action Plan: The author has developed an action plan to prevent a recurrence of an incident and improve their practice. They plan to expand their knowledge of postoperative care techniques, including spirometry, through training and supervision. They aim to improve communication skills, and value teamwork but work towards greater independence in procedures. Regular reflection using Gibbs' reflective cycle ensures continuous professional growth.

Reflection on Preparing Culture Media with Improper Composition

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Description: On usual placement day at one of the leading hospitals in Sri Lanka, when I was assigned to prepare various types of growth media for the day's microbial cultures. During the process, I mistakenly used incorrect proportions of agar, leading to the preparation of media with improper composition. Fortunately, I identified the mistake before it caused further problems.otherwise, this would have potentially led to contamination issues and invalidated cultures. This led to discarding the improperly prepared media, resulting in delays, wastage of reagents and additional work to redo the preparation.

Feelings: The procedure involves three steps: Before the Procedure, During the Procedure, and After the Procedure. Before the procedure, I felt confident and focused. During the procedure, However, upon discovering the mistake in the agar proportions while cleaning the balance, I experienced a surge of anxiety and frustration. After the procedure, The thought of the media potentially leading to contamination issues and invalidated cultures brought a sense of guilt and disappointment..

Evaluation: In a positive note, I was able to identify the mistake in the agar proportions before the media was used, preventing potential contamination and invalid results. The incident provided a valuable learning experience, highlighting the importance of adherence to protocols and verification. On the other hand, it caused significant delays in the lab's workflow and impacted the schedule for microbial cultures. It added extra work, time and also increased the overall workload and led to wastage of reagents.

Analysis: According to the research analysed above, the incident highlights the importance of adhering to SOPs to prevent errors in laboratory procedures. The failure to follow established protocols for measuring agar led to significant disruptions and additional work. Implementing and strictly following SOPs, including verification steps, is essential for maintaining accuracy, efficiency, and overall effectiveness in laboratory operations.

Conclusion: The incident highlighted the critical importance of precision and strict adherence to protocols during media preparation, as even small errors can lead to significant disruptions, such as contamination risks, wasted resources, and invalid experimental results. This event underscored the need for implementing more robust verification processes and ensuring all lab personnel are fully trained in SOPs and measurement techniques.

Action Plan: An action place could be developed for future practice by identifying specific steps or changes that can be made to improve the process and prevent similar problems. By scheduling regular training sessions focused on lab protocols, particularly SOPs for media preparation, enforcing strict adherence to SOPs as well as preventing measurement errors and other issues, particularly in media preparation will further improve accuracy and consistency.

Reflection on an Incident of Air Accidentally Entering the Syringe During Nasogastric Feeding.

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Description: A patient's nasogastric feeding procedure was successful during a clinical placement at a well-known hospital in Sri Lanka. Still, an accidental clamping of the syringe caused air to enter the tube. The senior nurse intervened and the patient resumed the feeding, demonstrating the importance of following proper procedures and avoiding unintended mistakes in the Nasogastric feeding process.

Feelings: I experienced a mix of confidence and fear before the procedure inside the Intensive Care Unit, but felt prepared after reviewing processes and practicing under supervision. During the procedure, I made a mistake, which the senior nurse calmly explained and helped me. After the procedure, I felt relieved but still felt disappointed.

Evaluation: A patient's nasogastric feeding procedure was successful due to thorough preparation, confidence, and ability to detect obstructions. However, a mistake occurred when the feeding tube was clamped too late, allowing air to enter and leading to complications such as aspiration pneumonia. A senior nurse's calm intervention was crucial, demonstrating the importance of staying calm under pressure. This incident highlights the need for patient safety, staying calm, following steps accurately, and double-checking actions in critical patient care settings.

Analysis: The process of NG tube feeding in ICU units is complex and requires strict adherence to rules to prevent complications like air entry. Inexperience and nervousness can lead to mistakes, affecting clinical performance. An air bubble obstructing NG feeding can cause discomfort, inadequate feeding, and an increased risk of complications. To ensure patient safety, proper management of the tube is crucial. The fast-paced nature of ICU environments can increase human errors, especially among less-experienced personnel.

Conclusion: The ICU NG feeding procedure incident highlighted the importance of methodical and attentiveness in critical care settings. The mistake allowed air to enter the tube, highlighting the need for calmness and clear communication. The incident also underscored the value of senior mentorship and teamwork. To improve future practices, the author plans to be more observant, double-check actions, and reflect on mistakes.

Action Plan: I proposed a plan to enhance nursing practices, focusing on efficient preparation, patient communication, early problem identification, and preventing air entry in the NG tube. This includes checking patient information, incorporating practice and simulation, and cross-checking steps. The plan also emphasizes managing anxiety in high-pressure situations, implementing a checklist, and seeking training on NG feeding. The goal is to ensure continuous improvement and avoid mistakes impacting patient care.

Reflection on Damaging Bacteria Culture while Performing Long Streaking

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Description: On the first day of my placement at the microbiology laboratory of a hospital in Sri Lanka, I was being assigned with an antibiotic sensitivity test (ABST). With both excitement and nervousness, I started the process. Unfortunately, during the streaking process,I apply too much pressure with the inoculation loop, resulting in damage to the agar plate. This mistake not only disrupted the streaking but also led to the waste of the agar and other reagents used to prepare the plate as it is not suitable for any further tests.

Feelings: Before the procedure, I was thrilled when my supervisor asked me to perform the long streaking on an agar plate as I was eager to demonstrate my ability. During the procedure, my initial excitement quickly turned into anxiety and my stress mounted. After the procedure,I felt disappointed and frustrated with myself for damaging the agar plate and wasting the reagents.

Evaluation: Being given the responsibility to perform long streaking for the first time filled me with excitement and curiosity, motivating me to dive into the task and learn from it. This enthusiasm helped me actively engage in the process, and despite the mistake, it provided valuable hands-on experience. My nervousness and excitement caused me to lose control, leading to the unintended puncturing of the agar surface. The error caused delays in the test and served as a reminder of the importance of staying calm, focused, and patient during laboratory procedures.

Analysis: Lack of experience, overwhelmed by doubt and excitement, improper techniques and lack of theoretical knowledge can hinder in executing the given task properly. The problem created can cause effects such as delayed diagnosis and treatment, waste of laboratory workers time as well as wastage of agar and reagents.

Conclusion: In microbiology laboratories, precision, responsibility, and focus are essential for successful experimentation. Reflecting on my experience with the long streaking procedure, I encountered challenges due to inexperience and overwhelming emotions of doubt, excitement, and nervousness. My lack of familiarity with the task and the pressure of being observed led to the inadvertent damage of the agar plate. Moving forward, I understand the need to enhance both my practical skills and theoretical knowledge, while managing my emotions more effectively.

Action Plan: To minimise causing damage in bacteria culturing follow. Gain experience through handson practice and gather more theoretical knowledge. Lastly, I will work on managing my emotions and building confidence by applying what I have learned through previous practice, focusing on staying calm and composed during tasks. By implementing these solutions, I aim to refine my skills, strengthen my theoretical understanding, and manage my emotions, ultimately leading to more confident and precise performance in future lab tasks.

Reflection on an Incident Occur While During Naso Gastric Feeding

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Description: This Incident took place in the medical ward of a private hospital in Sri Lanka. I was tasked with providing Naso Gastric (NG) feeding to a 53-year-old male patient who had suffered a stroke and was unable to swallow due to partial paralysis on his left side. With the guidance of a senior nurse, I prepared the formula and positioned the patient in a high Fowler position. However, when I attempted to confirm the placement of the NG tube by injecting air and listening with a stethoscope, I struggled to hear the characteristic sounds. The senior nurse then confirmed the tube placement, alleviating my anxiety, and together we successfully administered the formula feed. This experience taught me the importance of proper technique, teamwork, and communication in patient care.

Feelings: Before the procedure, I felt excited and happy, as it was my first time administering an NG feed, and I was confident in the knowledge I had. However, during the process, I became a bit nervous and anxious, especially when I couldn't hear the whoosh sound through the stethoscope, which was disappointing. After completing the feed successfully without complications, I felt satisfied, but the difficulty with the whoosh sound made me realize I still need more practice and experience.

Evaluation: I took positive actions by preparing the formula according to protocol, positioning the patient correctly, and seeking help from the senior nurse to ensure safe feeding. Despite feeling anxious, I followed proper guidelines and didn't proceed without confirming tube placement. However, my anxiety caused hesitation and a slight delay when I couldn't hear the air sound, highlighting a gap in my experience with this skill. I could have requested the senior nurse's supervision earlier to avoid unnecessary repetition and ensure a smoother process.

Analysis: A nasogastric tube is a flexible tube inserted into the stomach to deliver nutrition, fluids, and medication to patients who cannot eat or swallow properly. It is crucial to confirm NG tube placement before feeding to prevent complications like aspiration or pneumonia. A common method is using a stethoscope to listen for a "whooshing" sound after injecting air into the tube, which is essential for patient safety. Seeking assistance from a senior nurse is also recommended.

Conclusion: The experience highlighted the importance of technical competence and emotional resilience in nursing practice. It highlighted the need to follow clinical protocols and prioritize patient safety during procedures like NG feeding. It also highlighted the value of seeking help from senior staff and continuous skill development to build confidence and independence. It also highlighted the impact of anxiety on performance and the need to manage it effectively.

Action Plan: I planned to improve my skills in tube placement confirmation and anxiety management by adhering to protocols, seeking support, and practicing mindfulness. They plan to engage in simulation exercises and workshops to gain confidence in low-stress environments. They also aim to enhance their skills in confirming NG tube placement and participate in case study reviews on NG feeding techniques

Reflection on an Incident of Breaking Sterility During Catheterization.

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Description: A 68-year-old female patient, Mrs. S, was admitted to a private hospital after an accident. My senior nurse needed to insert an indwelling catheter, and received assistance from another nurse. However, the catheter accidentally touched Mrs. S's body, breaking the sterility of the procedure. The fast-paced environment left Mrs. S feeling anxious, and the procedure was paused to retrieve a new sterile catheter set.

Feelings: I recounted a high-stakes emergency procedure where they felt both responsible and apprehensive. I was tasked with assisting Mrs. S, who was in distress. The busy environment distracted me, and I made a critical error when a catheter touched her body. I felt embarrassed and disappointed, but my senior nurse's calm demeanor made me feel part of the team. After the procedure was completed, I realized the importance of maintaining composure in high-pressure situations. I learned that emotions like stress, panic, and disappointment are natural but can also serve as reminders for personal growth.

Evaluation: This incident highlights the need for better stress management in high-pressure situations. My actions need refinement, but their professionalism and teamwork demonstrated their ability to perform effectively in high-pressure situations.

Analysis: Stress in fast-paced environments like emergency treatment units can negatively impact healthcare professionals' concentration and performance, leading to cognitive overload and increased errors like breaches in sterility. I got distracted during the procedure because of the chaotic environment and high stress levels. Effective stress management and mindfulness exercises can help healthcare professionals avoid mistakes, as they can calm themselves and focus before handling sterile equipment. In conclusion, managing stress and maintaining focus are crucial for ensuring patient safety, and improvements in stress management strategies and mindfulness could prevent similar mistakes.

Conclusion: The catheterization procedure breach underscored the importance of stress management and focus in high-pressure settings, emphasizing the need for self-awareness and effective communication to prevent errors. It underscored the need for continuous improvement in clinical skills and stress-handling techniques for patient safety.

Action Plan: Suggests staff training on stress management techniques, implementing a quiet zone for critical procedures, and using standardized checklists for sterile procedures. It encourages a culture of safety and reduces errors. During busy times, increasing the nurse-to-patient ratio and actively communicating with management about staffing shortages are suggested. The author will avoid excessive responsibilities and participate in discussions about optimal staffing strategies to enhance patient care.

Reflection on a Critical Blood Collection Incident: Ensuring Patient Safety in Emergency Transfusions

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Description: The incident occurred at the medical ward in a hospital in Sri Lanka The patient was admitted with a critically low hemoglobin count. An urgent blood transfusion was prescribed to stabilize his condition. After verifying the patient's identity, I explained the procedure, positioned the patient's arm, and punctured the veins. The sample was collected and labeled accurately, with the process going smoothly without complications.

Feelings: I was excited to prove my competence but nervous about the task and the patient's condition. managed to perform the blood draw successfully, feeling relieved and accomplished. I was grateful for the support of the senior nurse, who reassured me and gave me confidence. However, I realized they needed to work on managing their initial anxiety in such situations.

Evaluation: The experience enhanced clinical skills, emphasized the importance of double-checking orders for patient safety, and highlighted the value of quick and collaborative actions. It reinforced the importance of reflective practice, attention to detail, and teamwork in nursing, ensuring timely care for patients and enhancing clinical skills.

Analysis: Blood drawing, or venipuncture, requires an understanding of anatomy, proper technique, and adherence to infection control protocols. Emotional resilience and mentorship are crucial for maintaining composure and improving patient care outcomes. Clear communication, patient involvement, and active listening are essential for patient satisfaction and better health outcomes. Nursing is a holistic practice that integrates clinical skills, emotional management, effective communication, and professional relationships.

Conclusion: I learned the importance of reflective practice for continuous professional development and identified areas for improvement. The incident also underscored the need for effective communication with patients and the healthcare team, as well as the role of supervision in developing clinical competence. The author concludes that this experience was a valuable learning opportunity.

Action plan: Developing an action plan for my future clinical practice, which includes implementing stress management techniques, seeking feedback from supervisors or senior nurses, continuing practice, prioritizing patient communication, and regularly reflecting on my clinical experiences. These strategies aim to maintain calmness and focus during procedures, reduce anxiety, build confidence, and ensure patient comfort. make reflective practice a habit to continuously improve my practice and learning.

Reflection on Administering Antibiotics via a Burette Set: An experience encountered in the Clinical Setting

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Description: During my morning shift in a medical ward at a private hospital in Sri Lanka. I was responsible for administering antibiotics through a burette set to a male patient, aged 45, who was experiencing high fever, cough, and shortness of breath, under the guidance of a senior nurse. Although I felt nervous and anxious at the start of the procedure, I successfully carried out the procedure by following the three-check protocol to ensure the accurate administration of the medication.

Feelings: Prior to the task, I experienced a mix of excitement and anxiety, worrying about the possibility of making errors and mistakes. While carrying out the procedure, I felt a bit confused and worried, especially because it was my first experience with a burette set in real life. Nevertheless, following the successful administering of medication and receiving good comments from the senior nurse, I experienced a sense of pride and increased confidence in my skills.

Evaluation: I gained valuable practical experience in administering medication and received positive feedback. Patient safety was ensured by following the three-check protocol respectively. Nonetheless, my lack of experience led to some confusion and trembling hands during the procedure, potentially affecting my overall performance.

Analysis: The proper oversight and adherence to protocols were the main factors behind the successful administration. The use of a burette set enabled accurate administration of the antibiotic, ensuring patient safety. However, my lack of confidence and experience led to some confusion and hesitation. These challenges arose by the absence of structured training or prior practice. Increased exposure and comprehensive preparation would help improve these issues in the future.

Conclusion: Upon reflecting on the experience, it became clear to me how crucial practice, effective communication, and confidence are when carrying out clinical procedures. I managed to administer the antibiotic successfully and gained insights into the significance of remaining composed under pressure and following best practices in medication administration.

Action Plan: To improve my abilities, I will look for more chances to practice medication administration with supervision. I plan to utilize checklists and ask for advice from experienced nurses to ensure precision and increase my confidence. Furthermore, I will concentrate on deepening my theoretical understanding to support my hands-on skills. This will enable me to perform future procedures more effectively and with greater practice.

Reflection on Not Being Able to Stain the Smear Further and Being Unable to Observe Under a Microscope

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Description: I was at a clinical laboratory placement at a private hospital, observing and learning the Gram staining procedure with two medical laboratory technicians (MLTs) and two colleagues. We were tasked with preparing and staining bacterial smears using patient samples. While staining my first smear, I accidentally added the counterstain (diluted Carbolfuchsin) before washing off the decolorizer (Iodine acetone). I was able to correct the procedure for my second smear but couldn't continue with the first one due to the inaccurate staining.

Feelings: Before the incident, I was excited, nervous, and curious about this new experience. During the incident, I felt anxious and doubtful, which led to my mistake. Afterward, I felt frustrated that I hadn't completed the procedure perfectly but also relieved that I understood the correct technique and learned from my error. I felt reassured by the end of the procedure.

Evaluation: The positive aspects of the incident were successfully preparing the smear initially and gaining valuable knowledge about accurate techniques and potential errors in the Gram staining procedure. On the other hand, the inaccurate staining of the first smear prevented further analysis and visualization. My lack of experience was the main reason for the mistake, leading to wasted reagents, time, and effort.

Analysis: Gram staining is a crucial preanalytical indicator for specimen quality, culture acceptability, and potential pathogen classification, which impacts clinical treatment decisions. Accurate staining practices are essential for reliable results. Improper washing between the staining steps can cause incorrect interpretations, including false positives and negatives, which can delay diagnosis and treatment. Comprehensive training and practical experience are crucial for achieving reproducible results. The experience I gained, including identifying the correct techniques and learning from my colleagues and the MLTs, will benefit my future work as a biomedical scientist.

Conclusion: While I was initially disappointed that I couldn't complete the Gram staining procedure as expected, I realized the experience provided valuable knowledge. Missing the washing step due to nervousness led to the failure of the first smear staining, but I was able to successfully stain the second smear after receiving instructions from the MLT. The exposure and knowledge gained from this experience, especially recognizing the importance of careful handling in each step of a test procedure, will be beneficial for my future laboratory applications.

Action plan: To avoid similar incidents in the future, I plan to: apply theoretical knowledge to each step, use critical thinking for decision-making before procedures, develop checklists, actively engage in discussions with educators and ask questions when unsure, participate in similar test procedures to gain more experience, seek out specialized workshops and training programs, volunteer for relevant projects, and continuously reflect on my experiences.

Reflection on Enhancing Laboratory Practices and Improvement

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Description:- On March 12, 2024, during a clinical placement at a Colombo hospital's microbiology lab, I mistakenly prepared nutrient agar instead of the required XLD agar for culturing specific pathogens. This error caused a delay in scheduled tests and wasted resources, as I had to prepare the correct agar afterward. While my colleagues engaged in various tasks, my mistake interrupted the workflow and led to rescheduling the use of the nutrient agar for the following week.

Feeling:-Initially confident in preparing agar media, I felt nervous yet proud to handle real patient samples. However, after mistakenly preparing nutrient agar instead of XLD agar, my confidence turned to fear of blame. My supervisor addressed the error constructively, which relieved some anxiety but left me embarrassed. Colleagues' reactions varied, leading to feelings of disappointment. Reflecting on the experience, I recognize the importance of attention to detail and protocols, and I appreciate the valuable lessons learned

Evaluation:-Reflecting on my experience, I recognized positive aspects like demonstrating initiative and learning from feedback. However, the error of preparing nutrient agar instead of XLD led to wasted resources and workflow delays. Improved attention to detail and communication, such as using checklists, could prevent similar mistakes in the future.

Analysis:-After giving my error some thought, I determined that environmental stress and overconfidence were the main contributing reasons. Task familiarity caused attentional lapses, and the error was exacerbated by poor communication and disregard for Standard Operating Procedures (SOPs). Prioritising teamwork and attention to detail is essential for avoiding mistakes in the future.

Conclusion:- Reflecting on my clinical placement using Gibb's Reflective Cycle emphasized the importance of following procedures, clear communication, and stress management. My mistake in preparing agar highlighted the need for attention to detail. I'm committed to refining my skills and ensuring thoroughness and clarification in future clinical work.

Action plan:- improve practices, I will regularly review SOPs with my team, use digital tools for task management, and enhance communication. I'll avoid assumptions, confirm task details, and implement an action plan to ensure clarity and prevent future errors.

Reflection on Observing Clumps on Blood Smear

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Lanka

Description: As a second-year biomedical science student, I participated in a blood smear preparation procedure at a private hospital's hematology laboratory. My goal was to create a high-quality smear for microscopic examination to assess blood cell morphology. During the procedure, I followed the standard steps but became increasingly concerned about my technique for spreading the blood evenly, the resulting smear showed significant clumping, making it unusable for analysis. This outcome stemmed from insufficient mixing of the blood sample, highlighting the crucial role of meticulous technique and strict adherence to protocols.

Feelings: I initially felt confident due to previous practice, I became anxious about working with a clinical sample and its potential impact on the diagnostic process. My anxieties were confirmed when I examined the slide under a microscope and observed significant clumping of blood cells, rendering the smear unusable.

Evaluation: The lab assistant's guidance and feedback proved invaluable, emphasizing the importance of seeking assistance and learning from mistakes6. This experience reinforced the impact seemingly minor errors can have on the quality of laboratory work and patient care.

Analysis: Analyzing the situation, I realized the clumping likely resulted from insufficient mixing of the blood sample, leading to uneven cell distribution and a thick smear89. Research confirms that proper sample handling, including thorough mixing and even spreading, is critical for accurate blood smear preparation8. This experience emphasized the importance of meticulous technique, strict adherence to standard operating procedures (SOPs), and the need for continuous improvement.

Conclusion: This blood smear preparation experience underscored the importance of following proper protocols, meticulous technique, and the significant impact of seemingly routine procedures on patient outcomes. By incorporating the outlined action plan, I am confident in my ability to improve the quality and reliability of my future blood smear preparations.

Action plan: To avoid similar errors in the future, I plan to implement the following actions, Ensure thorough cleaning of all equipment before use to prevent contamination, Follow a step-by-step checklist to guide the process, addressing potential issues such as improper mixing, uneven spreading, and clumping, Improve my technique by practicing regularly and reviewing best practices for creating even smears, Seek feedback from lab supervisors to ensure adherence to correct procedure and Regularly review and update standard operating procedures (SOPs) to reflect improvements and ensure continuous improvement in accuracy and consistency.

Reflection on Urine Spill During the Handling of a Urine Sample for a Urine Full Report Test

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Description: This reflection is about an incident that occurred on June 18, 2024, at a private hospital. I was performing a Urine Full Report (UFR) test as part of my placement. While transferring a urine sample from the collection container to a centrifuge tube, I accidentally knocked it over, resulting in a spill and partial loss of the sample.

Feelings: Initially, I was focused and confident in performing the routine procedure. However, upon spilling the urine, I felt panic, embarrassment, and worry about the contamination. I was concerned about the impact on the testing process and the potential discomfort it could cause the patient if I needed to request another sample. Although I managed to complete the test with the remaining urine, I was frustrated with myself for the mistake. In retrospect, I'm disappointed about the lapse in focus but grateful for the learning experience.

Evaluation: Despite the error, my quick response to contain the spill and follow decontamination protocols was positive. I was also able to complete the test with the remaining urine, preventing inconvenience to the patient. However, the spill itself was avoidable. My lack of focus due to working too quickly led to the incident. A more severe spill with no remaining sample would have caused a significant delay and inconvenience for the patient. Although the lab was busy, my carelessness was the main cause of the incident. The senior technicians responded well by guiding me through the cleanup, but the spill still disrupted the workflow.

Analysis: The UFR test is crucial for diagnosing various conditions affecting the kidneys and urinary tract. Literature suggests that errors occur more often when individuals are rushed or under pressure. The busy lab environment likely contributed to my haste and reduced focus. Moreover, studies highlight the importance of workspace organization in preventing accidents. A cluttered workspace increases the risk of spills, and a more organized workspace might have mitigated this risk. Research also emphasizes the importance of following protocols to standardize procedures and reduce errors. The incident was a result of the high-pressure environment, poor workspace organization, and my failure to strictly adhere to protocols.

Conclusion: This experience highlighted the importance of maintaining focus and attention, even during routine tasks. The potential consequences of small errors were evident, including the discomfort and inconvenience to the patient. I also realized the significance of workspace organization and mindful actions to prevent accidents. The incident emphasized the value of staying calm and following protocol to resolve errors effectively. Ultimately, the incident served as a valuable learning opportunity, making me more aware of the need for care and caution in the laboratory setting.

Action plan: To prevent similar incidents in the future, the following action plan will be implemented. Prioritizing focus and precision over speed by focusing on handling each sample carefully, regardless of the routine nature of the procedure, the risk of errors can be minimized. I will ensure a clutter-free workspace will minimize the risk of accidents like knocking over containers or equipment.

Reflection on Erythrocyte Sedimentation Rate (ESR) Test Incident

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Description: I was tasked with performing an Erythrocyte Sedimentation Rate (ESR) test at a private hospital in Sri Lanka. Although it was a routine procedure, I felt a mix of excitement and nervousness. Unfortunately, during the process, my hand slipped, causing blood to spill from the tube. This incident raised concerns about the accuracy of the test and the risk of workplace contamination. Fortunately, the remaining sample was sufficient for the test to proceed.

Feelings: Initially, I was eager and enthusiastic about the opportunity to enhance my skills. However, the spillage caused feelings of anxiety and self-doubt. I realized the gravity of my mistake, which was compounded by the potential impact on patient care and the testing timeline.

Evaluation: This incident illuminated the critical nature of precision in laboratory work. The excitement I felt was beneficial, as it drove my desire to learn. However, it also proved detrimental when it interfered with my focus. I recognized that emotional regulation is essential in maintaining a professional demeanor during routine tasks.

Analysis: The spillage incident underscored the significance of attentiveness and careful handling of samples. It reminded me that minor lapses in concentration can lead to significant consequences, including contamination and delays. My inexperience and failure to adhere strictly to supervisory guidance were contributing factors, emphasizing the need for thorough training and adherence to protocols.

Conclusion: This experience has been a profound learning opportunity. I now understand the balance needed between managing emotions and maintaining procedural accuracy. It highlighted the necessity of composure in laboratory settings and the importance of learning from mistakes.

Action Plan: The action plan would be to enhance lab skills and prevent future incidents. I'll review supervisory guidelines and standard operating procedures (SOPs) to stay informed. To gain hands-on experience, I plan to volunteer for extra lab sessions and attend workshops focused on emotional regulation and advanced lab techniques. Additionally, I will incorporate mindfulness practices to improve focus and calmness during procedures, ultimately aiming for overall performance enhancement. Regular reflection will support continuous improvement in their practice.

Reflection on the Impact of Overconfidence on Skill Acquisition and Performance in Medical Laboratory Procedures

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Description: I was assigned to a hematology practicum at a private hospital in Sri Lanka. The focus of the session was practicing blood smear preparation, a crucial procedure in hematology. While practicing, I accidentally dropped a blood tube, resulting in a spill that needed to be cleaned up for me.

Feelings: I initially felt a mix of excitement about the hands-on experience and confidence in my abilities to create a blood smear. However, I also admitted feeling nervous about handling actual blood tubes. Following the incident, I experienced disappointment and panic, becoming self-critical about my reaction.

Evaluation: Despite the setback, I successfully created several blood smears, demonstrating proficiency in the technique. I also noted that the majority of my group performed well, indicating the overall success of the practicum session.

Analysis: In my analysis, I identify several factors that contributed to the incident. I acknowledge that overconfidence and a lack of practice handling blood tubes specifically contributed to dropping the tube. I also reference the importance of proper smear-making technique and the need for calm and focused work. I further emphasize the value of blood smear analysis, explaining that it serves to verify automated hematology results, determine the need for manual differential counts, and provide a comprehensive hematologic picture.

Conclusion: Based on my experience, I conclude that adopting a "slow and steady" approach is crucial for success in such practical settings. I emphasize the need for regular practice to enhance both confidence and stability when handling blood tubes.

Action Plan: I have outlined a comprehensive action plan to enhance my skills and prevent future incidents in the lab. First, I will prioritize regular practice of blood smear preparation, aiming to increase my comfort and confidence with the procedure. Additionally, I am committed to maintaining a calm and focused demeanor, ensuring I avoid rushing and stay concentrated during practical tasks. Open communication with the lab in-charge will also be a priority, allowing me to proactively address any concerns and receive timely feedback. Finally, I will focus on improving my dexterity by practicing the technique of one-handed capping and uncapping of blood tubes, which will help me handle the tubes more efficiently and safely.

Reflection on Preparing Blood Smears for Microscopic Examination

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Description: I was tasked with preparing blood smears for microscopic examination. It was my first attempt, and I was both excited and nervous. I applied excessive pressure while spreading the blood, resulting in a thick and uneven smear, unsuitable for analysis.

Feelings: Initially, I was a mix of nervous and excited to apply my theoretical knowledge. During the process, I became anxious as I realized the smear wasn't spreading correctly. When my supervisor pointed out the mistake, I felt embarrassed and disappointed. Later, my supervisor's feedback helped me understand that errors are part of learning, motivating me to improve.

Evaluation: The unusable smear caused a delay in workflow and potentially impacted lab efficiency. However, I demonstrated initiative by attempting the task independently and received valuable feedback from my supervisor. The incident highlighted the importance of precision and the potential consequences of errors in a clinical setting.

Analysis: My lack of experience with blood smearing technique led to the error. Applying excessive pressure resulted in an uneven smear, hindering microscopic examination. I also realized I should have critically assessed the smear before proceeding. This incident highlighted the importance of each step in the lab process and the impact of errors on patient care.

Conclusion: This experience highlighted the need for improvement in technical skills, self-evaluation, and time management. I learned the importance of attention to detail, accuracy over speed, and seeking guidance when needed.

Action Plan: To avoid similar incidents, I will focus on practicing the blood smear technique, paying attention to pressure and smear evenness. I will also review training materials and seek guidance from experienced lab staff.

Reflection on a Gram Staining Error: A Lesson on the Importance of Reagent Applying Order

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Description: I was tasked with performing a Gram staining procedure on a patient sample, a crucial test for differentiating between Gram-positive and Gram-negative bacteria. My supervisor provided clear instructions, however, I made a mistake by applying the reagents in the wrong order. Instead of applying iodine after crystal violet, I accidentally applied safranin first. I only realized my error when I noticed inconsistencies in the staining pattern under the microscope.

Feelings: Initially, I felt excited and nervous to perform the Gram stain independently. During the process, I was focused but began feeling uneasy when I applied the safranin too early, although I couldn't pinpoint the error at the time. After seeing the inconsistent results, I felt disappointed and frustrated with myself. My supervisor's feedback provided reassurance, and I realized that errors are part of the learning curve.

Evaluation: The incident had both positive and negative aspects. On the positive side, I was able to identify the staining error, indicating a developing awareness of quality control. The mistake also provided a valuable learning experience, highlighting the importance of reagent order. My supervisor's support and feedback were positive, reinforcing the idea that mistakes are learning opportunities. On the negative side, the incorrect reagent order resulted in an unusable slide, wasting time and resources. In a clinical setting, such an error could lead to diagnostic and treatment delays. The incident highlighted my lack of confidence and the need for greater attention to detail.

Analysis: The root cause of the incident was applying the reagents in the wrong order, specifically applying safranin before iodine. This disrupted the staining process because iodine acts as a mordant, fixing the crystal violet in Gram-positive bacteria. Skipping or misplacing this step leads to inconsistent staining and makes it impossible to differentiate between Gram-positive and Gram-negative bacteria. The incident highlighted the importance of attention to detail, self-monitoring, and the need for greater confidence in the procedure. It also emphasized the critical role of Gram staining in clinical diagnostics, as inaccurate results can lead to improper treatment and serious implications for patient care.

Conclusion: This experience highlighted the importance of accuracy in each step of the Gram staining process. Moving forward, I will review protocols carefully, double-check reagent orders, and seek guidance when uncertain.

Action Plan: To prevent similar errors, I will regularly practice Gram staining to gain proficiency and confidence, thoroughly review the procedure before each staining session, use a checklist to ensure the correct order of reagents and seek confirmation from lab staff when uncertain about any step. This incident provided a valuable lesson about the importance of accuracy and attention to detail in laboratory work, particularly for crucial procedures like Gram staining.

Reflection on a Lapse in Laboratory Safety Protocol

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Description: The event took place in the microbiology lab at the hospital, during a practical session focused on observing urine culturing techniques for diagnosing urinary tract infections. As I was running late that day, I rushed into the lab, completely forgetting to put on my lab coat. Upon my arrival, the lab supervisor, noticing my lack of proper PPE, immediately halted the ongoing procedure. This brought the entire class to a standstill and drew attention to my mistake.

Feelings: The procedure involves three steps: Before the Procedure, During the Procedure, and After the Procedure. Before the procedure, I sensed worry and hurry before the event. During the procedure, Upon the supervisor's interruption of the class, embarrassment washed through me. After the procedure,I slipped my lab coat on and returned to the session, overwhelming relief enveloped me. My reaction was gratitude towards the supervisor when they quickly responded to keep any risks in check and capitalise on the lesson it provided.

Evaluation: On a positive note, I am grateful for their decisive action and the emphasis they placed on safety. Although forgetting my lab coat was a major lapse in judgement, I believe I redeemed myself somewhat by immediately rectifying the mistake. This oversight was a consequence of my own negligence and lack of attention to detail, particularly in a setting where safety is paramount and had made me acutely aware of the importance of being fully prepared and present in a lab setting.

Analysis: Firstly, consistently wearing a lab coat had not yet become an ingrained habit even knowing the rules, the automatic action of putting one on before entering the lab wasn't fully established. Secondly, the absence of immediate supervision at the lab entrance meant there was no one to point out my missing lab coat before I entered. Furthermore, my distraction played a significant role. Finally,I believe a degree of overconfidence might have also factored into the equation.

Conclusion: This experience has been invaluable in highlighting a crucial aspect of professional conduct in a scientific setting: the importance of strict adherence to safety protocols. It has reinforced the importance of personal accountability, meticulous attention to detail, and the far-reaching consequences, however small, that can arise from neglecting established safety procedures, especially in a lab environment where even minor oversights can have significant implications.

Action Plan: An action place could be developed for future practice by always verifying PPE before entering the lab as well as adhere to lab safety protocols as well as I will focus on improving my time management skills to avoid future instances of rushing and potentially overlooking crucial safety steps.

Reflection on Overstaining and Incorrect Smearing

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Description: I was at a well-known hospital in Sri Lanka for a placement with my batch mates. We were divided into four departments, and I was assigned to the Hematology laboratory with a friend. Our supervisor and other laboratory technicians were present as well. We were asked to draw blood smears and stain them for microscopic observation. Specifically, I was tasked with preparing a few blood smears and staining them using the Leishman staining technique. Unfortunately, my initial attempts at staining were not successful. The slides ended up being overstained, making it difficult to observe blood cell morphologies under the microscope.

Feelings: I was excited to finally get hands-on experience with real patient samples, but I was also nervous and anxious about making mistakes. I felt a mix of guilt, sadness, and stress because my mistakes would lead to delays in diagnosis for the patients whose samples I was handling.

Evaluation: Looking back on the situation, I was happy that I was able to do the experiment because it provided me with hands-on experience and helped me to become familiar with the protocol and steps involved in Leishman staining. When evaluating the situation, I realized that I had strictly adhered to the protocol. However, I noticed that I had overstained the slides and my blood smears were not properly prepared. This happened because I didn't follow the correct technique, add too much stain, and leave the stain to dry for longer than I should have.

Analysis: Leishman stain is a widely used staining technique for peripheral blood smear analysis. It helps to differentiate between different types of blood cells. Overstaining and insufficient washing can cause stain artifacts that alter the appearance of blood cells and make it difficult to evaluate morphological features accurately. This can lead to difficulties in diagnosing blood disorders. Additionally, thick blood smears can also make it challenging to accurately measure cellular components and differentiate between cell types.

Conclusion: This incident made me realize the importance of following the correct staining procedures and paying attention to every detail. I learned the importance of staining accurately, paying attention to staining times and the correct amounts of stain to add to prevent overstaining. I also learned that it's important to use the correct smearing technique because thick blood films can make it difficult to identify cells correctly. Both overstaining and incorrect smearing that results in a thick blood smear can lead to misdiagnosis because blood cell morphologies are unclear.

Action plan: To improve my skills, I plan to practice the correct staining procedure, write down the steps for reference, and be mindful of the amount of stain and drying time. I will also practice the wedge smear technique and ensure I use the correct amount of blood. Additionally, I plan to organize hands-on workshops to help other students learn about proper blood smear preparation and staining techniques. This will hopefully prevent similar mistakes and ensure accurate diagnoses for patients in the future.

Reflection on Student Malpractice in Clinical Setting

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Description: Reflective practice is a vital tool for continuous learning among healthcare professionals, as it enables learning from experience. Gibbs' reflective cycle offers a structured approach to reflecting on experiences through six stages. Recently, I received a complaint from a visiting surgeon at Ward 32, Teaching Hospital Kalutara, regarding a case of student malpractice. The incident involved the incorrect removal of a patient's indwelling silicone catheter. The surgeon emphasized the lack of adequate supervision as a significant contributing factor to the incident.

Feelings: When I first received the call from the surgeon, I was surprised because it is unusual for a surgeon to contact me directly. Instinctively, I felt that something had gone wrong with a student's clinical practice. Upon hearing about the incident, I felt angry and disappointed with the student involved. The call from the surgeon made me realize the gravity of the mistake and the importance of proper supervision.

Analysis: This incident brought to light the shortcomings in safety protocols within the clinical environment. It highlighted the importance of vigilant supervision to prevent such errors. In this case, a staff nurse had asked a student to collect a urine sample from a catheterized patient but failed to observe the student during the procedure. The student mistakenly punctured the wrong port of the catheter and, as a result, drained the distilled water from the balloon that was securing the catheter. Consequently, after a few hours, the catheter was dislodged without anyone noticing until the surgeon found the patient without the catheter during his ward round. This incident underscored the need for better observation and guidance during student-led procedures.

Evaluation: Ensuring patient safety is the fundamental responsibility of all healthcare professionals. Patients deserve safe, high-quality care, and student nurses must be guided and supervised effectively to provide this care. Nursing officers in clinical settings are key figures in overseeing student nurses' actions, ensuring they perform tasks safely and competently. Nursing educators must also conduct regular clinical site visits and provide guidance to students. Collaboration between educational institutions and clinical staff is crucial for fostering competent and responsible nurses. Without effective supervision, both patient safety and the learning experience of student nurses are compromised.

Conclusion: This event clearly demonstrates the critical role that supervision plays in preventing patient safety issues. Inadequate oversight can result in harmful consequences for both patients and students. Ensuring that nursing students are closely supervised is essential for safe practice and the prevention of errors. The incident serves as a reminder of the importance of proper guidance to ensure patient safety and enhance student learning.

Action Plan: To prevent similar incidents in the future, there must be a stronger emphasis on patient safety, proper nursing procedures, and the responsibilities of nursing professionals. Students must be taught and supervised to follow correct techniques during all clinical tasks, as any negligence can lead to harm for patients and damage the reputation of the nursing profession. By reinforcing the importance of supervision and promoting best practices, errors in practical tasks can be minimized, thereby protecting both patients and nursing students