



URS 2024

Proceedings of the 7th Undergraduate Research Symposium

Unveiling Insights, Advancing Knowledge Together

Faculty of Medicine
University of Jaffna

7th of March 2024

**Proceedings of the
7th Undergraduate Research Symposium 2024**

**Faculty of Medicine
University of Jaffna
March 07, 2024**

**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 is committed to fostering a culture of excellence in research and academic inquiry. Its scholars have made significant contributions to their respective fields worldwide, a source of immense pride for the university.

The Undergraduate Research Symposium organized by the Faculty of Medicine is an annual event aimed at fostering the research abilities of undergraduate students. This symposium serves as a platform for medical students to hone the research skills they have acquired during their undergraduate studies. The symposium offers opportunities for undergraduates to communicate their research findings and enhance their presentation skills. It also allows the Faculty of Medicine to showcase the research conducted by undergraduate students at their institution. I congratulate the staff of the Faculty of Medicine for their efforts in organizing this student research symposium.

I am very pleased that Emeritus Professor Saroj Jayasinghe of the University of Colombo is with us to deliver the keynote address today. Prof. Jayasinghe has made exceptional contributions to the field of medicine. Apart from serving as (former) Chair Professor of Medicine at the Department of Clinical Medicine, University of Colombo, Prof. Jayasinghe was the founder Director of the Medical Education Development and Research Centre (MEDARC). He has diverse research interests spanning clinical medicine, medical humanities and public health.

I congratulate the student researchers who will present their research at the URS 2024. Participating in scientific forums such as this will not only help you to enhance your research and communication skills but will also expand your horizons. Embrace this opportunity to network, learn from others, and be inspired to engage in more research.

Wishing you all a memorable and productive 7th Undergraduate Research Symposium.

Prof. S. Srisatkunarahaj
Vice Chancellor
University of Jaffna

Message from the Dean of the Faculty of Medicine



It is indeed commendable and fitting to extend congratulations to the team behind the 7th Undergraduate Research Symposium (URS2024) of the Faculty of Medicine, University of Jaffna, Sri Lanka, with the theme "Unveiling Insights, Advancing Knowledge Together" for their efforts in promoting academic excellence and collaboration.

The Undergraduate Research Symposium serves as a vital platform for undergraduates to engage in meaningful research discussions and share their findings with peers, academics, and clinicians. It fosters a culture of inquiry and knowledge dissemination, essential for the development of future healthcare professionals. By actively participating in such events, students not only enhance their understanding of research methodologies but also contribute to advancing medical knowledge and improving patient care. Encouraging students to continue their efforts in medical research will undoubtedly enrich their professional journey and benefit the broader healthcare community.

I express my gratitude to Prof. S. Srisatkunarah, Vice Chancellor of the University of Jaffna, Emeritus Professor Saroj Jayasinghe from the Faculty of Medicine, University of Colombo, and all distinguished speakers for their valuable contributions. As I acknowledge the support of the Jaffna Medical Faculty Overseas Alumni (UK), I must emphasise the importance of such collaboration in organising events like the annual URS at the Faculty. Additionally, the efforts of the URS2024 Organizing Committee must be appreciated alongside the collective endeavour that ensures the success of such events.

Finally, I congratulate the student researchers and wish them a productive and rewarding experience at the 7th Undergraduate Research Symposium.

Prof. R. Surenthirakumaran
Dean
Faculty of Medicine
University of Jaffna

Message from the Chairperson URS 2024



It is my pleasure to convey this message to the proceedings of the 7th Undergraduate Research Symposium (URS) 2024 of the Faculty of Medicine, University of Jaffna, which has been conducted annually since 2018.

The word knowledge could have several meanings but it is the ultimate source of power and essential for success. The annual undergraduate research symposium is indeed an important event in the academic calendar of the Faculty of Medicine, and this year too may play a crucial role in shaping new knowledge amongst the students of the faculty.

This year's theme "Unveiling insights, advancing knowledge together" illustrates that involvement in research can give more knowledge to medical students, empowering them to think out of the box and learn beyond the field of medicine. As the URS proceedings demonstrate, some of our students have ventured into unfamiliar territory, gathering insights of critical relevance to health. In addition, the URS enables students to enhance their communication skills, while helping them to gain new perspectives by engaging in a scientific forum.

On behalf of the URS 2024 Committee, I thank the Vice Chancellor of University of Jaffna, and the Dean, Faculty of Medicine, for their endless support in organizing this scientific event at our faculty.

I express my gratitude to the keynote speaker, Prof. Saroj Jayasinghe (Emeritus Professor Faculty of Medicine, University of Colombo) for honouring us with his presence at URS 2024. Prof. Jayasinghe is a versatile personality in the academic arena and a role model for our students to follow.

I am also grateful for the generous financial support extended by the Jaffna Medical Faculty Overseas Alumni – United Kingdom in partnership with the Medical Faculty Alumni Association.

I extend my appreciation to the members of the Organizing Committee, academics, extended faculty, and administrative and supporting staff of the Faculty of Medicine for their commitment towards conducting URS 2024 as a successful event.

Finally, I congratulate the students for their enthusiastic participation in this scientific programme.

Dr. K. Guruparan
Chairperson URS 2024

URS 2024 Organizing Committee



Seated (Left to Right): Dr. B. Balagobi, Ms. T. Theebihai, Ms. G. Sobika, Ms. J. Narthana, Ms. S. Vithushany, Dr. A. Muruganathan, Dr. K. Guruparan (Chairperson), Prof. R. Surenthirakumaran (Dean), Dr. P.A.D. Coonghe, Dr. T. S. Navaratinaraja, Dr. Nirubaa Umasankar, Dr. Romini Niranjan, Dr. Ramya Kumar, Ms. S. Sasrubi, Ms. T. Tharmika, Ms. S. Thayalini, Dr. Jebanathy A. Pradeepan, Dr. S. Raguraman

Standing (Left to Right): Mr. R. Tharsan, Vasanthakumar Hamsaananth, Madasamy Kugatharshan, Philip Deon Jonathan, Kanesamoorthy Kanoojan, Faisaldheen Rifla, A. M. Shukra Anaqath, Siyadh Fathima Shifani, M. I. Fathima Musfiha, Varatharasa Avanika, Dhushyanthan Vaishnavi, Ms. N. Saranya, Ms. K. Saranya, Ms. A. Ann Anobiya, Mr. S. Pathmasivam, Mahendran Shankeethan, Sriketheeswaran Saranga, Kokuladasan Suruthivasini, Ragavi Uthayakumar, M. S. Fathima Israth Serin, Mr. S. Malarvarnan

Absent: Mr. S. Thuvakaran, Mr. V. Gajenthiran, Mr. K. Bakeekaran, Hamshika Rajendran

URS 2024 Organising Committee

Dr. K. Guruparan (Chairperson)

Mr. R. Tharsan

Dr. P.A.D. Coonghe

Mr. S. Malarvarnan

Dr. T. S. Navaratinaraja

Ms. N. Saranya

Dr. N. Umasankar

Dr. J. A. Pradeepan

Student Members (44th Batch)

Dr. Ramya Kumar

Dhushyanthan Vaishnavi

Dr. S. Raguraman

Faisaldheen Rifla

Dr. B. Balagobi

M. I. Fathima Musfiha

Dr. A. Murugananthan

Ragavi Uthayakumar

Dr. Romini Niranjana

Mahendran Shankeethan

Mr. S. Pathmasivam

A. M. Shukra Anaqath

Ms. A. Ann Anobiya

Siyadh Fathima Shifani

Ms. K. Saranya

Kanesamoorthy Kanoojan

Ms. T. Theebihai

M. S. Fathima Israth Serin

Mr. S. Thuvakaran

Philip Deon Jonathan

Mr. V. Gajenthiran

Varatharasa Avanika

Mr. K. Bakeekaran

Kokuladasan Suruthivasini

Ms. S. Thayalini

Madasamy Kugatharshan

Ms. J. Narthana

Vasanthakumar Hamsaananth

Ms. S. Vithushany

Hamshika Rajendran

Ms. G. Sobika

Sriketheeswaran Saranga

Ms. T. Tharmika

Ms. S. Sasrubi

Winners of Awards – 41st Batch

Dr. Vaithyanathan Nadarajah Memorial Prize

Awarded to the best candidate in Community Medicine with a distinction in the subject
Narayanamoorthy Aburajan

Velauthar Sothinagaratnam Memorial Award

Awarded for the best research in Community Medicine in the field of Microbiology

Mohamed Akbar Mohamed Akeel
Kamalanathan Hemapratheep
Shahul Hameed Fathima Nushra
Kopalaratinam Theepan
Mohamed Fathima Waseema

Dr. Murugananthan Award

Awarded to the research which got the highest marks in the field of mental health among undergraduate researches conducted in Community and Family Medicine

Geethanshaly Singarasa
Mohamed Gazzali Hassan Fathima Aqkeela
Wanni Arachchige Sudheera Gayan Madhusanka
Rajendran Joyal

Prof. Appakutty Sinnathamby Memorial Award

Awarded for the best research in reproductive health related topics

Jayasinghe Hitihamylage Kavishka Gimhani
Dewndara Dewasiri Narayanalage Madhusa Darshani Jayantha
Michael Luckshana Johanie
Thavakodirasa Shriram
Weranga Shenal Wanniarachchi

Covinthapillai Candiah Research Award

Awarded to the best three researches undertaken in Phase II

Geethanshaly Singarasa
Mohamed Gazzali Hassan Fathima Aqkeela
Wanni Arachchige Sudheera Gayan Madhusanka
Rajendren Joyal
Dulshara Sathsarani Jayawardhana
Thurairasa Kabisan
Thuraisingam Nishandansan
Piraveena Raghavan
Rathnayaka Mudiyansele Akila Eranga Rathnayake
Nusha Mashoor
Mohammed Nasar Fathima Naseela
Suboeciya Selvarajah
Kandangamuwa Pathirannahalage Dinithi Mihirani Somachandra
Anjelo Joseph Vethanayagam

Reviewers of Abstracts

Faculty Reviewers

Dr. S. Raguraman
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Dept. of Parasitology

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Dept. of Paediatrics

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Dept. of Microbiology

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Medical Education Unit

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Dept. of Medicine

Dr. R. Kumar
Dept. of Community & Family Medicine

Dr. K. Sanchayan
Dept. of Pharmacology

Dr. P.A.D. Coonghe
Dept. of Community & Family Medicine

Prof. N. Suganthan
Dept. of Medicine

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Nallur MOH Office

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Teaching hospital, Jaffna

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RDHS, Jaffna

Dr. N. Parameswaran
PDHS, Jaffna

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Faculty of AHS, Jaffna

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PDHS, Trincomalee

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PDHS, Jaffna

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Consultant Community Physician

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Teaching hospital, Jaffna

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PGIM, Colombo

Dr. M. Guruparan
Teaching hospital, Jaffna

Dr. A. Thileepan
Health Village Pannai

Mrs. J. Viniththira
Faculty of AHS, Jaffna

Dr. T. Umaharan
Base Hospital Tellipalai

Programme Overview

	Venue	Time
Inauguration	Hoover Auditorium	08.00 - 10.30
Tea break	Board Room	10.30 - 10.45
Sessions	Subtheme 1 – Exploring health and illness	Hoover Auditorium 10.45 - 12.30
	Subtheme 2 – Empowering communities for health and wellness	Conference Hall 10.45 - 12.30
	Subtheme 3 – Building resilient health systems	Lecture Hall I 10.45 - 12.30
Lunch break	Seminar Room	12.30 - 14.00
Awarding ceremony	Hoover Auditorium	14.00 - 14.30

Chairpersons and Evaluators

Venue	Chairpersons	Evaluators
Hoover Auditorium <i>Subtheme 1</i> Exploring health and illness	Prof. K. Muhunthan, Professor in Obstetrics & Gynaecology, Faculty of Medicine, University of Jaffna Dr. S. Udhayakumar, Senior Lecturer in Anatomy, Faculty of Medicine, University of Jaffna	Dr. V. Murali, Consultant Community Physician, Anti Filariasis Campaign –Public Health Complex Dr. (Mrs). G. Yalini, Lecturer, Department of Pharmacology, Faculty of Medicine, University of Jaffna
Conference Hall <i>Subtheme 2</i> Empowering communities for health and wellness	Prof. M. Kalamathy, Professor, Department of Microbiology, Faculty of Medicine, University of Jaffna Prof. S. Kannathasan, Professor in Parasitology, University of Jaffna	Dr. S. Arulkumaran, Provincial Epidemiologist, Provincial Department of Health Services, Eastern Province, Trincomalee Dr. D. Vinothan, Regional Director of Health Services Mannar
Lecture Hall I <i>Subtheme 3</i> Building Resilient Health Systems	Dr. K. Sanchayan, Senior Lecturer, Department of Pharmacology, Faculty of Medicine, University of Jaffna Dr. R. Gajanthan, Consultant Physician, Teaching Hospital Jaffna	Dr. J. A. Pradeepan, Senior Lecturer & Consultant Physician Department of Medicine, Faculty of Medicine, University of Jaffna Dr. M. Umashankar, Deputy Regional Director of Health Services Jaffna

Oral Presentations – Abstracts and Schedule – 42nd Batch

ID	Title and Authors	Estimated Time
Hoover Auditorium: Subtheme 1 – Exploring health and illness		
Abstract 01	Prevalence of common menstrual problems and their association with psychological stress among female medical students of University of Jaffna Dilshan AGP, <u>Nishahari E</u> , Minoli HE, Nibal MFA, Ahamed FRR, Shivaganesh S, Sritharan A	10.45 am
Abstract 02	Assessing the prevalence of selected cardiovascular risk factors of stroke among known hypertensive patients admitted to the medical wards at Teaching Hospital Jaffna <u>Sujeevan N</u> , Afra MA, Rupasinghe SRDH, Rathnayake RMNM, Kumara KNDH, Surenthirakumaran R, Vinojan S	10.55 am
Abstract 03	Body image dissatisfaction and social anxiety among Jaffna medical students Nilani S, <u>Krishika P</u> , Bandara SMSH, Madushika DMDU, Kulenthiran I, Kumar R, Sivayokan S	11.05 am
Abstract 04	Factors related to visual impairment and its association with day to day living activities among elders in the State Elders' Home – Kaithady, Jaffna <u>Sivapriyan S</u> , Nayanamali CPTK, Rajapaksha S.H, Theshmaie M, Sulochana TM, Rajeev R, Kumarendran B	11.15 am
Abstract 05	Depression and loneliness among elders at the State Elders' Home – Kaithady, Jaffna <u>Miyuelin Jacob</u> , Dayas Mohanathas, Nadarajan Niranjana, Meera Lebbe Asfaq Ahamed, Prasani Ilangakoone, Sivathas S, Coonghe PAD	11.25 am
Abstract 06	Control of bronchial asthma and association of factors influencing control of asthma in adult asthmatic patients at the Pulmonary Clinic, Teaching Hospital Jaffna <u>Sithara GSSR</u> , Anuradha IJ, Saidha K, Anushshiya S, Chrishwin R, Sivaganesh S, Sivakanth S	11.35 am
Abstract 07	Association of cellulitis with socio-demographic factors, BMI and diabetes mellitus among patients admitted to the surgical casualty ward of Teaching hospital, Jaffna Pushpakumar K, Jizanee MJA, Aaqila MAF, <u>Hana SA</u> , Fernando WNV, Surenthirakumaran R, Giridharan S	11.45 am
Abstract 08	Miscarriage: Related factors and management among the women with miscarriage admitted to the gynaecological wards of Teaching Hospital Jaffna Paviththiran S, Majuran S, <u>Shanuga A</u> , Chandrasekara SAMB, Aasaththusana MIF, Coonghe PAD, Guruparan K	11.55 am

Abstract 09	A descriptive study on chronic kidney disease and its associated factors in patients with type 2 diabetes mellitus at the Diabetic Centre, Teaching Hospital Jaffna <u>Anojan S</u> , Jeseera JF, Samra JF, Khansa MR, Surenthirakumaran R, Parameswaran N, Aravinthan M	12.05 pm
Abstract 10	Quality of life among the patients with ischemic heart disease attending the Cardiology clinic, Teaching hospital, Jaffna Ashika A, <u>Lakmina EATS</u> , Abeyrathna HMWD, Hansa NF, Sujeeva S, Coonghe PAD, Kumaran S, Lakshman P	12.15 pm
Conference Hall: Subtheme 2 – Empowering communities for health and wellness		
Abstract 11	Knowledge and practice on road traffic rules among Sri Lankan Transport Board bus drivers in Jaffna Abishanth T, <u>Jahan H</u> , AMSS Senanayake, Thaakshajini R, SDNP Samarasinghe, Parameswaran N, Kandeepan K	10.45 am
Abstract 12	Knowledge and dietary practices related to iron and folic acid among GCE O/L (year 2023) female students in Jaffna divisional schools <u>Venuuha S</u> , Suventhira A, Danegka S, Thilakarathna AMSD, Aththanayaka AMRC, Sithamparapillai K, Parameswaran N	10.55 am
Abstract 13	Impact of online studies and its associated factors on academic performance among Ordinary Level school students (Academic year 2020/21) in Jaffna MOH Thivisha S, <u>Rifadha F</u> , Andreshiya F, Shivamainthaan K, Tharshikan S, Rajeev G	11.05 am
Abstract 14	Knowledge on dog ownership and rabies prevention among Grade 10 students in the Jaffna Educational Zone Gnanendran K, Inthirakumar M, Muralietharan N, <u>Sivanathan S</u> , Rajapaksha WPHE, Coonghe PAD, Gajanthan R	11.15 am
Abstract 15	Knowledge and perceptions on gender-based violence and their associated factors among patients admitted to Teaching Hospital, Jaffna <u>Sivapiriya S</u> , Nirosha S, Pathum Sasanka MA, Ravindu Dissanayake DMT, Shivarathan V, Rajeev G, Pranavan S	11.25 am
Abstract 16	Awareness of oral cancer disease and its risks factors among adults patients in the out-patient department, Teaching Hospital Jaffna <u>Athmika N</u> , Ilakeya K, Wijebandara IDHC, Premakanthan K, Kajan P, Shivaganesh S	11.35 am

Abstract 17	Awareness on burn injuries, first aid and associated factors among students of National Educational Colleges in the Northern Province of Sri Lanka <u>Fasila N</u> , Jayaweera JMCTM, Dissanayake DMKGS D, Thivaraga K, Abishiha K, Kumarendran B, Elancheliyapallavan K	11.45 am
Abstract 18	Knowledge and attitude towards children's eye care among parents of young children admitted to the paediatric wards of Teaching Hospital Jaffna Dhuvarahan R, <u>Keshini Y</u> , Shivaany Y, Jayathilake PGND, Dayananda TKS, Kumar R, and Chandrakumar S	11.55 am
Abstract 19	Knowledge, attitude and practice in relation to worm control and associated factors among mothers of children admitted to pediatric wards, Teaching Hospital Jaffna: A mixed method study <u>Hashmath MJJ</u> , Bandara MRSS, Dasanayaka DMML, Viththagan K, Kannathasan S, Kumarendran B	12.05 pm
Abstract 20	Usage of computer unit and associated factors among medical students of the University of Jaffna Dinusha WAW, Rathnayaka RST, <u>Sahra MNF</u> , Nirupama LGU, Shanu MP, Kumarendran B, Muruganathan A	12.15 pm
Lecture Hall II: Subtheme 3 – Building resilient health systems		
Abstract 21	Factors associated with academic performance among students of the Faculty of Medicine, University of Jaffna <u>Insha ISF</u> , Aakeela Shahana MZ, Irhaam MFM, Kamshalini S, Waseefa JF, Rajeev G, Surenthirakumaran R	10.45 am
Abstract 22	Health-related-out-of-pocket expenditures, their distribution and determinants among patients undergoing dialysis at Teaching Hospital Jaffna Krishanth M, Kanisdija K, Devindani TKS, <u>Sankalpana H</u> , Azhar A, Kumar R, Brammah T	10.55 am
Abstract 23	Migration intentions and associated factors among early career doctors at Jaffna Teaching Hospital Sasika Nipun SA, <u>Saliha N</u> , Laksha T, Fathima Misfera MS, Ravishka Dulaj P, Kumar R, Venoden D	11.05 am
Abstract 24	Challenges and associated factors of being a Nursing Officer in the Teaching Hospital Jaffna Hajeekaran L, Keerthika Y, Kavindu Hansaka MAW, Uvashri T, <u>Thayashakhary A</u> , Kumarendran B, Sivayokan S	11.15 am

Abstract 25	Pathways to accessing healthcare and associated factors among young febrile children admitted to the pediatric wards of Teaching Hospital Jaffna Rishad MHM, <u>Faseeha SE</u> , Aathil Ahamed Y, Wijayabandara SGMUS, Mhathulaa K, Kumar R, Umasankar N	11.25 am
Abstract 26	Difficulties encountered by the Public Health Inspectors in the Northern Province during the COVID-19 pandemic <u>Keerthika V</u> , Lalith Kumara HM, Tharshy G, Lakshika S, Mathumilan T, Coonghe, PAD	11.35 am
Abstract 27	Challenges with accommodation among medical students of the University of Jaffna Risafa JF, <u>Kayaline S</u> , Arun KC, Dissanayake DMRP, Simra EF, Kumar R, Ambalavanar V	11.45 am
Abstract 28	Meeting the English language barrier: The perception of first-year students of University of Jaffna <u>Fathima MHR</u> , Fahman MN, Pathmasooriya KDTM, Jayasundara JNR, Thevanthy G, Coonghe PAD, Sanchayan S	11.55 am
Abstract 29	Sociodemographic, economic, psychological factors and home care among patients with common gynecological malignancies attending the oncology clinic at Teaching Hospital Jaffna and Tellippalai Trail Cancer Hospital <u>Hikma YN</u> , Kobithan S, Shukra IF, Indrajith GDS, Madhushani KAI, Surenthirakumaran R, Kavitha I	12.05 pm
Abstract 30	Perceptions of inhalers and associated factors among patients with bronchial asthma attending the Respiratory Clinic at Teaching Hospital Jaffna <u>Razaan MMF</u> , Ranasinghe DOA, Senanayake MM, Jeevanantham R, Sangavi S, Kumarendran B, Athavan M	12.15 pm

Prevalence of common menstrual problems and their association with psychological stress among female medical students of University of Jaffna

Dilshan AGP¹, Nishahari E¹, Minoli HE¹, Nibal MFA¹, Ahamed FRR¹, Shivaganesh S², Sritharan A³

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³*Teaching Hospital Jaffna*

Background and objective: Variations in menstrual patterns due to several factors are frequently observed among young females. Common menstrual problems and stress are two very common complaints among female medical students. This study aims to describe the prevalence of common menstrual problems, levels of stress and the association between common menstrual problems and stress among female medical students of the University of Jaffna.

Methods: This was an institution-based descriptive cross-sectional study. Data was collected from November to December 2022 from female medical students in the University of Jaffna using a self-administered questionnaire. Perceived stress level was assessed using PSS-10 (Perceived Stress Scale). Perceived stress above 27 was considered as “with perceived stress”. This study was analyzed by SPSS (26th version) using descriptive statistics and chi-square test. P value <0.05 was considered as statistically significant.

Results: Among 389 students, 97.4%, 67.9%, 23.1%, 13.9%, 11.1%, and 6.4% reported having dysmenorrhea, heavy menstrual periods, abnormal menstrual intervals, abnormal extra light period, abnormal bleeding and intermenstrual spotting, and three or more missed periods in a row, respectively. More than half of the students were affected by premenstrual symptoms. In total, 36.5% of participants were stressed on most occasions on a usual basis. There was a significant association (<0.05) between psychological stress and heavy menstrual bleeding (p=0.009) and abnormal menstruation intervals (p=0.041). However, there was no evidence of a statistically significant association between psychological stress and abnormal bleeding or spotting between menstruation, abnormal extra-light periods, three or more missed periods in a row during the last 4 months, any of the premenstrual symptoms or dysmenorrhea.

Conclusion: The study found a statistically significant association between psychological stress and heavy menstrual bleeding, as well as abnormal menstrual intervals. However, dysmenorrhea, despite its high prevalence among menstrual abnormalities, did not show evidence of a statistically significant association with psychological stress. Even though common menstrual problems in the target population were not strongly associated with psychological stress, all medical faculties should make arrangements for the identification of students with psychological stress and menstrual problems and implement ways to overcome these issues.

Keywords: Dysmenorrhea, Heavy menstrual bleeding, Premenstrual symptoms, Psychological stress, Female medical students

Assessing the prevalence of selected cardiovascular risk factors of stroke among known hypertensive patients admitted to the medical wards at Teaching hospital Jaffna

Sujeevan N,¹ Afra MA,¹ Rupasinghe SRDH,¹ Rathnayake RMNM,¹ Kumara KNDH,¹ Surenthirakumaran R², Vinojan S^{3,4}

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Introduction and objective: Stroke, a leading cause of global disability and the third most common cause of death, is largely influenced by cardiovascular risk factors with hypertension as the main contributor. Sri Lanka has a hypertension prevalence rate of 10.4 per 1000 population with a 2:1 male-to-female ratio. This study describes the prevalence of known selected cardiovascular risk factors of stroke and assesses the association of socio-demographic, lifestyle and healthcare-related factors with the presence of selected cardiovascular risk factors of stroke among known hypertensive patients admitted to the medical wards at Teaching hospital Jaffna

Methods: A hospital-based cross-sectional study was conducted from Feb 2022 to Jul 2023 among 455 hypertensive patients admitted to the medical wards of Teaching Hospital Jaffna. Data were collected via interviewer-administered questionnaires and data extraction sheets and analysed with SPSS. The analysis includes descriptive statistics such as percentages, frequency distributions, median, range. The chi-square test was used to test for associations.

Results: Of the 455 participants, 80.7% had more than one selected risk factor and 65.1% had 2-3 selected risk factors with a median and range of 2 and 7, respectively. The distribution of the selected risk factors were as follows: 58.9% diabetes mellitus, 36.5% dyslipidaemia, 9.9% with alcohol intake and 5.5 % with vascular disease & smoking habits. Being a male ($p=0.001$) has a significant association with having more than one selected risk factor. There was a significant association with family history, unhealthy food practices and healthcare-related factors such as drug compliance and regular clinic follow up of diabetes mellitus. Family history of dyslipidaemia and regular clinic follow up were significantly associated with dyslipidaemia at the p value of 0.05.

Conclusion and recommendations: Majority of patients had more than one risk factor of stroke. Among the 7 selected risk factors, there is a two-fold increase in the distribution of diabetes mellitus and dyslipidaemia over 8 years. Multi-comorbidities (more than one selected risk factor) are common, certain lifestyle factors are contributing and health-related factors like compliance must be considered in management.

Keywords: Cardiovascular risk factors, Stroke, Sociodemographic and lifestyle related factors, Hypertension, Jaffna

Body image dissatisfaction and social anxiety among Jaffna medical students

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Background and objective: Body image dissatisfaction (BID) and social anxiety are known to be widely prevalent among young people. Within this group, medical students are no exception. The association between BID and social anxiety has been investigated in other settings, but not in Sri Lanka. This study aimed to determine the prevalence of BID and social anxiety, their associated factors and the relationship between BID and social anxiety among medical students at the University of Jaffna.

Methods: An institution-based descriptive cross-sectional study was conducted among first to fourth year students of the Jaffna Medical Faculty from February 2022 to July 2023. Stratified random sampling by batch and gender was carried out to select the sample. Stunkard Figure Rating Scale and Social Phobia Inventory were used to measure BID and social anxiety, respectively. Chi square test was used to determine the associations (critical level 0.05).

Results: A total of 349 students participated with response rate of 93%. Over two-thirds (67.9%, n=237) had BID, of whom 70% had positive dissatisfaction (greater body size than their perceived ideal) and 30% had negative dissatisfaction (lesser body size than their perceived ideal). There was a significant association between BID and body mass index ($p<0.001$), relationship status ($p=0.049$), and social media exposure ($p=0.016$); overweight students, those without partners and those exposed to social media for <2 hours were most likely to have BID. In the sample, 44.1% (n=154) of students had scores compatible with social anxiety. A significant association was found between social anxiety and sex ($p=0.001$) and social media exposure ($p=0.016$); female students and those who spend <2 hours on social media were more likely to have social anxiety. There was a significant association between BID and social anxiety ($p=0.016$); students with BID were more likely to have social anxiety.

Conclusion and recommendations: The results suggest that a significant percentage of students of the Jaffna Medical Faculty have BID and social anxiety. More over, those with BID are more likely to have social anxiety. While research is needed to explore this relationship further, we recommend raising awareness and intervening to support students affected by with these mental health problems.

Keywords: Body image dissatisfaction, Social anxiety, Stunkard Figure Rating Scale, Social Phobia Inventory, Medical students

Factors related to visual impairment and its association with day to day living activities among elders in the State Elders' Home – Kaithady, Jaffna

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Introduction and objective: Vision impairment is a common problem among the ageing population. There are a few studies on factors associated with vision impairment and its effect on day to day living activities of elders. The objective of this study was to describe the sociodemographic and medical factors related to visual impairment and the association between vision impairment and daily living activities among elders.

Methods: A cross-sectional analytical study using non-probability sampling was carried out among 139 elders in the State Elders' Home Kaithady, from February 2022 to October 2023. An interviewer-administered questionnaire and a data extraction sheet were used for data collection. We assessed how activities of daily living (dependent variable) are affected by visual impairment (independent variable). We measured the activities of daily living by using the National Eye Institute Visual Function Questionnaire and the scoring system provided by the National Eye Institute. Vision impairment was categorized according to the classification of distance vision impairment for the better eye (by WHO). Chi square test and t test were used to analyze the data. P value ≤ 0.05 was considered significant.

Results: More than half of the population had either mild, moderate, or severe vision impairment. About a third of the elders had normal visual acuity with no vision impairment (36%), while 5% had blindness. Sociodemographic factors did not show any statistically significant association. When considering age and educational level, elders above 80 years (77.3%) and elders who had studied less than O/L (69.6%) had highest vision impairment. Only about half of the elders had medical records. No medical factors showed a statistically significant association with visual impairment. Elders with hypertension (65.5%) and diabetes mellitus (68.2%) had higher vision impairment. Among the elders without medical records, majority had vision impairment (62.3%). There were no pronounced differences in mean scores for the 11 scales of the NEI-VFQ (SL). Eight scales showed statistical significance and association.

Conclusion and recommendations: More than half of the population had vision impairment. People with advanced age, low educational level and co morbidities such as diabetes mellitus showed a higher visual impairment. Vision impairment was inversely associated with activities of daily living.

Keywords: Vision impairment, Elders, Socio-demographic factors, Medical factors, NEI-VFQ

Depression and loneliness among elders at the State Elders' Home – Kaithady, Jaffna

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Background and objective: Physical diseases, psychological illness, and adjustment problems are frequently encountered in aging. In Sri Lanka, 12.3% of the population is aged 60 years or above—the highest in South Asia. The proportion of institutionalised elders is rising with attendant mental health problems such as depression and loneliness. Institutionalized elders lack community resources, heightening their vulnerability to depression and loneliness. This study aimed to assess depression, loneliness, and their associated socio-demographic and health-related factors among elderly people in the State Elders' Home – Kaithady, Jaffna.

Methods: An institution-based analytical cross-sectional study was conducted among 127 elders at the State Elders' Home – Kaithady, Jaffna. Ethics approval was obtained from the Ethics Review Committee at Faculty of Medicine, University of Jaffna. Data collection utilized interviewer-administered questionnaires and data extraction sheets, including the Geriatric Depression Scale and a locally prepared loneliness scale validated for content by a psychiatrist, using the Kobocollect Toolbox. Statistical analysis was performed using SPSS, including Chi-square test, Independent t-test, one-way ANOVA, and correlation coefficient test.

Results: In the sample, males comprised 56.7%, with a mean age of 72.46 years (SD 9.63). Among the elders, 56.7% were depressed; females had higher mean Geriatric Depression Scale scores. Over a third (40.2%) experienced moderate loneliness, similar across genders. Visual problems, hypertension, and diabetes were common. Depression was significantly associated with occupation ($p=0.002$) and loneliness ($p<0.001$). Marital status, presence of children and duration of stay were neither associated with depression nor loneliness.

Conclusion and Recommendation: Depression and loneliness among institutionalized elders are often underdiagnosed and untreated. The results of this study indicate the need to enhance the mental health and quality of life of institutionalised elders. Recommendations include a detailed evaluation of depression and treatment of those affected, and ensuring that residents of elders' homes receive improved social services.

Keywords: Institutionalized elders, Depression, Loneliness, Elders' homes, Jaffna.

Control of bronchial asthma and association of factors influencing control of asthma in adult asthmatic patients at the Pulmonary Clinic, Teaching Hospital Jaffna

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Introduction and objective: People with asthma can have different levels of control over their symptoms: some manage well, some moderately, and others poorly. Doctors monitor how well asthma is controlled by considering daytime and nighttime symptoms, inhaler use, and how much asthma limits activities. Many factors affect asthma control, like age, weight, family history, allergies, smoking, respiratory tract infections, and how waste is handled. The objective of this study is to determine the level of control of bronchial asthma and association of triggers for the control of asthma among adult asthmatic patients at the Pulmonary Clinic, Teaching Hospital Jaffna.

Methods: A clinic-based descriptive cross-sectional study was carried out from November 2022 to January 2023 at the Pulmonary Clinic in Teaching Hospital Jaffna by using an interviewer-administered questionnaire. GINA assessment of asthma control in adults was used as a tool. Data were processed and analyzed using SPSS software (Version 22.0). The chi square test was used to determine the association between control of bronchial asthma and socio-demographic factors, duration of bronchial asthma, family history of bronchial asthma, history of allergy for various exposures, sensitization history for different exposures, respiratory tract infections, waste management, and active and passive smoking status.

Results: We looked at 356 adult asthma patients and found factors that affect asthma control, like age, weight, family history, specific allergies, past infections, and waste disposal habits. The asthma control levels were categorized as well-controlled (23.9%), moderately controlled (28.1%), and poorly controlled (48%). Older patients and those who are very thin or overweight tended to have worse control. Allergies to pollen, mosquito coils, and pesticides, make control harder, as does exposure to environmental dust (road dust, smoke, and bakery dust). Respiratory tract infections and burning waste also make asthma control worse.

Conclusion and recommendations: The study revealed a significant number of adult patients with poorly controlled asthma. To improve asthma control, it is important to live healthily and eat well to maintain a normal weight. Avoiding dust, smoke, and allergens by wearing masks may help. Taking steps to prevent infections is crucial. Also, it is better to recycle waste instead of burning it. These changes can make managing asthma easier.

Keywords: Allergens, Activity limitation, Environmental exposures, Family history, Night time symptoms

Association of cellulitis with socio-demographic factors, BMI and diabetes mellitus among patients admitted to the surgical casualty ward of Teaching hospital, Jaffna

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Introduction and objective: Cellulitis is a preventable condition which causes a considerable amount of hospital admissions. Understanding the common risk factors for the development of cellulitis is useful to prevent it. This study aimed to determine the association of cellulitis with socio-demographic factors, BMI and diabetes mellitus among patients admitted to the surgical casualty ward of Teaching Hospital, Jaffna.

Methods: An institution-based descriptive cross-sectional study was conducted from February 2022 to July 2023 among 279 patients admitted to the surgical casualty ward of Teaching Hospital, Jaffna. Data were collected using interviewer-administered questionnaire and entered and analyzed using SPSS. Chi-square test was used to assess for associations (critical level 0.05 level).

Results: Of 279 participants, majority were males 178 (63.8%), and many were within the age range of 21-40 years (38%). In the sample, 66 (23.7%) patients had diabetes and 24 (8.6%) had cellulitis. A significant association of cellulitis with sex and age was observed, where being female (58.3%) and age above 40 years (73.9%) had more risk. Religion and highest educational qualification had a significant association with cellulitis, whereas ethnicity, occupation and BMI category did not have any significant association at the p value of 0.05. Meanwhile, diabetes had significant association with sex and age where males (54.5%) and being above 40 years of age (87.8%) had more risk. No significant association was observed between ethnicity, religion or BMI category with diabetes. Development of cellulitis was significantly associated with diabetes (54.2%) than non-diabetes (45.8%) at the p value of 0.05.

Conclusion and recommendations: As a significant association between diabetes and cellulitis was observed, enhanced focus on diabetic patients is crucial to prevent development of cellulitis with the consideration of socio-demographic factors such as sex and age.

Key words: Cellulitis, Diabetes mellitus, BMI

Miscarriage: Related factors and management among the women with miscarriage admitted to the gynaecological wards of Teaching Hospital Jaffna

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Introduction and objective: The term miscarriage is used to describe a pregnancy that fails to progress beyond the 24th week, leading to death or foetal expulsion. Accounting for about a quarter of all pregnancies, miscarriage is known to be associated with uterine abnormalities, genetics, age, medical conditions, medications, and lifestyle changes. This study investigated the association of sociodemographic, obstetric factors, medical conditions and management of women with miscarriages admitted to the gynaecological wards of Teaching Hospital Jaffna.

Methods: This was a hospital-based descriptive cross-sectional study among 100 mothers admitted to the gynecological wards of Teaching Hospital Jaffna. Data were collected using an interviewer-administered questionnaire and data extraction sheet and analyzed with SPSS software. The independent t-test was used to test for associations.

Results: Our study found that 69% of mothers were between 20-34 years, with a mean maternal age of 31.3 years and a mean BMI of 23.8 kgm⁻². Among them, 75% were unemployed, 21% were degree holders and 83% were from low-income families. Almost all were married and 59% lived in a nuclear family. Over three-fourths (76%) of mothers had not taken folic acid in the 3 months prior to conception. The majority had first-trimester miscarriages (69%) with 74% experiencing vaginal bleeding. Hypothyroidism (12%) was the most common medical condition encountered. In the sample, 17%, 66% and 17% were managed conservatively, medically and surgically, respectively. Misoprostol was the mainline drug used for medical management. A significant association was found between prescription of antibiotics and POA at miscarriage (p=0.037).

Conclusion and recommendations: The majority of women with miscarriage were admitted with a first-trimester miscarriage. Most had not taken pre-conceptual folic acid supplementation which is a known risk factor. The majority were medically managed with misoprostol. Promoting pre-conceptual folic acid intake and conducting population-based studies to assess risk factors in local settings is recommended.

Keywords: Miscarriage, Pre-conceptual folic acid, Misoprostol, Hypothyroidism, Jaffna

A descriptive study on chronic kidney disease and its associated factors in patients with type 2 diabetes mellitus at the Diabetic Centre, Teaching Hospital Jaffna

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Background and objective: The prevalence of chronic kidney disease (CKD), particularly in diabetic patients, is increasing rapidly throughout the world. In the current era, many individuals in developing nations suffer from diabetes which is a major risk factor for CKD. This study aimed to determine the pattern of CKD and the association of lifestyle, sociodemographic and clinical factors with the pattern of CKD in patients with type 2 diabetes mellitus attending the Diabetic Centre, Teaching Hospital Jaffna (THJ).

Methods: This hospital-based descriptive cross-sectional study was conducted among 317 patients with type 2 diabetes mellitus (DM) attending the Diabetic Center, THJ. Data were collected using an interviewer-administered questionnaire and data extraction sheet. SPSS was used to analyze the collected data. Chi-square test was performed to assess the association of selected variables with CKD and its parameters.

Results: In total, 317 patients participated in the study. In the sample, 185 (58.4%) were female. The majority (n=284, 89.6%) were more than 40 years of age. Among the participants, 103 (32.5%) had type 2 DM for >10 years; 231 (72.9%) were non-smokers and 244 (77%) did not consume alcohol; 177 (55.8%) adhered to a diabetic diet; 248 (78.2%) had fasting blood sugar above 126 mg/dl and 259 (81.7%) had HbA1C above 6.5%. A large proportion of patients who were overweight (n=43, 19.1%) had CKD; 206 (65%) patients had hypertension and 187 (59%) had dyslipidemia. Among them, 281 (88.6%) had good drug compliance and 300 (94.6%) attended their clinics regularly. There was a significant association between following diabetic diet, duration of type 2 DM, drug compliance, hypertension and family history of CKD and the progression of CKD ($p \leq 0.05$).

Conclusion and recommendations: The study identified that not following a diabetic diet, greater duration of type 2 DM, poor drug compliance, having a family history of CKD and hypertension are significantly associated with the progression of CKD in type 2 DM patients.

Keywords: Chronic kidney diseases, Risk factors, Type 2 diabetes mellitus, Blood sugar control, Jaffna

Quality of life among the patients with ischemic heart disease attending the Cardiology clinic, Teaching hospital, Jaffna

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Introduction and objective: Ischemic Heart Disease (IHD) is a global health challenge, causing significant mortality and morbidity across all age groups. Improving the Quality of Life (QoL), including physical, psychological, social, and environmental aspects, for IHD patients is an important aspect of management. This understanding can lead to tailored healthcare strategies and improved care for IHD patients, ultimately striving for better outcomes and well-being. This study aims to measure the quality of life and risk factors among patients with IHD attending the Cardiology Clinic, Teaching Hospital Jaffna.

Methods: A hospital-based descriptive cross-sectional study was conducted between February 2022 and October 2023, involving 427 IHD patients, using systematic sampling. Data were collected using an interviewer-; administered questionnaire incorporated with MOS SF- 36 (Medical Outcome Study – Short Form). The study assessed various aspects of QoL including physical functioning, QoL limitations due to physical health, emotional well-being, energy/fatigue, and social functioning. Chi square test was used to assess the association between known risk factors and QoL.

Results: Majority of the study participants were men (57.6%), aged above 55 years and Hindus (95.8%). Obesity was prevalent among 40% of the participants; 44%, 42.2%, 52.5% of the sample had diabetes mellitus, dyslipidemia and hypertension, respectively; 63.2 % experienced limitations in activities of daily living. No significant association was found between QoL and having diabetes mellitus (p value=0.88), hypertension (p value= 0.197), dyslipidemia (p value= 0.054), alcohol consumption (p value=0.58), and BMI (p value= 0.74). However, QoL was found to be significantly associated with smoking (p value=0.02) and age (p value < 0.01).

Conclusion and recommendations: QoL of patients with IHD is negatively associated with smoking and aging. These findings provide valuable insights into modifiable (smoking) and non-modifiable (age) risk factors that affect the QoL of patients with IHD and highlight the need to address and intervene with appropriate measures to improve the QoL of patients with IHD.

Keywords: Ischemic heart disease, Quality of life, Risk factors, Intervention

Knowledge and practice on road traffic rules among Sri Lankan Transport Board bus drivers in Jaffna

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Background and objective: According to the World Health Organization world life expectancy 2020 report, Sri Lanka has reached 4200 deaths by road traffic accidents annually. As accidents mainly affect the earning population, they create a significant economic burden. Road traffic accidents are mostly predictable and can be prevented with good road safety interventions and technologies. This study aimed to assess the knowledge and practice on road traffic rules among Sri Lanka Transport Board (SLTB) bus drivers in Jaffna district.

Methods: A descriptive cross-sectional study was conducted among SLTB drivers in Jaffna district. The study period was November 2022 to February 2023, and the sample size was 216. Knowledge and practice of the drivers were measured by a self-administered questionnaire which was content and face validated. Data were processed and analysed by using SPSS software. Chi square test and ANOVA test were used to determine the associations.

Results: In total, 216 SLTB drivers participated in our study with a response rate of 93.05%. Mean age of the sample was 42.8 years. A significant association was found between drivers' knowledge and practice of road traffic rules ($p < 0.001$). Knowledge of road traffic rules was significantly associated with the age at getting a heavy vehicle ($p = 0.014$). Knowledge about road signs was significantly associated with the educational level of the driver ($p < 0.001$) and the experience range of driving ($p = 0.036$). Practicing road traffic regulations was also associated with the age at getting a heavy vehicle license ($p < 0.001$).

Conclusion and recommendations: Significant associations were found between knowledge and practice regarding road traffic rules. All the drivers agreed they follow road signs and significant association is obvious between knowledge about road signs and experience of driving. Proper interventions would help to reduce the risky behaviour of drivers and ensure the safety of passengers. We have suggested to assess the drivers' knowledge periodically and arrange awareness programmes to maintain drivers' knowledge and practice at an appropriate level.

Keywords: Knowledge, Practice, Road traffic accident, Bus drivers

Knowledge and dietary practices related to iron and folic acid among GCE O/L (year 2023) female students in Jaffna divisional schools

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Introduction and objective: Iron and folic acid are essential for women's health and foetal growth, especially during pregnancy. In Sri Lanka, 19.2% of school children and adolescents are found to have iron deficiency. In Jaffna, 56.74% of school students (14-18 years) have iron deficiency. The Jaffna Educational Zone has the second highest prevalence of iron deficiency. This study aimed to assess the knowledge and practices related to iron and folic acid among GCE O/L (year 2023) female students in schools of the Jaffna division.

Methods: A school-based cross-sectional analytical study was conducted among 427 female O/L students in schools of the Jaffna Educational Division from March 2022 to July 2023. Simple random sampling was used to select the sample. Data were collected by self-administered questionnaires and analyzed with SPSS and composite scores were used to assess knowledge and practices. Frequencies were used to describe knowledge and practices about iron and folic acid. Chi-square test was used to test for associations.

Results: Of the 427 students, 46.4% and 22% had adequate knowledge and good practice related to iron, respectively; 41.9% and 41.5% had adequate knowledge and good practice related to folic acid, respectively. Religion ($p < 0.001$), parents' education level (father's $p = 0.002$, mother's $p = 0.002$) and family income ($p = 0.023$) had a significant association with the level of knowledge on iron. Religion ($p = 0.026$) was significantly associated with practices related to iron. Residence ($p = 0.022$), religion ($p < 0.001$), parents' education level, (father's $p = 0.002$, mother's $p = 0.003$), family income ($p < 0.001$) and food pattern ($p = 0.031$) had a significant association with the level of folic acid knowledge. Parents' education level (father's $p = 0.047$, mother's $p = 0.001$) and family income ($p = 0.035$) had a significant association with practices related to folic acid. Notably, there was a significant association between folic acid knowledge level and food practice ($p < 0.001$).

Conclusion and recommendations: About half of the O/L students in this study had adequate knowledge but only around a quarter of students had adequate practice on iron. Less than half of the students had adequate knowledge and good practices on folic acid. Awareness programmes on nutritional supplementation, especially iron and folic acid, should be conducted among school students, while ensuring the intake of nutrition supplements given in schools to students.

Keywords: Female secondary school students, Iron, Folic acid, Knowledge, Dietary practices, Socioeconomic Factors

Impact of online studies and its associated factors on academic performance among Ordinary Level school students (Academic year 2020/21) in Jaffna MOH

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Background: The COVID-19 pandemic and sudden closure of schools and subsequent adoption of online education caused challenges for students' learning. The objective of this study was to determine the impact of online studies and its associated factors on academic performance among ordinary level (O/L) school students (Academic year 2020/21) in Jaffna MOH.

Methods: This school-based analytical cross-sectional study was carried out among 384 O/L students from 17 secondary schools in the Jaffna MOH area who were in Grade 11 in the academic year 2020/21. Stratified sampling was used. Data were collected by self-administered questionnaire. Academic performance was assessed by the marks obtained in six subjects that are common to all. Descriptive statistics and bivariate analysis were performed using SPSS software.

Results: The response rate was 84.5%. More than half of the respondents were females (55.3%). The majority of students (97.8%) had engaged in online studies; 88.6% students were from urban areas and most attended online sessions at home (98.3%). Among those who did not engage in online learning (2.2%), half lacked an appropriate learning environment. Over 65% of the students who engaged in online studies had satisfactory academic performance in the second and third terms. All online learners used video (100%) but power point was perceived as most effective; 86.4% used smartphones and 51.1% used a data package and experienced average network quality; 92.3% used Zoom, the most popular app; 91.8% of students had interactive sessions with the teacher while 61.9% of them used audio-based communication. Statistically significant associations were found between academic performance and sex, comfort with delivery method, device, app used for online learning, student-teacher interaction, conducting assignments, category of hometown (urban/rural), leisure time apps in certain subjects and terms ($p \leq 0.05$).

Conclusion : The study found that the majority of students engaged in online studies and among them 65% had satisfactory academic performance. Based our results, schools that are conducting or planning to conduct online learning session should focus on regular and meaningful student-teacher interaction, attractive power point presentations and Zoom lecture sessions.

Keywords: Online learning, Academic performance, Secondary school students, COVID-19

Knowledge on dog ownership and rabies prevention among Grade 10 students in the Jaffna Educational Zone

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Background and objective: Rabies is a fatal zoonotic disease. The main reservoirs for rabies in Sri Lanka are dogs, cats, cattle, rats, and mongoose but our research focuses solely on dogs due to their high population density in Jaffna. This study aims to assess the knowledge on dog ownership, practices followed in rearing dogs, and the socio-demographic and economic factors influencing dog ownership and knowledge on rabies prevention among Grade 10 students in Jaffna Educational Division.

Methods: A school-based descriptive cross-sectional study was conducted among 796 Grade 10 students from 23 schools in the Jaffna Educational Division using cluster sampling. A self-administered questionnaire was used to collect data and chi square test was used to assess the influencing factors. Ethics approval was obtained from the Ethics Review Committee, Faculty of Medicine, Jaffna.

Results: Among 796 participants, 586 were dog owners. In the sample, most (45.4%) had average knowledge. Good and poor knowledge category were 14.4% and 40.2%, respectively. Male students (60.9%), type 1AB school students (92.2%) and those whose mothers (72.2%) or fathers (71.3%) had studied beyond O/L were more likely to have good knowledge than others. There was a significant association between gender, school type, mother's and father's educational status, occupation of the parents and the knowledge level at a p value of less than 0.05. Knowledge was not significantly associated with religion ($p=0.213$) or dog ownership.

Conclusion and recommendations: According to the results of this study, awareness programmes should be targeted to type 2 schools. Proper health education on post-exposure immunization, registration of dogs and routine vaccination should be highlighted as some of the students were unaware of the importance of these practices.

Keywords: Rabies, School students, Dog ownership, Jaffna

Knowledge and perceptions on gender-based violence and their associated factors among patients admitted to Teaching Hospital, Jaffna

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Background and objective: Gender-based violence (GBV) is a prevalent issue in Sri Lanka with severe but often hidden consequences. Jaffna is a notable hotspot for domestic violence, indicating the prevalence of GBV in the region. Our study primarily addressed this concern, recognizing that DV and GBV are closely linked. GBV-related health problems range from mild depression to fatal outcomes, underscoring the urgency of addressing this issue. The objective of this study was to assess the knowledge, perceptions on gender-based violence and associated factors among patients admitted to Teaching Hospital Jaffna (THJ).

Methods: This institutional-based analytical cross-sectional study was conducted from November 2022 to February 2023 at THJ. We used the Kobo-collect app for interviewer-administered questionnaires on GBV-associated factors, knowledge, and perceptions. Data were analyzed with SPSS Software.

Results: In total, 394 patients participated in the study (7.72% non-response); 53.8% were male and 33% were below 30 years. Notably, 20.3% had experienced GBV, among them 41.3% had acted against GBV. Knowledge assessment revealed 45.2% poor, 21.3% average, and 33.5% good knowledge scores, while perceptions were 45.2% positive, 11.7% neutral, and 43.1% negative. Significant associations were found, linking higher GBV incidence to age over 30 ($X^2=5.001$, $p=0.025$), educational qualification below O/L ($X^2=3.965$, $p=0.046$), unmarried status ($X^2=11.644$, $p=0.001$), good knowledge ($X^2=12.67$, $p=0.002$), and negative perceptions ($X^2=7.043$, $p=0.030$). Hence the study revealed significant associations between GBV and age, civil status, educational qualifications, knowledge and perceptions on GBV.

Conclusion and recommendations: This study highlights low GBV knowledge, emphasizing the need for interventions. Perceptions play a key role in GBV experiences. Initiatives should start in childhood, focusing on education. Addressing marital conflicts, enforcing robust laws, offering counseling, and promoting a healthier lifestyle can significantly reduce GBV in society.

Keywords: Gender-based violence, Knowledge, Perceptions, Associated factors.

Awareness of oral cancer disease and its risks factors among adults patients in the out-patient department, Teaching Hospital Jaffna

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Background and objective: The prevalence of oral cancer disease is high in Sri Lanka, especially in Northern Province. It is a preventable disease as its occurrence mainly depends on the lifestyle practices. Adequate awareness regarding early manifestations and the risk factors of oral cancer disease among the public will help to reduce the burden of the disease. This study aimed to assess the awareness of oral cancer disease and its risk factors and their association with socio-demographic factors among adult patients in the Out-Patient Department of Teaching Hospital Jaffna.

Methods: An analytical cross-sectional study was conducted among 402 adult participants who were recruited by systematic sampling. An interviewer-administered questionnaire consisting of socio-demographic characteristics and questions regarding awareness of oral cancer disease and its risk factors was used. A scoring method was developed and the results were statistically analyzed with chi-square test and risk assessment by using SPSS (v26) software.

Results: Among 402 participants, 117 (44%) were males; 186 (46.3%) had a satisfactory level of awareness regarding oral cancer disease, which showed a statistically significant association with sex, education, and occupation ($p \leq 0.05$). A majority of participants identified the possible sites of oral cancer (inner surface of oral cavity (84.1%), gingiva (66.2%) and tongue (59.2%)) and associated symptoms (white and red patches (69.4%), lump in oral cavity (75.9%), non-healing ulcers (75.9%) and burning sensation (60%)) but 38.3% had a misconception that oral cancer is contagious. In the sample, 47.7% had a satisfactory level of awareness regarding risk factors of oral cancer; 95.5% and 89.6%, respectively, stated that chewing betel with areca nut, lime and tobacco and smoking were risk factors, while only 63.9% identified alcohol consumption as a risk factor. Males had less awareness (16.7%) compared to females (31.1%) regarding risk factors (OR 2.052, 95% CI 1.373 -3.067). Risk factor awareness showed a statistically significant association with sex and occupation.

Conclusion and recommendations: Awareness regarding oral cancer disease and its risk factors in Jaffna is still lacking, even though awareness and screening programmes exist. This deficit should be compensated by reassessing and establishing these programmes at primary health care units along with the active involvement of mass media in educating the people.

Keywords: Oral cancer, Early manifestations, Northern Province, Sri Lanka, Public awareness, Risk factors

Awareness on burn injuries, first aid and associated factors among students of National Educational Colleges in the Northern Province of Sri Lanka

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Background and objective: Burn injuries are a global public health concern, and knowledge is vital for prevention and management. The objective of this study was to determine the awareness on burn injuries, first aid, and associated factors, among students of the two National Educational Colleges in the Northern Province of Sri Lanka.

Methods: This cross-sectional analytical study with an estimated sample size of 482 closely matched the total number of first-year students in both Colleges. Hence, all of them were recruited. Data were collected in Tamil language using an online questionnaire via Google form. The data in CSV were exported to and analyzed in IBM SPSS version 26. As there were no established cutoffs for determining awareness adequacy, mean scores were used to evaluate awareness.

Results: Response rate was 68.3% (329/482), with majority females (n=257, 78.1%). Awareness on burn injuries (mean 72.0%, SD 16.9) surpassed first aid (mean 58.5%, SD 12.3). Commonly identified causes of burn injuries included fire (n=300, 91.2%), hot liquid (n=262, 79.6%), hot objects (n=277, 69.0%) and steam (n=226, 68.7%). Although 59.6% (n=196) recognized fire-triangle, some stated carbon-dioxide (n=165, 50.2%) as a component. Common remedies suggested were toothpaste (n=259, 78.7%), oil (n=138, 41.9%), and turmeric (n=134, 40.7%). Only 118 (35.9%) knew running water must be applied for 20+ minutes. Many recognized the stop (n=251, 76.3%), drop (n=243, 73.9%), roll (n=277, 84.2%) technique. Some (n=112, 34%) suggested running during fire. In fire involving oil, respondents recommended either turning off the heat source (n=264, 80.2%), using sand (n=251, 76.3%), covering the pan with a lid (n=186, 56.5%), or applying water (n=132, 40.1%). Awareness on burn injuries was associated with A/L stream (p<0.001) and their current course (p=0.006). There was higher awareness among students in science-related subjects. Awareness on first aid was associated with current course (p<0.001), previous exposure (p=0.009) and province (p=0.035). Those who had no exposure and students from the Northern Province had higher awareness than others.

Conclusion and recommendation: Awareness on first aid was lower than that of burn injuries. Students in science-related studies showed the highest awareness. It is important to conduct further studies in the target populations to assess their practical knowledge. Addressing misconceptions will ensure appropriate responses during emergencies.

Keywords: Awareness, Burn, First aid, Teachers colleges, Northern province

Knowledge and attitude towards children's eye care among parents of young children admitted to the paediatric wards of Teaching Hospital Jaffna

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Background and objective: A child's vision develops until they are between six and seven years of age. Early identification and correction of eye-related problems are essential to prevent future complications. This study assessed knowledge and attitudes towards children's eye care among parents of young children (≤ 5 years) admitted to the paediatric wards of Teaching Hospital Jaffna.

Methods: A hospital-based descriptive cross-sectional study was conducted among parents of young children (≤ 5 years) admitted to paediatric wards of Teaching Hospital Jaffna. Systematic sampling was used and data were collected through an interviewer administered questionnaire. Knowledge was scored (out of 21) and attitudes were analyzed through a Likert scale. SPSS-26 was used for analysis. Independent t-test, one-way ANOVA and chi square test were used to determine the factors associated with knowledge and attitudes (critical level 0.05).

Results: The response rate was 87.5% (400/457). Three-quarters of the sample were mothers (75.3%) and the majority were educated at least up to A/L (60.5%). Mean age was 32.3 (SD 6.5) years. Common sources of knowledge on eyecare were social media (55.8%), newspapers (39.8%) and doctors (36.0%). Mean knowledge score was 14.4 (SD 3.2) out of a total of 21. Age, education level, employment and having a child with an eye problem were associated with knowledge score ($p \leq 0.05$). Younger parents, those educated beyond A/L, employed parents and those who had a child with an eye problem, had higher knowledge scores. Over half the sample were not aware that vision should be assessed at birth (54.3%) and squint could lead to permanent vision loss (56.3%). In terms of attitudes, two-thirds (67.5%) believed that eye assessment is not needed unless there are symptoms, while a third (32.3%) saw squint as a cosmetic issue. Attitude was associated with education where caregivers with higher levels of education were more likely to have positive attitudes ($p \leq 0.05$).

Conclusion and recommendations: There are significant knowledge and attitude gaps on children's eye care among parents. Parents with higher education level are more likely to have better knowledge and positive attitudes. Public health messaging regarding regular eye assessments via social and other media may help to address gaps in knowledge and attitude among parents and caregivers.

Keywords: Childhood visual impairment, Early detection, Knowledge, Attitude, Primary care

Knowledge, attitude and practice in relation to worm control and associated factors among mothers of children admitted to pediatric wards, Teaching Hospital Jaffna: A mixed method study

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Background and objective: Intestinal parasite infestation is a prevalent health issue, particularly affecting impoverished communities and children worldwide. Maternal knowledge plays a crucial role in preventing worm infestations and promoting long term health among their children. The objective of this study was to determine the knowledge, attitude, and practice, in relation to worm control and associated factors among mothers of children admitted to the pediatric wards of Teaching Hospital Jaffna.

Methods: This mixed-method study was carried out in the paediatric wards of Teaching Hospital Jaffna by recruiting 427 mothers of children between the ages of 2 to 13 years from November 2022 to February 2023. Data were collected with an interviewer-administered questionnaire for the quantitative component and a focus group interview guide for the qualitative component. The quantitative data were analyzed with SPSS.

Results: Of 427 mothers, 71.9% (n=307) were housewives and 28.1% (n=120) working mothers. Mean knowledge and practice scores of mothers were 69.81% (SD 13.3) and 76.85% (SD 10.53), respectively. Knowledge score was positively correlated with age ($r = 0.162$, $n=427$, $p=0.001$) and monthly income of the family ($r=0.131$, $n=427$, $p=0.007$). Practice score was negatively correlated with age of the first child ($r = -0.12$, $n=427$, $p=0.013$). In the focus group discussions, mothers had good knowledge regarding worm infestation and preventive measures. However, most of them did not adhere to the preventive measures routinely.

Conclusion and recommendations: Although most mothers who participated in our study had good knowledge and practice regarding worm infestation, their awareness regarding deworming and the health consequences of worm infestations were poor. Poor socioeconomic status and younger age may have led to poor knowledge regarding worm infestations among some mothers. Prioritizing the mothers from a low socioeconomic background when organizing awareness programmes and conducting good counselling programmes may improve their health seeking behavior.

Keywords: Knowledge, Attitude, Practice, Enterobiasis, Worm infestation

Usage of computer unit and associated factors among medical students of the University of Jaffna

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Background and objective: A computer unit was established in 2021 at the Faculty of Medicine, University of Jaffna, to support computer-based learning. Despite its availability, it is not used sufficiently by the students. The objective of this study was to describe the usage of the computer unit and associated factors among medical students at the University of Jaffna.

Methods: The study employed a mixed-methods approach, combining quantitative (cross-sectional analysis) and qualitative (focus group discussions) components. The cross-sectional study involved 426 participants selected through stratified random sampling from medical students at the Faculty of Medicine, University of Jaffna. Data were collected using a self-administered questionnaires and analysed with SPSS 20 software. The focus group discussions were coded and analysed thematically.

Results: The study reported a high response rate of 97.7%. The sample consisted of mainly females (61.8%); 85.6% reported owning smartphones with 69.2% of participants having sufficient monthly income. Awareness of the computer unit was positive (83.4%), but only 1.7% knew its operating hours. Surprisingly, 74% of respondents did not use the unit. Out of the 26% respondents who did, 57.4% used it for research, and 38% for online learning. The primary reason for not using the unit was having personal devices (74.7%). Notably, 42.1% were aware of unlimited data, while 11.8% knew about secure data storage. Suggestions included, adding photocopy and printing facilities (64.7%) to improve utilization. During the focus groups, participants discussed computer unit usage, emphasizing research and document preparation. According to the thematic analysis, challenges with use included limited awareness and slow machines; interference with lectures; and preferring personal devices. Expectations for the future included increased usage with improved access and extended operating hours.

Conclusion and recommendations: Awareness of specialized facilities significantly impacted computer unit utilization, emphasizing the need for promoting such awareness among students. Family income and internet usage did not correlate with computer unit usage. Qualitative findings underscored a lack of awareness among students, who often preferred personal mobile devices over computers. These results highlight the importance of targeted strategies to enhance awareness and tailor interventions to improve computer unit utilization among medical education.

Keywords: Information and communication technology, Computer unit, Medical education

Factors associated with academic performance among students of the Faculty of Medicine, University of Jaffna

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Background and objective: Education is crucial in the era of globalization and technological revolution. Students undergo various stages of education, with academic performance being measured through various methods. Factors affecting academic performance include socio-demographic, academic-related, and lifestyle related factors. This study aimed to assess the socio-demographic factors, academic-related factors, and lifestyle-related factors associated with academic performance among the students of Faculty of Medicine, University of Jaffna.

Methods: A descriptive cross-sectional study was conducted with 429 students across selected batches from the Faculty of Medicine, University of Jaffna. Data were collected using a self-administered questionnaire and analysed using SPSS. Chi-square test was used to assess the association of selected factors with academic performance.

Results: A majority in the sample were females (n=266, 62%). Most had got through the G.C.E Advanced Level (A/L) in their first attempt with passes in all three subjects (n=237, 55.2%). The proportion of female students who got through the First Examination for Medical Degrees in their first attempt was higher than the males (60.4%, p value=0.007). The proportion of students who got through in their first attempt was higher than the proportion who got through in the second and third attempts (71.8%, p value<0.001). A higher proportion of students who did their A/L in the English medium got through the examination compared to the students who did their A/L in their native language (56.1%, p value<0.001). All other factors that were assessed did not show any significant association with academic performance.

Conclusion and recommendations: Except gender, attempt of entry and A/L medium, all other factors assessed showed no significant association with academic performance. Diverse teaching methods are recommended as different types of learners were identified. A mandatory attendance policy could be implemented as the students who were absent for fewer lectures showed higher academic performance. Substance abuse awareness as having a negative impact on academic performance has been observed and we recommend expanding the scope of research as many factors associated with academic performance are yet to be investigated.

Keywords: Academic performance, Medium of instruction, Teaching-learning activities, Medical education, Sri Lanka

Health-related-out-of-pocket expenditures, their distribution and determinants among patients undergoing dialysis at Teaching Hospital Jaffna

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Background and objectives: Chronic kidney disease (CKD) is a significant public health issue in Sri Lanka, leading to kidney failure and the need for dialysis. Limited dialysis facilities result in patients suffering out-of-pocket expenses (OOPE) on healthcare. This research aims to investigate health-related OOPE, their distribution and determinants among patients undergoing dialysis at Teaching Hospital Jaffna (THJ).

Methods: This hospital-based descriptive cross-sectional study was conducted among patients registered for dialysis at THJ (November 2022 - February 2023). Data were collected with an interviewer-administered questionnaire from all patients who matched the study criteria. Statistical analysis was performed using SPSS (v20). Standard descriptive statistics were used along with Kruskal-Wallis and Mann-Whitney U tests to test for differences in OOPE based on socio-demographic factors (critical level 0.05).

Results: Among 92 participants, 70.7% were male and 68.7% were >40 years of age. Half the sample (50%) had O/L education or beyond, and the majority lived >10 km away from THJ (56.5%) and received no financial assistance (60.9%). Mean and median total monthly health-related OOPE in government and private sectors was LKR 10,949.34 and LKR 8650.00, respectively. The highest OOPE were incurred in the course of accessing the free dialysis services available in the public sector, amounting to a mean and median OOPE of LKR 5389.67 and 3000.00, respectively, spent mainly on transport (mean LKR 2278.37, median LKR 1550), laboratory tests in the private sector (mean LKR 1359.02, median 0) and meals (mean LKR 886.52, median LKR 800.00). None of the participants used the private sector for dialysis; channeling incurred the highest expenses in the private sector (mean LKR 1864.67, median 0), mainly on tests (mean LKR 543.48, median 0), medicines (mean LKR 523.91, median 0) and transport (mean LKR 425.54, median 0). OOPE varied significantly by age, marital status, employment and whether receiving financial assistance ($p \leq 0.05$). The elderly, unmarried, unemployed and those receiving financial assistance incurred more OOPE on healthcare.

Conclusion and recommendations: Patients spend substantial amounts on transport, tests and meals in the course of accessing dialysis services at THJ. While most patients do not receive financial assistance, the CKD allowance provided by the government is inadequate to cover health-related OOPE. Strengthening government sector dialysis facilities and providing more financial support for patients is recommended.

Keywords: Chronic kidney disease, Dialysis, Out-of-pocket expenditure, Health systems

Migration intentions and associated factors among early career doctors at Jaffna Teaching Hospital

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Background: Since the 1970s, brain drain to the West has been a major problem in Sri Lanka that intensified in the Northern Province as a result of the civil war. The current economic crisis is pushing more and more doctors to migrate abroad. This study aims to determine the proportion of early career doctors (preliminary grade and grade II medical officers, including registrars) at Teaching Hospital Jaffna who intend to migrate abroad, the factors associated with their migration intentions and their reasons for wanting to migrate abroad.

Methods: This hospital-based descriptive cross-sectional study was conducted among all early career doctors (preliminary grade and grade II medical officers, including registrars) working at Teaching Hospital Jaffna. Data were collected from all doctors matching the study criteria through a self-administered questionnaire. Data were analysed using SPSS (v27). Standard descriptive statistics and the chi square test were used in the analysis (critical level 0.05).

Results: In total, 148 doctors participated (response rate 54.2%). Two-thirds were in the 25-35 years age group (66.9%), just over half were females (50.7%), and the majority were of Tamil ethnicity (93.2%) with permanent residence in Jaffna district (79.1%). In total, 57 (38.5%) early career doctors intended to migrate (38.5%). Younger age ($p=0.013$), not having postgraduate qualifications ($p=0.018$), wanting to pursue postgraduate studies ($p=0.048$) and having experience abroad ($p=0.010$) were significantly associated with the intention to migrate. Key push factors were economic instability (strongly agree 82.5%, agree 12.3%), political instability (strongly agree 78.9%, agree 12.3%), corruption (strongly agree 64.9%, agree 19.3%) and insufficient income (strongly agree 45.6%, agree 31.6%). Common pull factors included better future for children (strongly agree 54.4%, agree 38.6%), better living standards (strongly agree 66.7%, agree 24.6%), stable future (strongly agree 61.4%, agree 33.3%), and stable political and economic situation (strongly agree 57.9%, agree 35.1%).

Conclusions: Over a third of early career doctors at Teaching Hospital Jaffna have intentions to migrate abroad with younger doctors more likely to express such intentions. Key reasons for migration relate to economic and political instability in Sri Lanka. The government needs to take urgent steps to address the economic and health crises to ensure access to quality healthcare for the people of Sri Lanka.

Keywords: Health brain drain, Medical professionals, Health systems, Migration, Sri Lanka

Challenges and associated factors of being a Nursing Officer in the Teaching Hospital Jaffna

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Background and objectives: Nurses provide patient care, educate the patients and their families, and act as important liaisons between patients and doctors. The objective of this study was to determine the challenges and associated factors of being a nursing officer at Teaching Hospital Jaffna.

Methods: A population-based cross-sectional analytical study was carried out among 427 nursing officers in Teaching Hospital Jaffna using stratified sampling to recruit the participants from February 2022 to October 2023 using a self-administered questionnaire and analyzed with SPSS. Challenges were defined as limitations and demands common to the nursing field, and included perceived stress level, job satisfaction, mental well-being and work-family balance. We used the Perceived Stress Scale (PSS), and adapted the Minnesota Satisfaction Questionnaire, PHQ -9 for Mental Wellbeing, and a section of the Work Life Balance questionnaire. The significance of association was determined using Chi-square test, one-way ANOVA and t-test with the level of significance set at 0.05.

Results: The response rate was 100.9% (431/427), it was oversampled. Among participants, 24.4% (n=105) were male and 75.6% (n=326) were female. Majority of the participants were Tamil 60.1% (n=259) and mean age was 32.09 years. The majority were in the moderate stress level (81.9%, n=353). There was an association between perceived stress level and age ($p<0.001$) and having children ($p=0.007$). There was an association between job satisfaction and perceived stress level ($p=0.01$). Job satisfaction was associated with first language (95% CI: 0.18 to 1.56, $p=0.014$) and hometown ($p=0.03$). The majority of participants were in the mild depression grading of the PHQ-9 scale (38.5%, n=166). State of mental well-being was associated with marital status ($p<0.001$) and sex ($p<0.001$). The work-family balance was associated with sex (95% CI: -1.28 to -0.28, $p=0.003$) and number of night shifts per week (95% CI: 9.7 to 10.09, $p=0.03$).

Conclusion and recommendations: There was an association among the challenges especially between job satisfaction and perceived stress. Strategies should be developed considering the mental health of nursing officers such as awareness programmes and recreational activities. Policies should be implemented at administrative level considering the problems.

Keywords: Nursing officer, Perceived stress, Job satisfaction, Mental well-being, Work-family balance

Pathways to accessing healthcare and associated factors among young febrile children admitted to the pediatric wards of Teaching Hospital Jaffna

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Background and objective: Fever is a common reason for seeking healthcare for young children; delays could lead to adverse health outcomes. This study describes the pathways and time taken to access healthcare among young children admitted with fever to the paediatric wards of Teaching Hospital Jaffna (THJ).

Methods: This was a hospital-based descriptive cross-sectional study carried out among caregivers of young children (<5 years) in the paediatric wards of THJ. Consecutive sampling was used until sample size was achieved. Data were collected at the bedside with an interviewer-administered questionnaire with responses entered directly into the KoboCollect tool. Data were analyzed with SPSS (v20). Chi-square test was used to test for associations (critical level 0.05).

Results: In total, 436 caregivers participated (response rate 100%). Majority were 18-35 years (62.8%), mothers (93.6%) with at least O/L qualifications (78.2%). Most children were >1 year (84%) and male (54.4%). In total, 86.2% of children were self-medicated, 48.9% saw a general practitioner (GP) or other primary care provider, 21.1% consulted a private specialist, and 30% did not seek any healthcare prior to admission. Age of the child and type of provider accessed were associated with self-medication; older children and those seen by a general practitioner or other primary care provider were more likely to be self-medicated ($p \leq 0.05$). Marital status, education level and a family member in the health sector were associated with consulting a specialist; married caregivers, a higher education level and those with a family member employed in the health sector were more likely to consult a specialist ($p \leq 0.05$). With respect to time taken, 50.9% saw a healthcare provider within 24 hours. Age of the child and education level of the caregiver were associated with time taken to access care; caregivers seeking care for an infant with higher education level were more likely to seek care within 24 hours ($p \leq 0.05$).

Conclusion and recommendation: Many children with fever were self-medicated and not seen by a general practitioner or other primary healthcare provider before admission to THJ. Only half accessed health care within 24 hours of fever onset. Health authorities should raise public awareness on the importance and advantages of accessing primary care and investigate the safety of self-medication practices.

Keywords: Healthcare access, Primary care provider, Fever, Young children, Jaffna

Difficulties encountered by the Public Health Inspectors in the Northern Province during the COVID-19 pandemic

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Background and objective: The COVID-19 pandemic has significantly impacted northern Sri Lankan public health inspectors (PHI), causing challenges in preventive measures, surveillance, and case management. This study evaluated the difficulties faced by PHIs in the Northern Province during the COVID-19 pandemic, including psychological distress, resource availability, communication issues, and the association of these difficulties with sociodemographic and work-related factors.

Methods: A descriptive cross-sectional study involving 98 active PHIs in the Northern Province was conducted. A self-administered online questionnaire was used to collect data on sociodemographic characteristics, psychological distress (DASS-21), resource availability, as well as communication and coordination challenges. Means, standard deviation, or the median and range were used to summarize numerical data. Frequencies and proportions were used to summarize categorical data.

Results: In the sample, 52.6% were aged <35 years (mean 35.8, SD 7.7); 74.5% were married, 51% had children, and were predominantly Tamil (82.7%). With respect to work, 64.9% had <10 years' experience; 92.9% were area PHIs; and 54.1% worked in their own residential area. Almost all (99.7%) reported not having any preexisting psychological problems. However, a considerable proportion reported experiencing psychological distress; 26.3% and 17.9% recorded moderate and severe stress, respectively; 24.5% and 26.6% recorded moderate and severe anxiety, respectively; and 26.3% and 16.8% recorded moderate and severe depression, respectively. Apart from gloves (56.7%) and face shields (57.1%), <50% of PHIs reported availability of KN95 mask, gowns, goggles, shoe covers, and head covers all the time. Other than vehicle permits, <50% reported the availability of supporting staff, transport facilities, vehicle fuel facility, support and guidance from supervisors, and having the necessary training for the job, all the time. In terms of communication, while almost a quarter (24.5%) stated they had difficulty getting help from the municipal councils all the time, the following challenges were reported to have been experienced sometimes: low public awareness (40.2%), difficulty in approaching people (25.8%), and lack of support from hospital staff (36.7%).

Conclusion and recommendations: The study highlights the difficulties faced by PHIs in the Northern Province during the COVID-19 pandemic. Interventions to promote mental health among PHI could include providing psychological support, ensuring resources, and enhancing healthcare system communication and coordination.

Keywords: Public health inspectors, COVID-19 pandemic, Psychological distress, Resource availability, Communication and coordination.

Challenges with accommodation among medical students of the University of Jaffna

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Introduction: Medical students face challenges in finding affordable accommodation located in proximity to the university and clinical training sites. This study describes the challenges faced by students of the Jaffna Medical Faculty in finding suitable accommodation, the key challenges they face with current accommodation and the socio-demographic and financial factors associated with these challenges.

Methods: A university-based descriptive cross-sectional study was conducted at the Jaffna Medical Faculty among a study population of 812 students including the first through fourth years. Stratified random sampling was carried out to ensure proportionate representation across batches and genders. Data were collected through self-administered questionnaires and analysed with SPSS (v21). Standard descriptive statistics and the chi-square test was used in the analysis (critical level 0.05).

Results: In total, 415 students participated (response rate 97.2%). Majority were females (59.8%), Tamil (53.7%) from outside Jaffna district (76.1%) and living in temporary accommodation (79.8%). Highest monthly expenses were on food and purified water (mean LKR 11810.78, median LKR 12000) and rent (mean LKR 4161.20, median LKR 5000). Among challenges in finding accommodation, the highest proportion reported difficulty finding accommodation near the faculty (28%). The three current challenges ranked number one by the highest proportion were food availability and water facilities (20.2%), safety and security (12.0%), and distance (8.4%). Among those paying rent, 27.7% reported rent was unaffordable. Ranking food availability and water facilities and safety and security as number one challenges were associated with sex, ethnicity, and district of residence, while ranking distance was associated with district of residence ($p < 0.05$). Females, non-Jaffna and Muslim students were more likely to rank security first. Males ($p = 0.005$), Sinhala students ($p < 0.001$) and non-Jaffna students ($p < 0.001$) were more likely to rank food and water as their first challenge; females ($p = 0.001$), Muslim students ($p < 0.001$) and non-Jaffna students ($p < 0.001$) were more likely to rank security; and Jaffna students were more likely to rank distance ($p = 0.002$).

Conclusion: A substantial proportion of students from the Jaffna Medical Faculty face various problems related to accommodation, especially related to food and water, safety and security, distance and rent. As out-district students tend to be more affected, the university authorities could support incoming undergraduates to identify suitable accommodation.

Keywords: Student accommodation, Living expenses, Medical education, Socio-demographic factors, Jaffna

Meeting the English language barrier: The perception of first-year students of University of Jaffna

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Background and objective: Sri Lanka boasts a diverse linguistic landscape, with Sinhala and Tamil as its national languages and English serving as the link language. The majority of students receive primary and secondary education in their native languages, and English assumes a prominent role in tertiary education. For students whose educational background primarily consists of non-English instruction, transitioning to an English-medium university can be an overwhelming experience. The objective of this study is to describe the perceptions of first-year students of the University of Jaffna in navigating the English language barrier and its related factors.

Methods: An institution-based descriptive cross-sectional study was conducted among 427 University students from the 2019/2020 academic year who were studying in English medium. Data were collected using an online self-administered questionnaire. A scoring system was developing incorporating different scales designed to measure the extent of the impact of the language barrier on the learning process, studying, communication and overall impact (mild, moderate, severe). Data were analyzed using SPSS. Chi-square was performed to assess the association between sociodemographic, and academic factors, and the English language barrier.

Results: In total, 371 students participated (response rate 87.08%). The mean age was 23.2 (SD 1.13) years. In the sample, females and males were nearly equal in number (49.9%, n=185 & 50.1%, n=186, respectively). About three-fourths (74.4%, n=275) used apps to overcome the language barrier. Among them, 21.8% (n=81), 50.7% (n=188), and 27.5% (n=102) felt mild, moderate, and severe language barriers, respectively. This study revealed a significant association between English language barrier and O/L medium (p<0.001), A/L medium (p<0.001), O/L (p<0.001) and A/L (p<0.001) results for English, having studied English literature (p<0.001), following extra classes for English during A/L (p=0.028), and having obtained satisfactory marks in the first attempt of the English language barrier exam (p<0.001).

Conclusion and recommendations: Most university students face a moderate English language barrier especially those who took their O/L and A/L examinations in their native language. We recommend implementing targeted support for students who did not achieve satisfactory marks in the English language barrier examination. In addition, our results strongly support the recommendation to promote access to extra English classes during A/L years.

Keywords: Language barriers, English as a second language, Undergraduate education, Jaffna, English medium, Native language

Sociodemographic, economic, psychological factors and home care among patients with common gynecological malignancies attending the oncology clinic at Teaching Hospital Jaffna and Tellippalai Trail Cancer Hospital

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Background: Gynecological malignancies have a profound impact on psychological status. Socioeconomic status and socio-demographic factors influence the ability to access home care. This study aimed to describe the pattern of gynaecological malignancies, the distribution of sociodemographic, economic, and psychological factors associated with gynaecological malignancies, and how these factors relate to patients receiving home care.

Methods: A hospital-based descriptive cross-sectional study was conducted among 76 patients with gynecological malignancies who attend the Oncology Clinic of Teaching Hospital Jaffna and Tellippalai Trail Cancer Hospital. An interviewer-administered questionnaire was used. HAD scale was used to assess anxiety and depression. Rosenberg Self-esteem scale was used to assess self-esteem. Modified Kuppaswamy's scale was used to categorize economic status broadly into upper and lower classes. A scoring system was created to evaluate the adequacy of home care drawing on sociodemographic, economic factors and other details. The chi-square test was used test for associations using SPSS.

Results: Mean age was 54.29 years. Ovarian cancer (n=31, 40.8%) followed by cervical cancer (n=22, 28.9%) and endometrial cancer (n=21, 27.6%) were common gynaecological malignancies. In the sample, 42 (55.3%) participants had anxiety, 43 participants (56.6%) had depression and 54 (71.1%) participants had intermediate self-esteem. A majority belonged to the lower socioeconomic class (n=40, 52.6%), had care takers at home (n=67, 88.2%) most of whom were family members (n=66, 98.7%). Home care was adequate for 59 (77.6%) patients, a greater proportion belonging to the upper socio-economic class (n=34, 44.7%) than the lower socio-economic class (n=25, 32.9%). Those who were married and living with spouses were more likely to have adequate home care (n=43, 56.6%). Marital status and socio-economic class showed significant association with receiving adequate home care (p<0.05).

Conclusion and recommendations: Gynaecological cancer survivors often suffer from anxiety and depression. Marital status and being with children influence their ability to receive adequate home care. Family members should be encouraged to be involved in improving the physical and psychosocial well-being of gynaecological cancer survivors. The latter should be encouraged to live with their families to ensure they receive adequate home care.

Keywords: Gynecological malignancies, Economic factors, Psychological factors, Home care, Jaffna

Perceptions of inhalers and associated factors among patients with bronchial asthma attending the Respiratory Clinic at Teaching Hospital Jaffna

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Background and objective: Effective asthma management requires educating patients about the disease, triggers, and proper management protocols. Inadequate patient education, negative attitudes towards medication and poor adherence to inhaler therapy are common issues in asthma management. These factors can lead to uncontrolled asthma, highlighting the importance of routine assessment of inhaler practice and patient education to enhance treatment outcomes. The objective of this study was to determine the knowledge, attitude, practice and beliefs regarding inhalers and associated factors among patients with bronchial asthma attending the Respiratory Clinic at Teaching Hospital Jaffna.

Methods: This mixed method study was conducted among 150 patients with bronchial asthma on inhalers and under follow up for at least one month at the Respiratory Clinic, Teaching Hospital Jaffna. An interviewer-administered questionnaire was used to collect quantitative data from all patients who fit the study criteria, while two focus group discussions with patients recruited by purposive sampling were held as part of the qualitative component. Data was analyzed using IBM SPSS Statistics 20 and thematic analysis for the quantitative and qualitative components, respectively.

Results: The majority were prescribed pressurized metered dose inhalers (92%). In the sample, 88% of participants did not skip taking their inhalers. A significant association was found between educational level and preference for inhaler medication over oral medication ($p=0.006$). The study revealed that 27.3% used an inhaler with a spacer, and 83.3% were prescribed a different type of inhaler during exacerbations. No significant associations were found with socio-demographic factors, except for religion in certain cases. Both positive and negative aspects of inhalers were noted in the focus group discussions. Only a minority of the participants had misbeliefs.

Conclusion and recommendations: Overall, the study highlights the diverse duration of inhaler prescriptions and preferences among bronchial asthma patients. For better inhaler utilization, misconceptions should be addressed and clear explanations should be provided along with assessment of inhaler technique.

Keywords: Inhaler, Perception, Bronchial asthma, Outpatient care, Jaffna

