

URS 2025



Proceedings of the 8th Undergraduate Research Symposium

Today's Research for Tomorrow's Care

FACULTY OF MEDICINE UNIVERSITY OF JAFFNA

7th of March 2025







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Faculty of Medicine University of Jaffna 7th of March 2025

Sponsored by Jaffna Medical Faculty Overseas Alumni - UK In partnership with Jaffna Medical Faculty Alumni Association

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Message from the Vice Chancellor of the University of Jaffna



The University of Jaffna, as a distinguished higher education institution, remains committed to fostering a culture of excellence in research and academic inquiry. Our scholars have made significant contributions to their respective fields globally, a source of immense pride for the university.

The Undergraduate Research Symposium, organized annually by the Faculty of Medicine, is a vital initiative aimed at nurturing the research skills of undergraduate students. This symposium provides a platform for students to showcase their

research, reflecting the rigorous training and dedication they have demonstrated throughout their undergraduate studies. The theme for this year, *"Today's Research for Tomorrow's Care,"* underscores the university's commitment to advancing knowledge and preparing future healthcare professionals.

I extend my sincere appreciation to the Faculty of Medicine staff for their efforts in organizing this important event. The 8th Undergraduate Research Symposium is honoured to welcome Professor H. M. Senanayake, Emeritus Professor of Obstetrics & Gynaecology at the Faculty of Medicine, University of Colombo, as the keynote speaker.

Participating in this symposium offers students a valuable opportunity to interact with peers, engage in thought-provoking discussions, and broaden their academic horizons. I encourage all student researchers to embrace this experience, network with fellow scholars, and be inspired to pursue future research endeavours.

Congratulations to all student researchers, and best wishes for your continued success. I hope you have a memorable and productive 8th Undergraduate Research Symposium.

Prof. S. Srisatkunarajah *Vice Chancellor University of Jaffna*

8th Undergraduate Research Symposium 2025

Message from the Dean of the Faculty of Medicine



With great pleasure, I extend my heartfelt congratulations to the team behind the 8th Undergraduate Research Symposium (URS2025) of the Faculty of Medicine, University of Jaffna, Sri Lanka. The theme, "Today's Research for Tomorrow's Care," aptly reflects the Faculty's commitment to fostering a vibrant research culture and promoting knowledge creation for the improvement of healthcare, among our undergraduates.

The Undergraduate Research Symposium serves as a vital platform for students to present their research findings to their

peers and faculty. It cultivates a spirit of inquiry and knowledge dissemination—essential qualities for the development of future healthcare professionals. By actively engaging in such academic endeavours, students refine their research skills and contribute meaningfully to the advancement of medical science and patient care. Encouraging undergraduates to pursue medical research will undoubtedly enrich their professional journeys and benefit the broader healthcare community.

I take this opportunity to express my sincere appreciation to Prof. S. Srisatkunarajah, Vice Chancellor of the University of Jaffna, and Professor H. M. Senanayake, Emeritus Professor of Obstetrics & Gynaecology, Faculty of Medicine, University of Colombo, for their invaluable contributions. I also thank all distinguished speakers for their insights and expertise.

A special acknowledgment goes to the Jaffna Medical Faculty Overseas Alumni (UK) for their generous support, emphasizing the significance of collaboration and financial assistance in making this event possible. Furthermore, I commend the URS2025 Organizing Committee for their dedication and collective efforts in ensuring the symposium's success.

Finally, I congratulate all student researchers and wish them a productive, enriching, and rewarding experience at the 8th Undergraduate Research Symposium.

Prof. R. Surenthirakumaran Dean

Faculty of Medicine University of Jaffna

8th Undergraduate Research Symposium 2025

Message from the Convener, URS 2025



It is my great pleasure to extend this message as the Convener of the 8th Undergraduate Research Symposium (URS) 2025, Faculty of Medicine, University of Jaffna. Since its inception in 2018, this prestigious academic event has provided a valuable platform for medical students to engage in research and scholarly discourse.

The theme of this year's symposium, "Today's Research for Tomorrow's Care," underscores the critical role of research in addressing the ever-evolving challenges of the medical field. As medical advancements continue to accelerate, it is essential that

we equip ourselves to embrace and contribute to these transformations. Introducing research at the undergraduate level not only fosters curiosity and analytical thinking but also cultivates the skills and mindset necessary for future medical innovations. I am confident that URS 2025 will inspire young minds to explore new frontiers in medicine and make meaningful contributions to healthcare advancements.

On behalf of the URS2025 Organizing Committee, I extend my heartfelt gratitude to the Vice-Chancellor of the University of Jaffna and the Dean of the Faculty of Medicine for their unwavering support and encouragement in making this event a success.

I wish to express my sincere appreciation to our keynote speaker, Prof. Hemantha Senanayake, Emeritus Professor of Obstetrics and Gynaecology, University of Colombo, for sharing his expertise and inspiring the next generation of researchers. I also extend my gratitude to the Jaffna Medical Faculty Overseas Alumni – United Kingdom for their generous financial support and valued partnership in this event.

A special note of thanks goes to all members of the URS 2025 Committee for their dedication and commitment in organizing this symposium. I also deeply appreciate the contributions of the academic staff, extended faculty, administrative teams, and supportive staff, whose tireless efforts have made this event possible.

Finally, I extend my heartfelt congratulations to all the students—the true heroes of this occasion—for their dedication, hard work, and active participation. I am confident that this initiative will serve as a stepping stone, propelling them to the next level in research and academic excellence.

Dr. J. A. Pradeepan

Convener, URS 2025 Faculty of Medicine, University of Jaffna

8th Undergraduate Research Symposium 2025

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Winners of Research Awards – 42nd Batch

Velauthar Sothinagaratnam Memorial Award

Awarded to the best research in Community & Family Medicine in the field of Microbiology

Ms. Nivetha Muralietharan

Ms. Inthirakumar Mathushanthi

Ms. Sobika Sivanathan

Ms. Gnanendran Kajavaany

Mr. Weerasingha Pathiranalage Hashan Eranga Rajapaksha

Dr. Murugananthan Award

Awarded to the best research which got highest marks in the field of mental health among undergraduate researches conducted by Community & Family Medicine & should pass 2nd examination

Ms. Nilani Sivarasa

Ms. Kirishika Pathmarajah

Mr. Sundarapperuma Mudiyanselage Sukitha Harshana Bandara

Mr. Kulenthiran Indushan

Ms. Dissanayake Mudiyanselage Deshani Udari Madhushika

Prof. Appakutty Sinnathamby Memorial Award

Awarded annually to the best proposal in reproductive health related topics in Community Medicine

Mr. Sivapalan Paviththiran

Mr. Sivanathan Majuran

Ms. Samarasinghe Arachchige Melani Bhagya Chandrasekara

Ms. Mohamed Ishaq Fathima Aasaththusana

Ms. Amirthalingam Shanuga

Covinthapillai Candiah Research Award

Awarded to the best 3 researches undertaken by students in Phase II

- Ms. Naushad Fasila Begum
- Ms. Karunananahan Abisiha
- Mr. Jayaweera Mudiyanselage Chamod Tharindu Madushan Jayaweera
- Ms. Dissanayaka Mudiyanselage Kumbure Gedara Sashikala Dilrukshi Dissanayake
- Ms. Ketheeswaran Thivaraga
- Ms. Mohamed Jawadh Jesara Hashmath
- Ms. Menama Ralalage Sachini Sathsarani Bandara
- Mr. Kodeeswaran Viththagan
- Ms. Dasanayaka Mudiyanselage Maduhushi Lakshika Dasanayaka
- Ms. Ilakeya Ketheswaran
- Ms. Ilandari Dewage Hiruni Chamika Wijebandara
- Mr. Kobinathan Premakanthan
- Ms. Navarathnarajah Athmika
- Mr. Puvanenthiram Kajan

Winner of the URS 2025 Theme Competition

This competition is held annually and open to all medical students of the Faculty of Medicine, University of Jaffna.

Ms. A. Minoshi Kavindya - 44th Batch

Reviewers of Abstracts

Dr. R. Rajanthi
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Dr. S. Thirumagal
Dr. S. Thuvaraga
Dr. M. Vallipuranathan
Dr. D. Venoden
Dr. S. Vinojan
Dr. G. Yalini

Venue	Chairperson	Evaluators
Panel 01:	Dr. Kausala Sithamparapillai	Dr. S Premakrishna
Hoover Auditorium	Lecturer, Dept. of Physiology, Faculty of Medicine, University of Jaffna	Consultant Anaesthetist, Teaching Hospital Jaffna
		Dr. Ramya Kumar
		Senior Lecturer,
		Dept. of Community and Family Medicine, Faculty of Medicine, University of Jaffna
Panel 02:	Dr. Anoja Mathievaanan	Prof. K. Muhunthan
Lecture Hall I	Consultant Physician Teaching Hospital Jaffna	Professor of Obstetrics & Gynaecology, Faculty of Medicine, University of Jaffna
		Dr. Sivaranjany Ravichandran Consultant Physician, Base Hospital Kayts
Panel 03:	Dr. S. Vinojan	Prof. N. Suganthan
Conference Hall	Senior Lecturer & Consultant Vascular and Transplant Surgeon, Department of Surgery, Faculty of Medicine, University of Jaffna	Professor and Consultant Physician, Department of Medicine, Faculty of Medicine, University of Jaffna
		Dr. Thaneswary Sooriyakuma
		Consultant Haematologist Teaching Hospital Jaffna

Chairpersons and Evaluators

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Thanuya M

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Abstracts of Oral Presentations

Abstract 1:

Social media usage patterns and the perception of its effects on academic performance and mental health of medical students at the University of Jaffna

Vithushan EJ¹, Shahithiya N¹, Sandaruwani KPW¹, Mathangi K¹, Peris WSV¹, Thangarajah BR^{2,3}, Coonghe PAD⁴

¹Faculty of Medicine, University of Jaffna
²Department of Medicine, Faculty of Medicine, University of Jaffna
³Professorial Medical Unit, Teaching Hospital Jaffna
⁴Department of Community Medicine, Faculty of Medicine, University of Jaffna

Background and objective: Social media usage is at its all-time highest. Social media usage affects the academic performance and mental health of students in both positive and negative ways. This study aimed to determine the social media usage patterns and assess perceived effects on academic performance and mental health among medical students of University of Jaffna.

Methods: This descriptive cross-sectional study was carried out among students of the Faculty of Medicine, University of Jaffna. Stratified random sampling was used to get proportionate representation from 42nd, 43rd and 44th batches. Data were collected with a direct self-administered questionnaire. Frequencies, percentages and chi-square tests were used in the analysis with SPSS (v26).

Results: In total, 320 students participated (response rate 75.1%). Mean age was 24.3 years (SD = 1.45). Most participants were females (63.7%) and reported daily screen time between 1 and 4 hours (61.3%). Almost all participants (97.5%) used smartphones to access social media, mainly YouTube (93.5%) followed by Facebook (68.4%) and Instagram (53.4%). In the sample, 41.6% believed that social media has a positive impact on academic performance. They reported positive experience with social media for visual learning (77.2%), resources sharing (75.6%), collaborative learning (68.4%) and quick doubt resolution (68.2%). Many students believe that social media usage reduces focus (78.2%), decreases productivity (70.3%) and increases procrastination (59.1%). Majority (72.5%) of the students expressed that social media affects their mental health, while 47.8% of the students believed that social media enhances connections and 41.0% felt performance pressure. Greater screen time was significantly associated with anxiety score (p<0.001) and irritability score (p=0.018).

Conclusions and recommendations: Though a large proportion of the students' perception on the effects of social media on academic performance was positive, mental health of the students may be negatively affected by increased screen time on social media. Monitoring of screen time and taking frequent breaks from social media may alleviate the effects on mental health.

Keywords: Social media, Mental health, Medical students, Jaffna

Abstract 2:

Participation in extracurricular activities and perceived barriers to participation among female management and commerce students of the University of Jaffna

Abbinanthan A¹, Rishmee L¹, Gunarathna WGRM¹, Nisra JP¹, Rasheeda RR¹, Guruparan K^{2,3}, Coonghe PAD⁴

¹Faculty of Medicine, University of Jaffna ²Department of Obstetrics and Gynaecology, Faculty of Medicine, University of Jaffna ³Professorial Obstetrics and Gynaecology Unit, Teaching Hospital Jaffna ⁴Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna

Background and objective: Extracurricular activities (ECAs) are defined as purely voluntary activities done outside of the academic curriculum. Despite numerous studies regarding participation in ECAs at universities, few studies focus on the participation of female undergraduates in ECAs and the specific barriers they face. These barriers vary by setting and are influenced by numerous factors. This study aims to describe the participation in extracurricular activities of female students of Faculty of Management Studies and Commerce, University of Jaffna, and determine the sociodemographic factors and perceived barriers associated with participation.

Methods: This descriptive cross-sectional study was carried out among female students at the Faculty of Management Studies and Commerce of University of Jaffna. Stratified random sampling was employed and data were collected with a self-administered questionnaire. Frequencies, percentages and Chi-square tests were used in the analysis with SPSS (v26).

Results: A total of 387 students participated (response rate = 93.25%), with 62.0% (n = 240) reporting that they have participated in ECAs at least once during their university period. Among them, 67.9% organized or participated in cultural/religious events, MACOS, fresher's party etc.; 59.1% were involved in aesthetic activities; 52.9% participated in sports. Most (69.7%) students stated that their participation in ECAs had decreased compared to when they were in school. Significant associations were found between participation status and the course followed (p=0.03), age (p=0.006), religion (p=0.007) and type of transport (p=0.01). Being B.Com students, senior students, Christian or Muslim students and students with access to a vehicle showed greater participation in ECAs. Most students perceived night time safety concerns and long distance between accommodation and facilities as barriers to participation. Many students were concerned regarding time management between ECAs and studies.

Conclusions and recommendations: A significant proportion of female students participated in ECAs. Organization or participation in cultural/religious or social events was higher than that in sports. Measures should be taken to address self-reported barriers such as night-time safety, long distance to facilities and time management issues to increase participation.

Keywords: Extracurricular Activities, Female undergraduates, Jaffna

Abstract 3:

Knowledge on early symptoms of acute stroke, acute ischemic heart disease, and their risk factors among schoolteachers in Nallur Educational Division, Jaffna

Thamilinban N¹, Nitharshan J¹, Herath C¹, Sewmini K¹, Perinpanayagam M¹, Thangarajah BR^{2,3}, Sivaganesh S⁴

¹Faculty of Medicine, University of Jaffna
²Department of Medicine, Faculty of Medicine, University of Jaffna
³Professorial Medical Unit, Teaching Hospital Jaffna
⁴Office of the Regional Director of Health Services - Jaffna.

Background and objective: Timely identification of acute stroke (AS) and acute ischemic heart disease (IHD) symptoms by the public is essential for prompt intervention and better health outcomes. Schoolteachers, due to their role in society, can significantly contribute to raising awareness about early detection and response to the above conditions. This study aimed to assess the level of knowledge regarding early symptoms and risk factors of AS and acute IHD among schoolteachers in the Nallur Educational Division, Jaffna

Methods: An educational institution-based cross-sectional descriptive study was conducted among schoolteachers. A proportionate stratified sampling method was used to select 423 teachers. Teachers were chosen randomly using a numerical random number generator. Data were analysed using SPSS. Knowledge levels were categorized as Excellent, Satisfactory, and Poor based on responses to the questionnaire. Chi-square test was used for statistical analysis.

Results: Knowledge regarding AS symptoms among the participants was excellent in 1.9%, satisfactory in 45.8% and poor in 52.2%. Regarding acute IHD symptoms, 2.1% demonstrated excellent knowledge, 50.8% satisfactory knowledge and 47% poor knowledge. With respect to AS risk factors, 14.9% had excellent knowledge, 52.9% satisfactory knowledge, and 32.1% poor knowledge. Regarding IHD risk factors, 17.9% had excellent knowledge, 60.9% satisfactory knowledge, and 21% poor knowledge. Those with a family history of stroke or IHD have higher knowledge levels (p<0.001). Teachers of bioscience-related subjects (science, biology, health science) had significantly higher knowledge compared to those teaching arts and mathematics (p<0.001). Teachers who use books and radio as primary sources of medical information demonstrated better knowledge than those using social media, newspapers, or friends (p<0.001).

Conclusions and recommendations: This study highlights that more than 50% of teachers in the Nallur Education Division have poor knowledge. Further education programmes are needed to improve their awareness so they can effectively disseminate this knowledge to students. Utilizing books and radio as key sources of medical information can enhance knowledge dissemination.

Keywords: Acute Ischemic Heart Disease, Acute Stroke, Recognition of early symptoms, Recognition of risk factors, Jaffna

Abstract 4:

Sleep patterns and their association with lifestyle factors among patients with ischemic heart disease attending the Cardiology Clinic at Teaching Hospital Jaffna

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Background and objective: Ischemic heart disease (IHD) is a leading cause of morbidity worldwide, with several modifiable risk factors, including sleep pattern. Sleep patterns are influenced by various lifestyle factors such as stress, diet, physical activity, and substance use. While the association between IHD and sleep pattern is well established in many parts of the world, no related studies have been conducted in Sri Lanka, including in Jaffna. This study aims to describe sleep patterns and their association with lifestyle factors among patients with IHD attending the Cardiology Clinic at Teaching Hospital Jaffna.

Methods: This hospital-based descriptive cross-sectional study was conducted among 427 patients attending the Cardiology Clinic at Teaching Hospital Jaffna from October 2023 to February 2024. Participants were selected using a systematic sampling technique. Data were collected through interviewer-administered questionnaires covering sleep pattern and lifestyle factors such as diet, physical activity, alcohol consumption, tobacco use (both inhaled and smokeless), and screen time. Sleep pattern was classified as healthy and poor based on the healthy sleep score developed by Song et al. (2022). Data were analysed using SPSS version 26. The association of lifestyle factors with sleep patterns was assessed using the Chi-square test.

Results: Among the 427 participants, 40.5% were female and 59.5% were male. The study showed that 39.8% of participants had a healthy sleep pattern (sleep score \geq 4), while 60.2% had a poor sleep pattern (sleep score \leq 3). The use of smokeless tobacco products (p value=0.031) and using screens within one hour before sleep (p value=0.044) were found to have a statistically significant association with poor sleep patterns. No significant associations were observed between alcohol consumption, dietary patterns (including oil consumption), or physical activity and sleep patterns in this study.

Conclusions and recommendations: A significant proportion of patients with IHD exhibited poor sleep patterns. The use of smokeless tobacco and screen time before sleep were found to adversely affect sleep patterns. This research suggests that modifying lifestyle factors may help to promote healthy sleep patterns among IHD patients and reduce further exacerbation of the disease.

Keywords: Sleep pattern, Lifestyle factors, Ischemic heart disease, Teaching Hospital Jaffna.

Abstract 5:

Learning style preferences among first-year medical undergraduates at the University of Jaffna

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Background and objective: Understanding learning styles is essential to adopt effective educational strategies. Literature suggests that socio-demographic factors may influence learning preferences. This study evaluates the learning style preferences of first-year medical undergraduates at the University of Jaffna and describes the association of these preferences with gender, ethnicity, and geographical area.

Methods: A descriptive cross-sectional study was conducted from February 2023 to August 2024 among 150 first-year medical undergraduates at the University of Jaffna. Data were collected using a questionnaire which assessed learning preferences using the VARK inventory (version 8.01) and socio-demographic details of participants. The VARK inventory identifies four modalities: Visual, Aural, Read/Write and Kinaesthetic and has demonstrated validity in various educational contexts including various medical schools in Sri Lanka. Data analysis was performed using SPSS (version 27.0), and the Chi-Square test was used to evaluate associations between learning preferences and socio-demographic factors.

Results: Most participants were female (65.3%). Most students preferred multimodal learning (59.3%) where 21.3% preferred quadrimodal, 19.4% bimodal and 18.7% trimodal. Kinaesthetic learning was the most common unimodal preference (17.3%). There was no statistically significant association between gender (p=0.689), ethnicity (p=0.527) or geographical background (urban vs. rural) (p=0.558) and learning style preferences. Notably, 19 (12.7%) students did not select reading/writing as a preferred learning style, either as a primary preference or as part of a multimodal pattern.

Conclusions and recommendations: The majority of first year medical undergraduates prefer multimodal learning, with most showing preference for quadrimodal learning. Kinaesthetic learning is the most common unimodal preference. A significant portion of students showed no preference for the read/write modality, indicating a possible decline in traditional reading and note-taking habits. These findings highlight the need for diverse teaching approaches for medical students.

Keywords: Learning style, VARK, Medical undergraduates, University of Jaffna

Abstract 6:

Knowledge and practice of standard precautions and its association with selected sociodemographic factors among the nursing staff at Teaching Hospital Jaffna

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Background and objective: Standard precautions (SPs) are the minimum standard of infection prevention and control practices that must be applied to all patient care. They must be followed to reduce transmission of healthcare-associated infections (HAIs). As healthcare workers (HCWs), nurses are at high risk of transmitting HAIs. The objective of this study was to assess knowledge and practice of nursing staff at Teaching Hospital Jaffna regarding SPs and to determine their association with selected socio-demographic factors.

Methods: An institution-based descriptive cross-sectional study was conducted among 427 nursing staff at Teaching Hospital-Jaffna. Data were collected using a self-administered questionnaire. Knowledge and practice were assessed using a score out of 100 in which >69 was considered as "satisfactory" while <=69 was considered as "unsatisfactory". Data were analysed using SPSS. Chi-square test was performed to identify association between sociodemographic factors, knowledge, and practice of SPs.

Results: Response rate was 74.9% (n=320). Mean age was 30.8 (SD 6.2) years. Majority were female (75.9%, n=243), junior nurses (76.6%, n=245) and diploma holders (81.6%, n=261). Among participants, 80.6% had satisfactory knowledge (mean=74.2) while 86.6% had satisfactory practice (mean=80.5). Over half (54.1%) perceived a gap between their knowledge and practice. Age (p=0.007), service duration (p=0.010) and site of occupation (p<0.001) were significantly associated with knowledge. The 28-32 years age group (85.5%), service duration <2 years (87.5%) and those working in ICU (97.5%) had a higher proportion with satisfactory practice scores. Significant associations were not found between sociodemographic factors and practice. Incorrect knowledge on alcohol-based hand rub (44.7%), use of gloves and hand hygiene (75.9%), gowning (66.6%), cough etiquette (57.5%) and blood-borne infections (75.3%) were identified. Incorrect practice of recapping used needles (60.6%) was identified.

Conclusions and recommendations: More than 80% had satisfactory knowledge and practice regarding SPs at Teaching Hospital Jaffna. Organizing training programmes regarding incorrect knowledge and practices, addressing the reasons for the perceived gap between knowledge and practice of SPs through effective interventions may reduce the risk of HAIs.

Keywords: Standard precautions, Nurses, Practice, Knowledge, Healthcare workers.

Abstract 7:

Body Mass Index and its association with selected sociodemographic factors and academic performance among grade 10 students of Nallur Educational Division

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Background and objective: Malnutrition in children occurs due to socio-economic factors and food insecurity, making it preventable. This study aimed to measure Body Mass Index (BMI) and its association with sociodemographic, socioeconomic factors and academic performance among grade 10 students of Nallur Educational Division.

Methods: A school-based descriptive cross-sectional study was conducted among grade 10 students in Nallur Educational Division. 332 students were selected using proportionate stratified sampling. Self-administered questionnaires, anthropometric measurements, and data extraction sheets were used to collect data, which were analysed using Statistical Package for Social Sciences version 26 (SPSS-26). Height and weight were measured using a stadiometer and bathroom scale, respectively. Body Mass Index (BMI) was calculated and cut off values selected according to age and sex specific charts: <5th percentile, >85th percentile and >95th percentile was considered as underweight, overweight and obese, respectively. Academic performance was categorized as Distinction (75-100), Credit (50-74.9), Ordinary (30-49.9), Fail (<30) based on the average of the second term marks collected from school records. The association between BMI and socio-demographic, socioeconomic, and academic performance was measured using the Chi-squared test.

Results: A total of 332 students participated; 52.7% females and 47.3% males. The prevalence of obesity, overweight, and underweight were 5.4%, 12.3% and 20.2%, respectively. There was no statistically significant association between sex and BMI. Only family size showed a significant association with BMI (p value <0.05); participants from families with more than 5 members were more likely to be underweight compared to those from smaller families. Other socioeconomic factors such as parents' occupation, income, and type of family, did not show a statistically significant association. In the sample, 25.8%, 35.6%, 24.5% and 14.1% obtained distinction, credit, ordinary pass and fail at the second term tests, respectively. The chi-square test showed no significant association between academic performance and BMI.

Conclusions and recommendations: Our study revealed a fifth (20.2%) of the population was underweight. Low BMI was significantly associated with larger family size. There was no significant association between academic performance and BMI.

Keywords: Body Mass Index, Academic performance, Socio-economic factors, Grade 10 student

Abstract 8:

Pattern of expenditures, sources of income, financial stress and their association with mental health among medical students of the Faculty of Medicine, University of Jaffna

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Background and objective: Mental health, according to the World Health Organization, is a state of well-being that enables individuals to manage challenges, realize their potential, and contribute to society. Medical students face numerous mental health challenges. Financial stress is an important aspect of mental well-being that remains underexplored among them. This study examines expenditure patterns, sources of income, financial stress, and their association with mental health among medical students of the University of Jaffna.

Methods: A mixed-methods study was conducted among all medical students at the Faculty of Medicine, University of Jaffna. Data collection involved self-administered questionnaires and in-depth interviews. Mental health was assessed using the General Health Questionnaire (GHQ-12), while financial stress was measured using the Financial Stress-College Version questionnaire. Statistical analyses were performed using SPSS version 27, applying Pearson correlation, t-tests, ANOVA, and chi-square tests at a 95% confidence interval. Qualitative data were coded and thematically analysed.

Results: A total of 427 students participated (response rate: 100%), with a mean age of 23.2 years; 75.9% were out-district students. Primary income sources included parental support (97.4%), savings (7%), and scholarships (7%). No students had educational loans. The average monthly expenditure was Rs. 32,030 (SD 10,580), mainly on food (mean Rs.16, 330, SD 7,780). Expenditure was associated with ethnicity (p=0.005) and district status (p<0.001) but not with age, year, or gender. Financial stress correlated significantly with expenditure (p<0.001), and students experiencing higher financial stress reported poorer mental health outcomes (p<0.001). The qualitative component revealed that financial stress influenced family dynamics, with students reporting parental sacrifices such as reduced personal spending, restructuring daily routines, and delaying healthcare. Common themes included prioritizing educational expenses over household needs and the emotional burden on family members.

Conclusions and recommendations: The study findings suggest that financial burden impacts students' well-being. Expanding financial aid, enhancing counselling services, and promoting student loan awareness are recommended.

Keywords: Expenditure pattern, Financial stress, Mental health, Medical students, Student loans

Abstract 9:

Perceived influences and satisfaction with A/L stream selection among grade 12 students in Nallur Educational Division

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Background and objective: Selecting an A/L stream is a critical decision that shapes students' career paths. Various factors influence this decision, and whether students are satisfied with their decisions remains unclear. This study aimed to describe perceived influences on stream selection, student satisfaction with their selected stream, and determine the association between selected sociodemographic, personal and academic factors and stream selection among Grade 12 students in the Nallur Educational Division.

Methods: An institution-based descriptive cross-sectional study was conducted among 394 Grade 12 students selected through proportionate stratified random sampling. Data were collected via a self-administered questionnaire and analysed using SPSS. Influence and satisfaction levels were categorized using a five-point Likert scale, with scores grouped into low (1–3) and high (4-5). Chi-square test and t-test were used for analysis.

Results: Among 394 respondents (response rate 100%), 58.9% were female, 80.5% were from Jaffna, 67.5% had parents who studied up to A/L or higher, and 75.4% reported a monthly family income >Rs.50,000. Half (50%) of the sample had received career guidance. The majority (89.6%) selected their stream based on career aspirations. Parents (71.6%), siblings (86%), teachers (90.6%), and peers (88.8%) had a low influence on stream selection, while the availability of career opportunities had high influence (57.4%). Over half (54.3%) were less satisfied with their selected stream. Significant associations were found between stream selection and gender (p<0.001), hometown(p=0.002), monthly income(p=0.004), parental (p=0.014), O/L results(p<0.001), career guidance(p=0.035), education teachers' influence(p<0.001), extracurricular activities(p<0.001), self-efficacy(p<0.001), and career opportunities(p=0.002).

Conclusions and recommendations: A large proportion of students selected their stream based on career opportunities but are less satisfied with their selected stream. Career guidance programmes providing comprehensive information about streams, job opportunities, and potential career paths must be introduced to improve stream selection. A supportive environment that minimizes academic pressure and encourages students to explore their interests and strengths needs to be created.

Keywords: Advanced Level, Stream selection, Perceptions, Satisfaction, Jaffna

Abstract 10:

Infections among cleaning-staff working at the Teaching Hospital Jaffna and nonhealthcare workplaces in the Jaffna Municipal Council area: An analytical study

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Background and objective: Hospital cleaning-staff are exposed to a variety of potential infectious materials and are at a greater risk of acquiring infections than those working in non-healthcare settings. This study aimed to determine the risk of infection among the cleaning-staff of Teaching Hospital Jaffna, compared to cleaning-staff working in non-healthcare settings in the Jaffna Municipal Council area and the association between types of infections and work-related factors.

Methods: An institutional-based cross-sectional analytical study was conducted among two groups of cleaning-staff \geq 18years: those working at Teaching Hospital Jaffna and those working in non-healthcare settings in the Jaffna Municipal Council area. An interviewer-administered questionnaire was used to collect data including on self-reported infections. Associations between infections and work-related factors within both groups and differences in infections between the groups were determined. Chi-square test was performed to determine statistical significance; p value <0.05 was considered significant.

Results: In total, 100 cleaning-staff were recruited to each group. Infections reported among those working in healthcare settings were RTI (56%), UTI (22%), skin infections (21%) and gastrointestinal infections (8%). Infections reported by those working in non-healthcare settings were RTI (24%), UTI (24%), skin infections (21%) and gastrointestinal infections (12%). All participants in healthcare settings claimed they practiced proper handwashing and used personal protective equipment (PPE). In non-healthcare settings, 99% and 93% said they practiced proper handwashing and used PPE, respectively. Cleaning-staff working in healthcare settings (p=0.002). In healthcare settings, those working for <5 years were more likely to report RTI (p=0.002); exposure to body fluids was associated with skin infections (p=0.019).

Conclusions and recommendations: Cleaning-staff in healthcare settings may be at a greater risk of RTI than their counterparts in non-healthcare workplaces. Greater emphasis must be given on educating them about preventive measures for airborne infections.

Keywords: Cleaning-staff, Infection control, Healthcare workers, Occupational health

Abstract 11:

Quality of sleep and associated factors among GCE A/L biology and mathematics stream students of Nallur Educational Division

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Background and objective: Sleep is critical for cognitive functions like memory consolidation and learning. Yet academic pressures and poor sleep hygiene can negatively affect sleep among GCE A/L students, particularly biology and mathematics students who spend more time on private classes and have a greater academic workload. This study aims to evaluate sleep quality and associated factors among biology and mathematics stream students in the Nallur Educational Division.

Methods: A descriptive cross-sectional study was conducted from November 2023 to February 2024, involving 415 biology and mathematics stream G.C.E. Advanced Level students (2024 & 2025 A/L). Students were recruited by proportionate stratified sampling. Data were collected using a self-administered questionnaire; sleep quality was assessed by the Pittsburgh Sleep Quality Index (PSQI). Data were analysed with SPSS. Frequencies and proportions were used to describe sleep quality, while chi-square tests were conducted to identify associations between sleep quality and sociodemographic, lifestyle, environmental and academic factors. Ethics approval was obtained from the Ethics Review Committee, Faculty of Medicine, Jaffna.

Results: Among 415 invited participants, 388 responded, resulting in a response rate of 93.5%. Among 388, 57.2% (n=222) were males and 42.8% (n=166) were females. Among the participants, 34.3% (n=133) experienced poor sleep quality, while 65.7% (n=255) reported good sleep quality. Male gender showed a statistically significant association with good sleep quality (p=0.049) Caffeine consumption (p<0.001) and end-of-day fatigue exhibited an association with poor sleep quality (p=0.002). Optimum room temperature was identified as a notable environmental factor, with variations significantly affecting sleep outcomes (p=0.003). Academic factors like stream, self-study time, time spent in tuition class did not show a statistically significant association with sleep quality.

Conclusions and recommendations: Although most students had good sleep quality, certain modifiable factors such as caffeine intake and room temperature can improve sleep. Addressing these factors may enhance sleep quality.

Keywords: Sleep quality, Secondary school students, Biology and Mathematics streams, Environmental factors, Lifestyle factors

Abstract 12:

Knowledge and practice of contraception amongst mothers of children admitted to the paediatric ward in Teaching Hospital Jaffna

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Background and objective: Despite the vast number of interventions to provide knowledge and access to contraceptives, both induced abortions and unplanned pregnancies remain high in Sri Lanka. This research aimed to assess the knowledge and practice of contraception amongst mothers of children admitted to the paediatric ward in Teaching Hospital Jaffna.

Methods: A hospital-based descriptive cross-sectional study was conducted among 359 mothers of children admitted to the paediatric wards in Teaching Hospital Jaffna. The sample was selected using systematic sampling with a sampling interval of 5. Data were collected with an interviewer-administered questionnaire, which contained 16 questions to assess knowledge on commonly available contraceptives (scored 0-16). Chi-square test and the independent t– test were performed on SPSS version 26. Mean scores were compared based on various sociodemographic factors.

Results: In total, 359 women participated (mean age 33.7 years, SD 5.9 years). Although almost all participants were aware of contraceptive methods (n=353, 98.3%), knowledge was poor (mean score 5.82, SD 2.85). Just over half (n=198, 56.1%) of the sample used a contraceptive method. The most common reason for not using contraceptives was fear of side effects (n=56, 35.4%). Among users (n=198), a significant proportion developed side effects (n=71, 35.9%). Only 21 (5.8%) participants had ever used emergency contraceptive methods. There was a significant association between knowledge on contraception and education level (p<0.01), monthly income (p<0.01), and employment status (p<0.05). Those who had studied above O/L, had an income over Rs.75, 000 and were employed were more likely to have higher knowledge. Use of contraception was significantly associated with the number of children (p<0.01), monthly income (p<0.05), and education of the partner (p<0.05). Those who had less than 3 children, whose partner had studied above O/L, and monthly income less than Rs. 75,000 were more likely to use contraception.

Conclusions and recommendations: The current study reveals that knowledge on contraceptives is poor among mothers, although a substantial proportion used contraception. Strengthening education, accessibility, and counselling is essential to improve contraceptive knowledge and practice among mothers.

Keywords: Contraceptive methods, Family planning, Knowledge, Practice, Northern Sri Lanka

Abstract 13:

Types of injuries among patients admitted with occupational accidents to the Surgical Casualty Ward and Accident and Emergency Care Unit, Teaching Hospital Jaffna

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Background: Occupational injuries can drive a family into poverty because of the cost related to medical expenses, rehabilitation and the loss of family income. The factors associated with occupational injuries in the Jaffna district remain understudied. This study aimed to describe the types of injuries and their characteristics among patients admitted with occupational accidents to the Surgical Casualty Ward and Accident and Emergency Care Unit, Teaching Hospital Jaffna.

Methods: This institution-based descriptive cross-sectional study was conducted using interviewer-administered questionnaires among patients admitted with occupational injuries to the Surgical Casualty Ward and Accident and Emergency Care Unit at Teaching Hospital Jaffna. A sample of 283 participants was selected through convenience sampling over a four-month period. Descriptive and multivariate statistical methods were used for analysis, and the data were analysed using SPSS. Ethics approval was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Jaffna.

Results: Among 283 participants, the majority affected were men (88.3%), with most in the age range of 26-35 years (32.5%). A significant proportion had an educational level below Grade 11 (67.7%) and were self-employed (50.5%). Most injuries occurred in industries such as construction (25.4%), transport (15.2%), and manufacturing (12.4%). The most common injury types were abrasions and lacerations (29.4%), fractures (22.5%), and cuts (18.3%). They were primarily caused by human error and loss of attention (37%), instruments (26.8%), and falls (19%). The majority of injuries occurred between 12 pm and 6 pm (49.1%).

Conclusions and recommendations: The construction industry experiences the highest number of injuries compared to transportation and manufacturing, accounting for one-fourth of all occupational accidents. The primary causes of these injuries were human error and loss of attention suggesting that implementing administrative controls and personal protective equipment may help to achieve primary prevention of occupational accidents.

Keywords: Occupational injuries, Occupational health and safety, Hazard control, Jaffna

Abstract 14:

Relationship between perceived parenting style, mental health, and socioeconomic factors among Grade 9 and 10 students in the Nallur Educational Division, Jaffna

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Background and objective: Parenting is a crucial factor in adolescent health with the World Health Organization recognizing parenting interventions as key to enhancing adolescent mental well-being. Understanding parenting styles and their impact on mental health is essential given rising adolescent issues such as anxiety, depression, and behavioural problems. This study aimed to assess the relationship between perceived parenting style, mental health and socioeconomic factors among grade 9 and 10 school-going children in the Nallur Educational Division in Jaffna.

Methods: A descriptive cross-sectional study was conducted among grade 9 and 10 students in the Nallur Educational Division. A total of 427 students were selected using proportionate stratified random sampling. The study instrument was a self-administered questionnaire assessing parenting style and mental health with the Perceived Parenting Style Score (PPSS) and the Strengths and Difficulties Questionnaire (SDQ), respectively. PPSS categorises parenting styles as authoritative (high responsiveness and demandingness), authoritarian (high demandingness, low responsiveness), and permissive (high responsiveness, low demandingness). Perceived parenting style was determined by the highest scoring component in the PPSS. SDQ scores were categorized as normal (0-15), borderline (16-19), and abnormal (20-40). Data analysis was performed using SPSS software, applying descriptive statistics and chi-square tests.

Results: Among 404 respondents (response rate 94.6%), 73.3% were male and 26.7% female. Authoritative parenting was predominant (89.4%, n=361) and significantly associated with better mental health, with 74.2% scoring normal on the SDQ (p<0.001). Permissive parenting (1.24%, n=5) was linked to poorer mental health, with 60% obtaining an abnormal SDQ score. Among students with authoritarian parenting (9.41%, n=38), 42.1% had normal scores, while 18.4% had borderline and 39.5% had abnormal SDQ scores. Household income (p=0.031) and family conflicts (p=0.001) were significantly associated with parenting styles. Father's alcohol use had borderline significance with parenting style (p=0.054).

Conclusions and recommendations: Authoritative parenting correlates with better adolescent mental health, while authoritarian and permissive styles are linked to poorer outcomes. Since over 25% of students experience mental health issues, structured school-based mental health education programmes may be helpful.

Keywords: Parenting style, Adolescent mental health, Socioeconomic factors, Jaffna

Abstract 15:

Knowledge on polycystic ovarian syndrome, its prevalence based on self-reported symptoms, and associations among female dance students of University of Jaffna

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Background and objectives: Polycystic ovarian syndrome (PCOS) is a common genetic and metabolic disorder affecting women's reproductive health. Early detection and awareness are essential for effective management. This study aimed to assess knowledge on polycystic ovarian syndrome, its prevalence based on self-reported symptoms, and associations, among female dance students of University of Jaffna.

Methods: An institution-based descriptive cross-sectional study was conducted among 274 female dance students aged 20 to 26 years from the Faculty of Performing and Visual Arts, University of Jaffna. Data were collected using a self-administered questionnaire developed by the researchers. PCOS prevalence was assessed using the Rotterdam Criteria while knowledge levels were categorised as limited (<50), average (50-70), and good (>70) based on a scoring system developed by the researchers. Data analysis was performed using SPSS. The chi-square test was used to assess associations.

Results: In total, 266 students participated with a response rate of 97%. All participants identified as Sri Lankan Tamil. Most respondents were in their second year (n=60, 22.6%). The majority reported a monthly family income of <Rs.50, 000 (n=214, 80.5%). In the sample, 61.5% (n=160) correctly identified PCOS as a reproductive system disorder. Overall knowledge about PCOS was poor, with 87.7% of participants scoring in the limited category; 88.8% (n=207) had limited knowledge of PCOS complications. Self-reported PCOS prevalence was 7.5%. Significant associations were found between PCOS and family income (p=0.007), and sleep patterns with sleep duration (p=0.016).

Conclusions and recommendations: Most participants recognized PCOS as a reproductive disorder, but their overall knowledge was limited particularly regarding the complications of PCOS. Although only a small percentage (7.5%) had PCOS based on self-reported symptoms, this prevalence among an active undergraduate population highlights the need for awareness and screening programmes at the community level to aid primary and secondary prevention.

Keywords: Polycystic ovarian syndrome, Knowledge, Rotterdam criteria, Undergraduates

Abstract 16:

Myths and misconceptions about immunization among parents of children under 5 years in the Nallur MOH area

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Background and objective: Despite the well-established immunization programmes in Sri Lanka, parents still have false beliefs about vaccines. The objective of this study was to describe the myths and misconceptions about immunization among parents of children under 5 years in Nallur MOH area and the factors associated with myths and misconceptions.

Methods: A clinic-based descriptive cross-sectional study was carried out among parents of children under 5 years immunized at clinics in the Nallur MOH area. Data were collected from all five clinics in the Nallur MOH area. Proportionate sampling was used to determine the sample size to be recruited from each clinic and systematic random sampling was used to select participants from each clinic. An interviewer-administered questionnaire was used to collect data. Chi-square test/Fisher's exact test was performed to determine the association between myths/misconceptions and sociodemographic factors. A value <0.05 was considered significant.

Results: Of 382 participants, the majority were mothers 79.8% (n=305). Most identified as Tamil (99.2%) and Hindu (81.7%). Nuclear family (60.2%) was the most common family structure. Six myths and seven misconceptions were reported. Majority had belief in at least one myth (88%) or misconception (91%). The most prevalent myths were avoiding baths post-immunization (54.2%), followed by avoiding certain food items during the immunization period (36.6%). Common misconceptions were that a child will get 100% protection from the disease (58.4%), vaccines will increase the tendency for allergies (26.2%) and preterm babies may follow the normal immunization procedure (20.7%). Grandparents were the main source of beliefs (39.8%). Belief in myths was significantly associated with religion (p=0.047) and number of children (p=0.027). Misconceptions were significantly associated with age of the parent (p=0.037) and religion (p=0.029).

Conclusions and recommendations: The study found a high prevalence of myths and misconceptions about immunization among parents of young children in the Nallur MOH area. Poor understanding about vaccines may lead to incorrect practices in handling immunization-related events. Educating the parents about vaccines may reduce the false beliefs.

Keywords: Myths, Misconceptions, Parents, Young children, Jaffna

Abstract 17:

Career choices and associated factors among medical undergraduates of University of Jaffna, Sri Lanka

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Background and objective: The medical career path starts broadly and narrows into specific specialties, but this transition is often poorly understood. Choosing a specialty is multifactorial. Understanding the factors that influence career choices is crucial for effective healthcare system design and addressing specialty imbalances. This study aims to describe career choices and associated factors among medical students of the University of Jaffna.

Methods: A descriptive cross-sectional study was conducted among 427 medical students from the 40th to 45th batches at the Faculty of Medicine, University of Jaffna. Data were collected using self-administered questionnaires via Google Forms. Data were entered and analysed using SPSS (version 26) software. Chi-squared test was used to assess associations at the 0.05 level of significance.

Results: Among 398 respondents, 79.6% had already decided their specialties. Most preferred specialties were general surgery, general medicine, paediatrics, dermatology and obstetrics/gynaecology; rheumatology, venereology, transfusion medicine, haematology, histopathology and radiology were least preferred. Gender significantly influenced choices; males preferred surgery (p<0.001), while females favoured paediatrics (p<0.001) and medicine (p=0.045). Medicine-related specialties and obstetrics/gynaecology were preferred mostly by paraclinical students, while preclinical students favoured surgery-related specialties. Preference for paediatrics increased with academic phase. A desire to serve humanity was associated with the career choice of paediatrics (p=0.001) and surgery-related fields (p=0.010). Parental wishes (p=0.001) and experience with patients (p=0.037) were associated with a preference for obstetrics and gynaecology. Working conditions and working hours were associated with paediatrics and surgical fields. Job satisfaction (p=0.020) and sense of personal fitness (p=0.011) were significantly associated with surgical choices.

Conclusions and recommendations: A majority of medical students had already decided on their specialties, with a strong preference for clinical and high-demand fields. The associating factors highlights, importance of personal fulfilment, academic phase, gender and work-related factors in career selection. Promoting flexible rotation schedules that accommodate diverse student interests, ensuring gender equity in choices through career guidance, policy changes, and encouraging community-focused medical education may help to broaden specialty options and align academic goals with societal needs.

Keywords: Career choices, Specialisation, Medical undergraduates, Sri Lanka

Abstract 18:

Participation in extracurricular activities and quality of sleep among Grade 12 students of Jaffna Educational Zone

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Background and objective: Quality sleep is essential for cognitive function and memory consolidation. Involvement in extracurricular activities (ECA) may disrupt sleep patterns among students, potentially impacting their health and academic performance. This study aimed at investigating the association between participation in ECA and sleep quality among Grade 12 (GCE A/L 2025 Batch) students in schools in the Jaffna Educational Zone.

Methods: A school-based descriptive cross-sectional study was conducted from November 2023 to February 2024, involving 854 Grade 12 students in the Jaffna Educational Zone, using cluster sampling. Data collection was performed using a self-administered questionnaire, which contained a section to assess participation in ECA and the Pittsburgh Sleep Quality Index (PSQI) to assess sleep quality. Statistical analysis was done using SPSS (version 20). Ethical clearance was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna.

Results: In total, 825 students participated in the study (response rate 95.93%). Majority were 17 years (69.9%) of age, female (56.6%) with most from the biological sciences stream (46.8%). In the sample, 18.8% reported a high level of participation in ECA (>7h/ week), 20.4% a moderate level (4-7h/week), 32.1% a low level (1-4 h/week), while 28.7% rarely participated (<1h week). The highest proportion reported a significant level of participation (>1h/week) in aesthetics (32.5%), followed by hobbies (30.5%), outdoor activities (27.6%), fine arts (21%), indoor activities (20.1%), community service (13.8%), clubs (7.8%), digital creations (4.5%), martial arts (2.9%), and other activities (0.2%). The mean PSQI score was 6.24. Over two-thirds (69.8%) had good sleep quality (PSQI score 1-7), while 28.7% and 1.5% showed moderate (PSQI score (8-14) and bad (PSQI score of 15-21) sleep quality, respectively. Chi-square tests revealed no statistically significant association between participation in ECA and sleep quality (p=0.452).

Conclusions and recommendations: There was no significant relationship between the time spent on ECA and sleep quality of students. Despite varying levels of extracurricular involvement, sleep quality remained relatively high. Schools may encourage students to engage in ECA to enhance their well-being. Future studies should explore the types of ECA and their specific effects on sleep quality.

Keywords: Adolescents, Extracurricular activities, Secondary school students, Pittsburgh Sleep Quality Index, Sleep quality.

Abstract 19:

Involvement in extracurricular activities and perceptions regarding participation among Jaffna medical students

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Background and objective: Extracurricular activities (ECA), including sports, community services, games, and aesthetic activities, occur outside the academic curriculum. While these activities provide stress relief, enhance skills, and promote social interaction, medical students often face challenges in participation. This study aimed to assess the level of involvement in extracurricular activities and perceptions regarding participation among Jaffna medical faculty students.

Methods: This was an institution-based descriptive cross-sectional study. The sample was selected from the 41st to 45th batches of medical students in the University of Jaffna using a stratified random sampling technique. Data were collected, using a self-administered questionnaire that was developed by the research team and validated for content by experts. SPSS (20th version) was used to carry out descriptive statistics and the chi-square test. P value <0.05 was considered statistically significant.

Results: Of 205 invited students, 185 participated; 79 (42.7%) males and 106 (57.3%) females. A total of 132 (71.4%) students reported being involved in ECA. Among them, 57 (43.2%) were males and 75 (56.8%) were females; 109 (82.6%) reported a high level of involvement, while 23 (17.4%) reported low involvement. When considering students' perceptions, the main barrier to participation was academic workload, reported by 103 (55.7%) students. More than 2/3 of the students believed that participating in ECA could have a positive impact by reducing stress, improving skills, providing leadership opportunities, and enabling social interaction and a healthy lifestyle. Self-confidence was identified as a key motivational factor for participation. Lack of transport facilities (p=0.01), physical unfitness (p=0.03) and unavailability of preferred activities (p=0.04) were individual factors that were significantly associated with low involvement (p<0.05). There was no evidence of an association between gender or family income and participating in ECA (p>0.05).

Conclusions and recommendations: A substantial proportion of students reported not participating in ECA. Academic workload should be managed more effectively to improve participation. Encouraging students to balance academics and extracurricular activities, promoting group participation, and improving facilities such as transport may increase involvement.

Keywords: Extracurricular activities, Academic load, Perceptions, Medical students, Jaffna

Abstract 20:

Self-management practices and control of diabetes among diabetics with early chronic kidney disease attending Nephrology and Medical Clinics at Teaching Hospital Jaffna

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Background and objective: Chronic kidney disease (CKD) is a major cause of mortality globally, including in Sri Lanka, with uncontrolled diabetes mellitus being a significant risk factor. This study aimed to assess self-management practices, control of diabetes and the association between self-management practices and diabetic control among diabetics with early CKD attending Nephrology and Medical Clinics at Teaching Hospital Jaffna.

Methods: A hospital-based descriptive cross-sectional study was conducted with 300 patients using interviewer-administered questionnaires. Data, analysed with SPSS software, focused on key self-management areas: glucose monitoring, eating behaviour, cooperation with the diabetes team, medication adherence, and physical activity. Optimal and suboptimal self-management practice was defined as a score of \geq 5 and <5, respectively, according to a scoring system used in a previous study. Diabetic control was assessed with HbA1c or fasting blood sugar. Early CKD was defined as eGFR 30-60ml/min/1.73m2. Chi-square test was used to measure associations.

Results: In total, 300 patients participated with a response rate of 100%. Optimal selfmanagement practices were observed in the areas of medication adherence (89.7%, n=269), cooperation with the diabetes team (80.3%, n=241) and glucose monitoring (59%, n=177). Suboptimal management practices were identified in physical activity (79.7%, n=239) and eating behaviour (57.7%, n=173). HbA1c levels were assessed in 25.3% (n=76) patients; among them 34.2% (n=26) achieved controlled levels. Of the patients with a fasting blood sugar (58%, n=174), 34.5% (n=60) had controlled levels, while among the 17.7% (n=53) with a post-prandial blood sugar test, 64.2% (n=34) had controlled levels. The study found a near association between practices of eating behaviour and diabetic control (p=0.061).

Conclusions and recommendations: The study findings suggest that self-management practices in eating behaviours and physical activity are suboptimal among patients with early CKD. Structured dietary counselling, nutritional and physical activity interventions should be prioritized to improve self-management and glycaemic control in this population.

Keywords: Self-management practices, Diabetic control, Chronic kidney diseases, Jaffna

Abstract 21:

Prevalence of overweight and obesity, knowledge on healthy diet, and engagement in physical activity among A/L students in schools in the Jaffna Educational Zone

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Background and objectives: Overweight and obesity have reached epidemic proportions globally, particularly among adolescents. Busy and sedentary lifestyle combined with lacking knowledge on healthy diet are known to contribute to overweight and obesity. This study aimed to assess the prevalence of overweight and obesity, knowledge about healthy diet, and engagement in physical activities among advanced level (A/L) students of government schools in the Jaffna Educational Zone.

Methods: This descriptive cross-sectional study involved 480 (out of 2419) A/L students in government schools in the Jaffna Educational Zone. Participants were selected using cluster sampling. Data were collected using a self-administered questionnaire. Anthropometrics were measured by the researchers. The WHO BMI Asia-Pacific classification was used to identify overweight and obesity (underweight <18.5 kgm-2, normal 18.5-22.9 kgm-2, overweight 23-24.9 kgm-2, obesity>25kgm-2). Ten questions on knowledge of healthy diet and a physical activity level recall table were included in the questionnaire. Data were analysed with SPSS software.

Results: In the sample (n=480), 25% were either overweight (15%) or obese (10%), while 29% (n=139) were underweight and 46.0% (n=221) were classified as normal. Knowledge assessment on healthy diet showed that 88.8% (n=426) of students had satisfactory knowledge, while the remainder (11.3%, n=54) had unsatisfactory knowledge. With respect to physical activity, 69.9% (n=276) were involved in vigorous activity, 54.8% (n=263) in moderate and 67.3% (n=323) in low physical activity. Among those who engaged in vigorous activity, only 4.8% engaged for 3–5 hours and 1.9% for over 5 hours per week. Among those who engaged in moderate physical activity, 4% engaged for 3–5 hours and 2.9% exceeded 5 hours per week. With respect to those who participated in low physical activity, 10.4% participated for 3–5 hours and 6.5% exceeded 5 hours per week. There was no association between BMI and physical activity levels.

Conclusions and recommendations: A concerning rate of overweight and obesity was observed among A/L students. Knowledge on healthy diet and engagement in physical activity was satisfactory in most. However, duration and intensity of physical activity were insufficient. The study recommends targeted interventions to increase physical activity engagement, integrate behavioural strategies into nutrition education, and conduct further research.

Keywords: Overweight and obesity, BMI, Healthy diet, Physical activity, Secondary school students

Abstract 22:

Usage of WhatsApp among undergraduates of Faculty of Medicine, University of Jaffna, and its perceived impact on psychosocial, behavioural, educational and extracurricular activities

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Background and objectives: WhatsApp is commonly used by undergraduates in Sri Lanka. However, little is understood from an empirical viewpoint about the intensity of usage of WhatsApp and its various impacts. Thus, this study aimed to assess the perceived impact of WhatsApp on psychosocial, behavioural, educational and extracurricular activities among the undergraduates of Faculty of Medicine, Jaffna.

Methods: This descriptive cross-sectional study was conducted among 427 undergraduates of Jaffna Medical Faculty using proportionate stratified random sampling. Ethical clearance was obtained from the Ethics Review Committee, Faculty of Medicine, Jaffna. Data were collected using a self-administered questionnaire and analysed using SPSS. Chi-square and independent tests were used to determine statistical significance

Results: Among the 427 students who participated, 60% were female, and 339 (79.4%) lived away from their families. Personal chats were the primary WhatsApp feature used (93.9%), while 374 (87.6%) used it for audio calls, and only 67 (15.7%) used it for community chats. Academic activities were recognized as the major purpose by 185 (43.3%). The mean daily WhatsApp usage time was 143.7 minutes (SD 105.7). Though 93.7% were aware of screen time monitoring, over half (56%) did not use it. Significant associations were identified between distance from family and perceived behavioural impact ($\chi^2 = 4.17$, df = 1, p = 0.042), gender and perceived psychosocial impact ($\chi^2 = 5.57$, df = 1, p = 0.018), and batch affiliation with status update usage ($\chi^2 = 34.76$, df = 20, p = 0.021). Status updates also correlated with perceived educational impact ($\chi^2 = 17.020$, df = 4, p = 0.002), while group chats were linked to sharing extracurricular information ($\chi^2 = 8.716$, df = 1, p = 0.003).

Conclusions and recommendations: This study showed that there is a gap between awareness and actual usage in managing screen time, highlighting the need for better strategies to encourage effective screen time management. Promoting the use of screen time monitoring apps can help students manage their WhatsApp usage more effectively, leading to a better balance between online and offline activities.

Keywords: WhatsApp, Psychosocial, Behavioural, Educational, Extracurricular

Abstract 23:

Knowledge on how advanced maternal age affects fertility and pregnancy outcomes among students of the Faculty of Science, University of Jaffna

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Background and objective: The trend of delayed marriage and childbearing among women in Sri Lanka has raised concerns regarding the implications of such delays for fertility and pregnancy outcomes. The level of knowledge on advanced maternal age (AMA) and its implications for fertility and pregnancy outcomes among young people depends on various factors. This study aimed to describe the level of knowledge on how AMA affects fertility and pregnancy outcomes among students of the Faculty of Science, University of Jaffna.

Methods: A descriptive cross-sectional study was conducted among 427 Science Faculty students at the University of Jaffna from November 2023 to March 2024. Participants were selected using proportionate stratified random sampling. Data were collected with a self-administered questionnaire developed by the researchers. Chi-square tests and one-way ANOVA were performed using SPSS, with p<0.05 considered significant.

Results: Among 427 participants, 230 (53.9%) were male and 197 (46.1%) female, with 226 (52.9%) and 201 (47.1%) in their first and second years, respectively. Overall, 52.5% were unaware of AMA, while 47.5% had some knowledge. Less than half (45.4%) correctly identified 35 years as the threshold age. The mean knowledge score was 7.37 (SD 3.9), with most scores ranging between 6 and 12. Knowledge was significantly associated with academic year (p=0.003), age (p=0.001), and ethnicity (p=0.009); first-year students, younger participants, and Sinhala students showed higher knowledge levels. Gender was not significantly associated with knowledge (p=0.137), nor was the course of study (p=0.545). Social media was the most common source of information (44%), followed by books (27%). Only 8% had participated in formal educational programmes on this topic, indicating gaps in structured learning.

Conclusions and recommendations: Findings reveal inadequate awareness on AMA among Science Faculty students. Integrating reproductive health education into the university curriculum and conducting awareness programmes about AMA may improve awareness and promote informed reproductive choices.

Keywords: Advanced maternal age, Reproductive health, Fertility, Pregnancy outcomes, Knowledge

Abstract 24:

Knowledge, attitude, practice and factors associated with hand hygiene practice among medical students of Faculty of Medicine, University of Jaffna

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Background and objectives: Health care-associated infections (HAIs) and antimicrobial resistance are global health concerns. They lead to treatment failure and increased patient morbidity and mortality. Most HAIs are transmitted through healthcare workers. Medical students, as future medical professionals, need proper knowledge of HAIs and hand hygiene. This study assessed the knowledge, attitudes, self-reported practices, and factors associated with hand hygiene practice among medical students of the University of Jaffna.

Methods: This descriptive cross-sectional study was conducted among 414 medical students of Jaffna Medical Faculty using stratified random sampling. Data were collected using a self-administered questionnaire and analysed using SPSS. Knowledge was assessed with 25 questions where a score >75% was considered good. Attitude and self-reported practice were evaluated using a 5-point Likert scale, with scores >30 and >51, respectively, considered good. Chi square test was used to analyse factors associated with hand hygiene practice. T-test was used to compare mean knowledge and attitude scores between students with good and bad practice. A p-value of <0.05 was considered statistically significant.

Results: In the sample, 60.9% (n=252) were females, 39.1% (n=162) were males. A total of 73.7% (n=305) of students recorded average knowledge, while only 22.9% (n=95) had good knowledge. Just under half had good attitudes (47.8%, n=198) and practice (47.3%, n=196). Female students (54%) were more likely to have good hand hygiene practices compared to males (37%) (p=0.001). Muslim students (63%) had the highest proportion of good practices (p=0.038). Good practice was associated with higher knowledge (t=3.629, p<0.001) and attitude scores (t=7.344, p<0.001). Availability of alcohol rub (p<0.033), peer influence (p<0.001) and monitoring by superiors (p=0.002) were associated with good hand hygiene practices but displaying infection prevention notices was not (p=0.296).

Conclusions and recommendations: Even though nearly three-quarters of students had average knowledge, more than half of them showed poor attitudes and practices. Hand hygiene practices were influenced by the facilities available at the hospital and supervision. Thus, interventions to improve hand hygiene facilities, strict policies and supervision are recommended to improve infection control in the clinical setting.

Keywords: Hand hygiene, Medical students, Healthcare-associated infections, Antimicrobial resistance, Infection control

Abstract 25:

Health-related quality of life in patients with thyroid disorders attending the Endocrine Clinic at Teaching Hospital Jaffna

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Background and objective: Thyroid disorders are prevalent worldwide, impacting healthrelated quality of life (HRQoL) in affected patients. This study aimed to assess HRQoL in patients with thyroid disorders attending the Endocrine Clinic in Teaching Hospital Jaffna and identify factors associated with HRQoL.

Methods: A descriptive cross-sectional study was conducted among 388 patients with thyroid disorders attending the Endocrine Clinic, Teaching Hospital Jaffna between November 2023 and March 2024. Participants were selected using systematic sampling. Data were collected using an interview-administered questionnaire, which included a validated tool to assess HRQoL. Patients were categorized based on threshold HRQoL scores (less than or equal to 50% and more than 50%) with lower scores indicating lower HRQoL. Descriptive (mean, median, standard deviation (SD), interquartile range (IQR)) and inferential statistics (chi-square and t-tests) were used to analyse data on SPSS.

Results: The study included 388 participants, with a significant female preponderance (91.5%). The mean age of the sample was 45.3 years (SD 15.5 years). Mean HRQoL was 46.6 (SD 9.2) with a median of 44.9 (IQR 39.5-53.4). Significant associations were found between age group and HRQoL (p=0.006) with the 18-25 years age group reporting the highest HRQoL. No significant associations were found between HRQoL and BMI (p=0.822), thyroid disorder type (p=0.576) and disease duration (p=0.477).

Conclusions and recommendations: A considerable proportion of patients with thyroid disorders experienced reduced HRQoL. Regular HRQoL monitoring, supporting treatment adherence, psychological interventions and social engagement are recommended. A multidisciplinary approach that combines patient education with comorbidity management is essential. Factors influencing HRQoL should be explored further to develop targeted interventions.

Keywords: Thyroid disorders, Health-related quality of life, Jaffna

Abstract 26:

Decision making styles and associated factors among students in the Jaffna National College of Education

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Background and objectives: Decision making is a specific executive task, but not all are fortunate enough to take truly successful decisions. In the realm of education, teachers play a vital role in shaping the minds and future of students. The ability to make effective decisions is crucial for teachers to create an engaging and impactful learning environment. This study aims to determine decision making styles and associated factors among students of Jaffna National College of Education.

Methods: An institution-based descriptive cross-sectional study was carried out among students of the Jaffna National College of Education. Proportionate stratified sampling method was used to select the sample from two batches; stratification was performed by batch and gender. The required sample size was 386. Data were collected using a self-administered questionnaire, which included an open-sourced decision style inventory that assessed analytical, behavioural, conceptual and directive decision-making styles. Range of scores that could be achieved for each decision-making style was from 20 to 160. Data were entered and analysed using SPSS software.

Results: The study involved 383 participants aged 21 to 27 years, with a mean age of 23.8 years. The majority were female (78.1%), first-year students (59.3%), who had studied non-science subjects for their G.C.E Advanced Level (62.7%), and were currently pursuing non-science subjects at the Jaffna National College of Education (76.2%). The mean scores for the analytical, behavioural, conceptual, and directive decision-making styles were 82.42, 87.89, 64.37, and 65.35, respectively. A statistically significant decline in the behavioural decision-making style was observed with increasing age (r = -0.113, p = 0.027). Females had a higher mean score for the directive decision-making style than males (p < 0.001). Statistically significant differences between females and males were not observed in other decision-making styles.

Conclusions and recommendations: While each decision-making style has its distinct pattern, behavioural and directive are the most consistently used across the sample. When students are older, there is a shift away from the behavioural style of decision making. Men lean towards analytical and women towards directive style of decision making. The implications of the different decision-making styles on teaching and learning in the school environment needs to be further explored.

Keywords: Decision making styles, Analytical, Behavioural, Conceptual, Directive, Teachers

Abstract 27:

Factors associated with smart-mobile device addiction and its impact on sleep quality among first-year students of the Faculty of Allied Health Sciences, University of Jaffna

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Background and objective: The rapid expansion of smart mobile devices has revolutionized daily life, offering both benefits and challenges. One growing concern is the potential link between excessive smart-mobile use and poor sleep quality, particularly among university students. While previous research has explored various factors affecting sleep, limited studies have examined its association with smart-mobile addiction. This study aims to identify factors associated with smart mobile device addiction and its impact on sleep quality among first year undergraduate students in the Faculty of Allied Health Sciences, University of Jaffna.

Methods: A cross-sectional study was conducted among 194 students from November 2023 to February 2024 using proportionate stratified sampling. Data were collected via a self-administered questionnaire, including the Smart-Mobile Addiction Scale (SAS), and the Pittsburgh Sleep Quality Index (PSQI), validated tools for assessing smart-mobile addiction and sleep quality, respectively. Statistical analysis including chi-square test, one-way ANOVA, and Pearson correlation were performed using SPSS v27. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Jaffna.

Results: Among 183 students, 53% used smart-mobiles excessively (SAS score >99) with 41.5% showing problematic use (SAS score 99-131), and 11.5% exhibiting addiction (SAS score \geq 132). Daily usage hours and single session duration correlated significantly with addiction (p<0.001). Social media use, online gaming and video watching were associated with addiction (p<0.05), while learning, texting, calling and browsing the internet showed no significantly associated with smart-mobile addiction (P=0.003). SAS positively correlated with PSQI score (r<0.3, weak correlation).

Conclusions and recommendations: A significant proportion of students, exhibit problematic smart-mobile use and addiction, negatively affecting sleep quality. Awareness programmes on responsible smart-mobile use are needed. Future studies should utilize multivariate analysis for deeper insights into causative factors.

Keywords: Addiction, Sleep Quality, Smart-mobile device addiction, Undergraduate students

Abstract 28:

Prevalence of anxiety and depression and their association with dietary patterns among medical students studying at Jaffna Medical Faculty

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Background and objectives: Research indicates a strong link between diet and mental health, yet this aspect is often overlooked in traditional psychiatric studies. Nutrient deficiencies and poor diet quality have been associated with mental disorders. This study explores dietary patterns and mental well-being among medical students. The aim of this study is to examine the association between dietary patterns, anxiety and depression levels among medical students at Jaffna Medical Faculty.

Methods: A descriptive cross-sectional study was conducted among 332 medical students from the University of Jaffna's Faculty of Medicine using stratified sampling. Data were collected via a structured, self-administered Google Form questionnaire, incorporating the Patient Health Questionnaire 9-item depression scale (PHQ-9) and the 7-item Generalized Anxiety Disorder scale (GAD-7) scale (both validated and open-source) alongside a dietary questionnaire from the National Nutrition and Micronutrient Survey Among School Adolescents in Sri Lanka (2017), used with prior permission. Data collection occurred from December 2023 to March 2024, with a 92.1% response rate. Data were entered into Excel, reviewed by supervisors, and analysed using SPSS version 20 with the Chi-square test.

Results: Among participants, 97 (29.5%) had major depressive disorder, and 63 (19%) had clinical anxiety. Dietary analysis revealed high consumption of rice/rice flour products, milk, and oils, with low intake of green leaves, vegetables, fruits, pulses, animal proteins, and junk food. However, no significant association was found between dietary patterns and mental health outcomes. Significant factors influencing anxiety included current residence (p = 0.006) and a history of taking mental illness medication (p=0.010).

Conclusion and recommendations: Although no significant link between diet and mental health was found, anxiety and depression were highly prevalent. Current residence significantly correlated with anxiety, highlighting the need for improved hostel facilities, faculty premises, and study spaces. Regular mental health screenings and expanded counselling services are recommended. Future research should use logistic regression, longitudinal studies, and randomized controlled trials to explore causality.

Keywords: Medical students, Depression, Anxiety, Dietary pattern, Major Depressive Disorder

Abstract 29:

Factors associated with knowledge and attitude about dengue infection and transmission, and dengue prevention practices among Grade 12 students in Jaffna Educational Division

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Background and objectives: Dengue is a significant global and public health issue. In Sri Lanka, over 36,000 cases were reported in the year 2023. Understanding the factors that influence knowledge, attitudes, and practices is essential for effective interventions. This study aimed to assess knowledge, attitude and preventive practices related to dengue among Advanced Level (A/L 2024) students in Jaffna Educational Divisional schools. In addition, the study aimed to determine the socio-demographic factors associated with dengue transmission.

Methods: A school-based analytical cross-sectional study was conducted among 384 students from schools in the Jaffna Educational Division with permission from the Jaffna Zonal Education Department. Students were selected using proportionate stratified sampling based on their academic streams and schools. A self-administered questionnaire was used to collect data. Data were analysed using SPSS. Cumulative scores were calculated as a total for knowledge, attitude and practice questions separately. The scale was classified as follows: 'satisfactory' >mean + SD; 'fair'=mean–SD to mean + SD; 'poor'=<mean–SD. Descriptive statistics and crosstab risk estimation were used to analyse data.

Results: Out of 384 invited students, 379 (98.68%) responded. Majority were 18 years of age (98.7%) and females (54.4%). In the sample, 13.7% had satisfactory knowledge on dengue infection and transmission, while 77.9% and 8.4% students recorded fair and poor knowledge, respectively. Attitudes on dengue infection and transmission were satisfactory in 30.1%, fair in 56.2% and poor in 13.8%. Dengue prevention practices were satisfactory in 17.7%, fair in 64.6% and poor in 17.7%. Knowledge had a statistically significant association with A/L stream (OR 1.84, 95% CI 1.02-3.32) and mother's occupation (OR 0.46, 95% CI 0.23-0.87), while attitude was associated with gender (OR 0.54, 95% CI 0.34-0.86), type of school (OR 1.66, 95% CI 1.03-2.67) and father's education (OR 1.64, 95% CI 1.04-2.59). No statistically significant factors were found to be associated with practices.

Conclusions and recommendations: Despite significant gaps, a substantial proportion of students demonstrated satisfactory and fair levels of knowledge, positive attitudes and good preventive practices related to dengue transmission and prevention. The findings suggest that socio-demographic factors influence their responses. Measures to improve knowledge at the base level may help to foster positive attitudes and good dengue prevention practices in society.

Keywords: Secondary school students, Dengue, Knowledge, Attitudes, Preventive practice

Abstract 30:

Association of growth monitoring practices in the past two years with current nutritional status among Grade 1 school children in Nallur Educational Division

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Background and objective: Nutritional status reflects a child's quality of life, and requires regular monitoring for early intervention. This study aimed to determine the association between growth monitoring practices (GMP) in the past two years and nutritional status among Grade1 school children in Nallur Educational Division, Jaffna.

Methods: A school-based descriptive cross-sectional study was conducted using single-stage cluster sampling among 512 Grade 1 students (November 2023 –February 2024). Data were collected with an interviewer-administered questionnaire, checklist, and data extraction form. Growth monitoring data from the Child Health Development Record (CHDR) were extracted for ages 37–60 months (February 2020–January 2023) and analysed using weight-for-age (WFA), height-for-age (HFA), and weight-for-height (WFH) assessments. Regular monitoring was defined as 6-8 WFA, 2-4 HFA and WFH recordings. Anthropometric measurements were directly obtained when children were 70–84 months old. Nutritional status was assessed using WHO growth references for WFA, HFA, and BMI-for-age (BAZ). The association between GMP and nutritional status was analysed using the chi-square test with SPSS 20.

Results: A total of 439 students were recruited. Undernutrition was prevalent, with 24.3% underweight, 27.6% stunted, and 14.6% wasted. Overweight or obesity were observed in 20.3%. Past nutritional status based on CHDR data showed 12.2% underweight, 6.2% stunted, 16.3% wasted, and 3.8% overweight or obese. Growth monitoring coverage was 91.1% for WFA, 83.3% for HFA, and 25.6% for WFH. Among students who were regularly monitored, 44.9% were within a normal range for WFA, 42.7% for HFA, and 64.7% for BAZ, inclusive of students who were previously under- or over-nourished and had reached the growth standards, as well as those who were already in the normal range and maintained it. Regular GMP was significantly associated with weight (p=0.001) and height (p=0.007), but not BMI (p=0.288).

Conclusions and recommendations: Malnutrition may have increased, with a higher prevalence of undernutrition and a shift to overweight and obesity. GMP was not satisfactory, particularly for WFH assessments. While regular monitoring improved weight and height, there was no significant impact on BMI possibly due to transitions between undernutrition and overweight. Strengthening GMP, especially WFH assessments, to address both undernutrition and overweight/obesity may help to promote nutritional well-being among children.

Keywords: Nutritional status, Growth monitoring, Child health, Jaffna, Sri Lanka

Abstract 31:

Awareness of menstrual hygiene among female students studying in schools in the Jaffna Municipal Council area

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Background and objectives: Menstrual hygiene is critical to girls' health, well-being, and academic success. Obstacles to good menstruation management include limited availability of sanitary products, and poor facilities, all of which have a negative impact on attendance and academic performance. Improving menstrual hygiene helps women manage their health with dignity, reduces school absenteeism due to lack of resources, and ensures girls can participate fully in education. The primary goal of this study was to assess the knowledge and practices related to menstrual hygiene of schoolgirls in the Jaffna Municipal Council Area and analyse the relationship between their knowledge of menstrual health and hygiene practices.

Methods: A school-based descriptive cross-sectional study was carried out among 427 students from Holy Family Convent, Vaitheeswara College, Chundikkuli Girls' college and Vembadi Girls' High School. Proportionate stratified random sampling was done among female students from Grade 10 and 11. A self-administered questionnaire was used to gather the data. A Likert scale was used to evaluate knowledge and practices related to menstruation. One-way ANOVA test was applied to evaluate the link between their knowledge and practices, and the impact of sociodemographic variables.

Results: This study showed that 96% of the students had good knowledge whereas 92% were following good practice indicating a small gap between knowledge and practice. Menstrual health awareness was high, with more than 75% understanding hormonal changes, but only 43% recognized the influence of menstruation on daily activities. While 65% reported effective menstruation management, 11% struggled. Notably, 38.9% reported poor school attendance during menstruation. Students' menstrual hygiene practices were positively associated with mother's higher education (p = 0.013) and maternal profession (p=0.045).

Conclusions and recommendations: This study highlights the need for targeted interventions to bridge gaps between knowledge and practice, improve school attendance during menstruation, and address socio-economic factors influencing menstrual hygiene management.

Keywords: Menstruation, Knowledge, Attitude, Practice, Jaffna schools

Abstract 32:

Prevalence of dyspeptic symptoms and associated factors among medical students of the Faculty of Medicine, University of Jaffna

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Background and objective: Dyspepsia includes nonspecific upper gastrointestinal symptoms and is common among medical students. Dietary habits, lifestyle choices, sleep disturbances, and stress contribute to dyspeptic symptoms, affecting quality of life and academic focus. This study aimed to determine the prevalence of dyspeptic symptoms and associated factors among medical students at the Faculty of Medicine, University of Jaffna.

Methods: A university-based descriptive cross-sectional study was conducted from February 2023 to August 2024 among 303 medical students using stratified random sampling. Data were collected via a self-administered Google Forms questionnaire covering socio-demographics, economic status, lifestyle, habits, and upper abdominal symptoms. Dyspeptic symptoms were assessed using the Short-Form Leeds Dyspepsia Questionnaire (SFLDQ), with a score of >7 (out of 32) indicating dyspepsia. Stress levels were evaluated using the Perceived Stress Scale (PSS). Data were analyzed using SPSS (version 20.0). The chi-square test assessed associations, and correlation analysis evaluated relationships between dyspepsia and medication use.

Results: Among 303 students (112 males, 191 females), 92 (30.4%) had dyspepsia (39.1% males, 60.9% females). A higher prevalence of dyspepsia was observed among 3^{rd} (25.1%) and 4^{th} (23.9%) year students. Economic status was not significantly associated with dyspepsia (p>0.05). With respect to dietary habits, skipping meals (70.6%) was significantly associated with dyspepsia (p=0.028), but meal frequency (p=0.055) and consumption of spicy (p=0.461), fatty/acidic foods (p=0.856), fruits/vegetables (p=0.769), carbonated (p=0.430) and caffeinated beverages (p=0.361) were not. Smoking (6.5%, p=0.044), stress (p=0.001), and poor sleep (p=0.003) were significantly associated, while consuming alcohol (p=0.094), engaging in exercise (p=0.095), and use of non-steroidal anti-inflammatory medication (NSAID) were not (p=0.200). A weak negative correlation was found between use of non-NSAID medication and dyspepsia (r=-0.075, p>0.05).

Conclusions and recommendations: Students should focus on healthy eating, stress management, and adequate sleep to prevent dyspepsia. Avoiding irritants like spicy foods and smoking and seeking medical advice for persistent symptoms is crucial for maintaining long-term gastrointestinal health and overall well-being.

Keywords: Dyspeptic symptoms, Medical students, Dietary habits, Lifestyle, Medications

Abstract 33:

Association between academic performance and procrastination level among Grade 12 students in Jaffna Education Division

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Background and objective: Academic performance is a key determinant of an individual's success. However, procrastination, the intentional delay of tasks despite negative consequences, can hinder students' academic achievements. Understanding the relationship between procrastination and academic performance is essential for developing targeted interventions. This study aimed to assess the association between procrastination level and academic performance among Grade 12 (GCE A/L 2025 Batch) students in the Jaffna Education Division.

Methods: A descriptive cross-sectional study was conducted among 483 Grade 12 students in the Jaffna Education Division. Participants were selected using a cluster sampling method, and data were collected via a self-administered questionnaire. Procrastination was measured using the Academic Procrastination Scale (APS), while academic performance was assessed using the Results Score (RESCO), calculated based on GCE (O/L) results. Data were analyzed using SPSS, including independent t-tests and Pearson correlation analysis. Ethics approval was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna.

Results: The response rate was 91.1% (483 out of 530 distributed questionnaires). In the sample, 63.8% (n = 308) were female. The mean APS score was 62.2 (SD 17.1), with males scoring significantly higher (66.8 SD 18.2) than females (59.5 SD 15.8, t = 4.57, p< 0.01). The mean RESCO score was 35.5 (SD 8.6), with males scoring 32.6 (SD 7.9) and females 37.1 (SD 8.5). The Pearson correlation coefficient between APS and RESCO was -0.020 (p = 0.677), indicating a weak and non-significant negative association between procrastination and academic performance. Students engaging in extracurricular activities (p=0.002), higher social media use (p<0.001), and longer sleep hours (p=0.014) had significantly higher APS scores, indicating greater procrastination tendencies compared to their peers.

Conclusions and recommendations: This study found no significant association between procrastination and academic performance, suggesting that while procrastination is present, other factors may play a more substantial role in academic outcomes. Future research should explore additional influences on students' academic performance to develop targeted interventions.

Keywords: Academic Procrastination Scale (APS), Academic Performance, Adolescence, Jaffna

Abstract 34:

Knowledge, sources of knowledge and willingness to learn and perform first aid among Advanced Level students of schools in the Jaffna Educational Division

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Background and objectives: First aid is crucial because it offers immediate help in emergencies, saving lives and stabilizing patients until medical professionals arrive. It can also shorten recovery time and reduce complications. This study aimed to describe knowledge, sources of knowledge, and willingness to learn and perform first aid in the case of emergency among Advanced Level (A/L 2024) students in the Jaffna Educational Division. Additionally, it seeks to determine the association between knowledge and willingness to perform first aid.

Methods: A school-based descriptive cross-sectional study was conducted among 428 students from the Jaffna Educational Division. Students were selected using proportionate stratified random sampling based on their academic streams and schools. A self-administered questionnaire was used to collect data, and data were analyzed using SPSS. First aid knowledge was categorized as adequate, intermediate, and inadequate. Descriptive statistics and chi-square tests were used to analyse the data. P value <0.05 was considered significant.

Results: In total, 387 students participated with a response rate of 90.4%. The majority were 18 years old (98.2%) with an almost equal gender distribution (50.9% male, 49.1% female). Based on the categorisation, 76.2% (n=310) had intermediate knowledge, 18.1% (n=50) had inadequate knowledge and 5.7% (n=27) had adequate knowledge. Reliable sources for first aid training were identified by 80.9% (n=313). Access to first aid boxes (84.5%, n=327) and first aid groups (79.3%, n=307) was common. The willingness to learn first aid was high (70.3% n=272), with a significant association between willingness to perform first aid and knowledge levels (p<0.001).

Conclusions and recommendations: Most A/L students in the Jaffna Educational Division have intermediate knowledge on first aid, although knowledge is inadequate among a substantial proportion. The willingness to learn and perform first aid is high. Training in first aid and further research is recommended to improve overall knowledge and willingness to perform first aid in the region.

Keywords: First aid, Knowledge, Skills, Emergency preparedness, Health education.

Abstract 35:

The association between menstrual pattern, premenstrual syndrome and sleep quality among GCE A/L students in schools in the Jaffna Municipal Council Area

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Background and objective: The menstrual cycle involves monthly physiological changes preparing the body for pregnancy. Variations in menstrual patterns are common, especially among young females who are new to menstruation, and can be influenced by various factors. Understanding the association between menstrual patterns and sleep quality can help manage symptoms and improve overall well-being. This study aimed to describe menstrual pattern, premenstrual syndrome (PMS) and sleep quality among GCE A/L students studying in schools in the Jaffna Municipal Council area.

Methods: A descriptive cross-sectional study was conducted involving 345 students sitting for the GCE A/L Examination in 2025 using proportionate stratified sampling method. Ethical clearance was obtained prior to the study. Data were collected between December 2023 and March 2024 using a self-administered questionnaire. Data were analyzed with SPSS version 27, employing chi-square and t-tests, with statistical significance at a p-value of less than 0.05.

Results: In the sample, 61.5% (n=212) experienced significant dysmenorrhea, 8.1% (n=30) experienced PMS and 14.9% had irregular menstruation (n=51). A significant association was found between dysmenorrhea and sleep quality (X2=5.24, p=0.022); 92.4% of participants with dysmenorrhea reported good sleep compared to 97.8% without dysmenorrhea. PMS also showed a significant association with sleep quality (X2=4.77, p=0.029); 88.0% of those with PMS reported good sleep compared to 96.8% without PMS. No significant association was found between menstrual cycle regularity and sleep quality (X2=0.966, p=0.326), although 96.7% of those with a regular menstrual cycle reported good sleep quality compared to the 93.7% of those with an irregular cycle.

Conclusions and recommendations: The study findings establish that there is a notable association between sleep quality and both PMS and dysmenorrhea. There is no evidence to suggest that menstrual regularity is associated with sleep quality. Further research is needed on menstrual patterns and sleep quality to design interventions to improve sleep outcomes in affected individuals.

Keywords: Menstrual pattern, Premenstrual syndrome, Sleep quality, Secondary school students, Jaffna

Abstract 36:

Psychological effects of treatment among patients with breast cancer at Tellippalai Cancer Hospital

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Background and objectives: Breast cancer represents a significant health concern in Sri Lanka, affecting thousands of women each year, with over 4,000 new cases reported annually. The diagnosis and treatment process can lead to profound psychological distress, alongside physical and social challenges that impact quality of life. Despite the life-saving benefits of treatment, the psychological burden often remains underexplored. This study aims to assess the psychological effects of treatment on patients with breast cancer, with a focus on depression and anxiety and the correlation between psychological distress and social support, along with sociodemographic factors such as age, marital status, education level, and employment status.

Methods: An institutional-based observational cross-sectional study was conducted among breast cancer patients receiving treatment or follow-up at the Tellippalai Trail Cancer Hospital. Ethics approval was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna. Data were collected through an interviewer-administered questionnaire. The Patient Health Questionnaire 9-item depression scale (PHQ-9) was used to assess depression. Statistical analysis was performed using the chi-square test to determine the association between psychological distress and various factors.

Results: A total of 385 patients participated in this study. The mean age of the participants was 56.0 (SD 11.2) years. Among them, 82.9% were married, and 76.4% were unemployed. The findings revealed that 37.4% of patients experienced moderate depression, whereas 83.1% exhibited low levels of anxiety. Major depressive disorders were significantly associated with patients who underwent surgery (p=0.001), those diagnosed within the past six months (p=0.001), and unemployed individuals (p=0.031). Anxiety levels were associated with employment status (p=0.009). However, no significant relationship was identified between anxiety and other sociodemographic factors or treatment. The majority of patients (36.62%) had moderate social support. Patients with low levels of social support displayed heightened levels of depression, whilst anxiety levels remained low across all categories of social support.

Conclusions and recommendations: The study suggests that treatment-related factors and sociodemographic factors significantly influence depression but not anxiety in patients with breast cancer. Higher levels of social support are linked to lower depression rates. These findings underscore the necessity for routine psychological evaluations, enhanced social support systems, patient education, and long-term mental health strategies for patients with breast cancer.

Keywords: Depression, Anxiety, Social support, Breast cancer, Northern Sri Lanka

Abstract 37:

Awareness on breast self-examination among school teachers in Nallur Division

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Background and objectives: Breast cancer is a significant health issue in Sri Lanka. In 2022, breast cancer accounted for 26% of all cancer cases among females in Sri Lanka, with 4,555 new cases reported. The age-standardized incidence rate for breast cancer was 27.3 per 100,000 population. This study aims to assess the knowledge, attitudes, and practices regarding breast self-examination (BSE) among female school teachers in the Nallur Division. Additionally, it examines the socio-demographic factors influencing BSE knowledge, attitudes and practices.

Methods: A cross-sectional descriptive study was conducted among 600 female teachers in the Nallur Division, with a response rate of 74.5% (447 participants). Data were collected through self-administered questionnaires. The participants' overall knowledge, attitudes, and practices regarding BSE were evaluated, along with the association of these factors with socio-demographic characteristics. The chi-square test was used to analyse the data.

Results: The study found that 71.6% of participants had knowledge of BSE, but only 47.5% were aware of the correct time to perform it. Additionally, 47.7% practiced BSE monthly. A positive correlation was observed between a higher level of education and a positive attitude towards BSE (p<0.001). Despite a high level of awareness, few participants knew the appropriate age and frequency for starting BSE. Knowledge of BSE was higher among married teachers and increased with higher education levels. Among the teachers who practice breast self-examination, 42 of them (13.1%) do it monthly as they knew the correct time interval

Conclusions and recommendations: Although most teachers were aware of BSE, gaps in knowledge regarding the correct timing and frequency of the practice were evident. Less than half performed BSE regularly. The study underscores the need for more comprehensive educational programs to improve BSE practice, as raising awareness alone is insufficient for consistent and accurate practice.

Keywords: Breast self-examination, knowledge, attitude, practice, breast cancer awareness

8th Undergraduate Research Symposium 2025

URS 2025

7th of March 2025

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ISBN: 978-624-6150-49-5