



*Faculty of Medical Sciences
University of Sri Jayewardenepura*



MEDICAL UNDERGRADUATE RESEARCH SYMPOSIUM 2025



***“INNOVATIVE RESEARCH
FOR SUSTAINABLE HEALTH CARE”***

BOOK OF PROCEEDINGS

14th November 2025

FMS, USJ

MEDICAL UNDERGRADUATE RESEARCH SYMPOSIUM 2025

14th November 2025

FMS, USJ

Organised by

Research Committee, Faculty of Medical Sciences

University of Sri Jayewardenepura

***“INNOVATIVE RESEARCH
FOR SUSTAINABLE HEALTH CARE”***

Tracking



**SUSTAINABLE
DEVELOPMENT GOALS**

Medical Undergraduate Research Symposium 2025

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**Research Committee, Faculty of Medical Sciences,
University of Sri Jayewardenepura**

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MESSAGE FROM THE CHIEF GUEST



With the theme *“Innovative Research for Sustainable Healthcare”*, the Medical Undergraduate Research Symposium 2025 (MURS 2025), organized by the Research Committee of the Faculty of Medical Sciences, marks an important step in promoting a strong research culture among undergraduates of our university.

It is with great pleasure that I contribute this message to the book of proceedings of MURS 2025, which reflects the university’s academic values and the commitment of the Faculty of Medical Sciences to strengthening research-based learning.

I wish to commend the Faculty for providing a national platform for medical undergraduates from across Sri Lanka to present their original, peer-reviewed work. Guiding students to engage in research from the early years of their education helps to build future healthcare professionals who are competent, analytical, and socially responsible.

The theme of the symposium is timely and relevant, closely connected with global health needs and the Sustainable Development Goals. Through this initiative, our students are encouraged to seek practical solutions to health issues and to contribute to improvements in healthcare.

The University of Sri Jayewardenepura continues to give high importance to research and innovation across all faculties, and the role of the Faculty of Medical Sciences in this effort is noteworthy. I am confident that MURS 2025 will encourage academic collaboration, highlight student achievement, and strengthen the place of undergraduate research in Sri Lanka.

I take this opportunity to thank the Dean, the Chairperson, and the members of the Research Committee for their effort in organising this event. I also congratulate the students and their academic mentors, and I trust this symposium will be a rewarding and memorable experience for all.

I wish MURS 2025 every success.

Senior Professor Pathmalal M. Manage

Vice Chancellor

University of Sri Jayewardenepura

MESSAGE FROM THE DEAN



The Medical Undergraduate Research Symposium 2025 (MURS 2025), organized by the Research Committee of the Faculty of Medical Sciences, stands as a testament to our continued commitment to fostering inquiry, innovation, and academic excellence among our students.

Under the timely theme *“Innovative Research for Sustainable Healthcare”*, this symposium offers an important platform for medical undergraduates across Sri Lanka to present original research that not only reflects scientific rigour but also addresses the broader goals of public health and sustainable development. I am particularly pleased to see the emphasis placed on aligning student research with the United Nations Sustainable Development Goals (SDGs), a reminder that the future of medicine lies in the balance between scientific advancement and societal responsibility.

This event also reinforces our belief that research is an essential part of undergraduate medical education. By nurturing curiosity and ethical research practices early in their training, we prepare our students to become critical thinkers and future leaders in healthcare.

I take this opportunity to commend the Research Committee for their unwavering dedication in organising this national-level academic event. I also extend my sincere appreciation to the faculty mentors who guided our students, and to the undergraduates whose enthusiasm and scholarly contributions form the heart of this symposium.

I hope that MURS 2025 will continue to inspire meaningful collaboration, encourage knowledge exchange, and strengthen the foundation of a vibrant research culture within our faculty and beyond.

Professor Manori Gamage

Dean, Faculty of Medical Sciences
University of Sri Jayewardenepura

MESSAGE FROM THE CHAIRPERSON



It is with great pleasure that I write this message to the Book of Proceedings of Medical Undergraduate Research Symposium 2025 (MURS 2025), a national-level academic event organised by the Research Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura.

This year's symposium is held under the theme *"Innovative Research for Sustainable Healthcare"*, reflecting our ongoing commitment to fostering a research culture that addresses real-world health challenges through evidence-based and ethically sound inquiry. We are proud to bring together undergraduate researchers from medical faculties across Sri Lanka, offering them a professional platform to present their findings and engage in meaningful academic dialogue. MURS 2025 not only empowers students to develop their scientific writing and presentation skills but also encourages them to critically explore health issues aligned with the Sustainable Development Goals (SDGs).

This symposium is the result of the dedication and collective effort of many individuals. I wish to express my heartfelt thanks to the Vice Chancellor, Senior Professor Pathmalal M. Manage and the Dean of the Faculty of Medical Sciences, Professor Manori Gamage, for their continued support and encouragement. I also extend my deepest appreciation to our keynote speaker, Vidyajyothi Professor H. Asita de Silva, reviewers, session chairs, and panels of Judges for contributing their time and expertise to this event.

I am especially grateful to Dr Udara Senarathne, the secretary of the Research Committee and Dr Charunya Nanayakkara, the conference secretary, and to the dedicated members of the Research Committee for their exceptional commitment in making this event a success. I also extend my sincere appreciation to the student presenters, whose enthusiasm, curiosity, and hard work form the heart of this event. A special note of thanks is also extended to our sponsors and supporters, whose generous contributions have played a vital role in making this symposium a reality.

I trust that MURS 2025 will serve as a platform for inspiring new ideas, nurturing future collaborations, and shaping the future of healthcare research in Sri Lanka.

Professor Chandima Kulathilake

Chairperson, Research Committee,
Faculty of Medical Sciences
University of Sri Jayewardenepura

KEYNOTE ADDRESS



Need for impactful research to guide medical innovation

Clinical trials are crucial to contemporary medicine, offering valuable insights into the safety, efficacy, and appropriate use of new therapeutic interventions. They contribute to public health improvements, reduce healthcare costs, uncover new understandings of disease biology, and facilitate the development of therapies for rare conditions. Investing in clinical trials is therefore essential for advancing medical science and enhancing patient outcomes globally.

Every new therapy must undergo rigorous testing to confirm that its benefits outweigh its risks. Clinical trials follow ethical standards and are carefully designed in phases, starting with small groups of volunteers and expanding to larger populations. This stepwise approach helps identify optimal dosages, detect rare adverse reactions, and refine treatment protocols. As a result, patients and healthcare providers can have confidence that approved medications are both effective and safe.

Moreover, clinical trials drive innovation and discovery. They enable researchers to translate laboratory findings into practical treatments for real-world diseases – from cancer and cardiovascular disorders to emerging infectious diseases. Through clinical research, medicine evolves continually, leading to longer life expectancy and improved quality of life. Many breakthroughs, such as vaccines, targeted cancer therapies, and gene editing techniques, would not exist without the rigorous testing process of clinical trials.

Beyond scientific advancement, clinical trials also foster patient involvement in research. Participants contribute directly to medical knowledge and often gain early access to cutting-edge treatments. This collaboration between scientists, clinicians, and patients exemplifies the collective effort required to advance healthcare.

In conclusion, clinical trials play a vital role in modern medicine by providing valuable information about the safety, efficacy, and appropriate dosing of new drugs. They can help improve public health, decrease healthcare costs, lead to new discoveries about the underlying biology of diseases, and develop treatments for rare conditions. As such, investment in clinical trials is essential for continuing to advance medical science and improving patient outcomes around the world.

Vidyajyothi Professor Asita de Silva

Cadre Chair and Senior Professor,
Department of Pharmacology,
Faculty of Medicine, University of Kelaniya



Inauguration Ceremony

Friday 14th November 2025

Anatomy Auditorium, Faculty of Medical Sciences

8.30 am	Invitees take their seats
8.50 am	Ceremonial Procession
8.55 am	National Anthem and Lighting of the Oil Lamp
9.00 am	Welcome address by the Chairperson, Research Committee, FMS, USJ <i>Professor Chandima Kulathilake</i>
9.05 am	Address by the Dean, FMS, USJ <i>Professor Manori Gamage</i>
9.10 am	Address by the Chief Guest <i>Senior Professor Pathmalal M. Manage,</i> <i>Vice Chancellor of the University of Sri Jayewardenepura</i>
9.20 am	Keynote address <i>Vidyajyothi Professor Asita de Silva,</i> <i>Cadre Chair and Senior Professor,</i> <i>Department of Pharmacology,</i> <i>Faculty of Medicine, University of Kelaniya</i>
9.50 am	Launch of the MURS 2025 Abstract book
9.55 am	Vote of Thanks by Secretary, Research Committee, FMS, USJ <i>Dr. Udara Senarathne</i>
10.00 am	Reception



MURS 2025 PROGRAMME

	Anatomy auditorium	Lecture Hall 1	Lecture Hall 2
10.30am - 12.15pm	Session A Primary Healthcare OP 1-9 Chairpersons: Prof. Renu Wickremasinghe Prof. Sharaine Fernando	Session B Surgical Care OP 10-18 Chairpersons: Prof. J Indrakumar Prof. Surangi Yasawardene	Session C Health Awareness OP 19-26 Chairpersons: Prof. Neluka Fernando Prof. Shamini Prathapan
12.15pm - 1.15pm	Session G Technology in Health & Education OP 48-52 Chairpersons: Prof. Guwani Liyanage Prof. Usha Hettiarachchi	Session H Reproductive, Maternal & Child Health OP 53-57 Chairpersons: Prof. Saraji Wijesekara Prof. Madura Jayawardane	Session I Infectious Diseases OP 58-62 Chairpersons: Prof. Neelika Malavige Prof. Ruwanthi Perera
1.15pm - 2.00pm	Lunch		
2.00pm - 3.30pm	Session D Mental Health & Psychological Wellbeing OP 27-34 Chairpersons: Prof. Savithri Wimalasekera Prof. Sugandhika Suresh	Session E Education & Student Wellbeing OP 35-41 Chairpersons: Prof. Rohana Marasinghe Prof. Pradeepa Jayawardane	Session F Non-communicable Diseases OP 42-47 Chairpersons: Prof. Dulani Beneragama Prof. Dulshika Waas
3.30pm - 4.30pm	Closing Ceremony		

LIST OF ORAL PRESENTATIONS

Session A

Primary Healthcare

OP 1

The prevalence, aetiological factors, and effects of carpal tunnel syndrome among garment factory workers in the Koggala Free Trade Zone

N.S.R. Perera, H.S. Wijegunawardana, W.H. Wijewardana, J.G.N. Yasara, A.T. Rathnayaka, A. Javahir, R.V.D.S. Rajapaksha

OP 2

Knowledge and associated factors on hand hygiene among healthcare workers at a teaching hospital in Sri Lanka

A.A.S. Madusanka, T.S. Thilakarathna, P.D.K. Sewwandi, R.M.S. Rathnayake, M.B.F. Mafaza, D.M.B.T. Dissanayake, R.D.S. Ranasinghe

OP 3

Factors associated with practices towards household waste management in selected districts in Sri Lanka

N.A. Paniyanduwege, J.P.S.S. Jayaweera, M.M.R. Balasooriya, M.Y.J. Fernando, S. Prathapan

OP 4

Effective therapeutic (doctor-patient) relationship: perceptions of doctors and the general public

D.H. Edussuriya, R.M.D.S. Bandaranayake, H.A.B. Dilpana, P.H.S.R. Karunananda, K.N.S. Perera, P.G.K.N. Dayaratna

OP 5

Common skin conditions and associated factors among health care workers in selected hospitals in Colombo District

A. Gunasekara, M. Epa, H. Mahagamage, I. Rathnasiri, S. Sabeshkar, N.C. Pallewatta, J.M.K.C. Jeewandara

OP 6

Prevalence and associated factors of musculoskeletal disorders among garment factory workers in selected garment factories in the Kalutara District

A.K.S. Hewa, I.A.U. Matharage, S. Arththika, P.K.N.C. Premadasa, R.M.P.T. Herath, C. Hunukumbure, S. Godakandage

OP 7

Determinants of food choices and dietary habits among adolescents in urban Sri Lanka

C. Gamachchige, M. Fonseka, O. Fonseka, D. Gamage, N. Chandraratne

OP 8

Knowledge, attitudes, practices, and associated factors towards fast food consumption among medical students in a Sri Lankan university

O.L. Fernando, B.S. Jayasundara, V.S. Yapa, M. Laksigan, M.M. Mendis, C.S.E. Goonewardena, P.R. Perera, A.F. Dheerasinghe

OP 9

Knowledge, attitudes, practices, and associated factors on prevention of iron deficiency anaemia among first-year students in a selected university in Sri Lanka

R.A.M.A.L. Rajapaksha, W.K.N. Perera, M.A.K.G. Fernando, A. Arulvibooshan, A.D.S.V. Wickramarathna, S.W. Wimalasekera, A.S.L. Bandusena

Session B

Surgical Care

OP 10

Obtaining consent from patients awaiting major surgical procedures and factors associated with patient satisfaction in a tertiary care hospital

A.M. Ashfak, M.R.H. Perera, P.A.S. Abayawickrama, E.M.M.C. Ekanayake, S.I. Panagoda, K.L.M.D. Seneviwickrama, R.G.M.S. Nandasena

OP 11

Non-invasive management of gastrostomy granulomas in children using table salt: outcomes from a retrospective review

A. Jayapathum, W. Hathagoda, S. Rajindrajith, L. Chandrlekha, M. Samarasinghe, I. Rathnayake

OP 12

Non-fatal falls in adults: injury patterns and associated factors in a tertiary care hospital

A.D. Jayathilake, H.M. Munasinghe, K. Gurusamy, K.A.I.R. Perera, K.D.G.H.I. Senarathna, H.D.T.W. Ariyaratna, J. Vidanapathirana

OP 13

Renal tumours under the microscope: Characteristics and factors associated with tumour grade from patients in selected tertiary care centres in Colombo District, Sri Lanka

H.A.Y. Prabhath, J.P.M. Kamalsiri, O.W.I.P. Weerasekara, V. Yuwasthika, P. Nirusha, S.K. Chandrasekara, I.V. Prematilleke, S. Prathapan

OP 14

Patient satisfaction with pain management and associated factors among acute abdominal pain admissions to the surgical wards of a selected tertiary care hospital

T.T. Edirisinghe, T.K.G.D.D. Lalchandra, A.V.N. Fernando, K.H.P. Hansika, S.K. Subramaniam, M.N.Y.F. Wijegoonewardene, A.A. Pathirana

OP 15

Clinicopathological links in breast cancer: A Sri Lankan study

W.J.S. Peiris, J.M.Y. Binovin, M.P.L. Alwis, C.P.K.R. Fernando, D.D.N. Edirisinghe, K.L.M.D. Seneviwickrama, B. Seneviratne

OP 16

Sociodemographic and clinicopathological features of pancreatic carcinoma and factors associated with tumour resectability in a tertiary care centre in Sri Lanka

W.G.Y. Navodya, R.P.D.K. Gangani, H.I.P. Muhandiram, P.H.H. Padukkage, J. Kirupairetnam, I.V. Prematilleke, S. Prathapan

OP 17

Cutting through the first delay: barriers to timely surgical care in Colombo District, Sri Lanka

H.W.M.J.C. Wijayasinghe, H.A.K.N. Tissera, R.M.I.K. Rathnasiri, W.H.S. Hansani, T. Rishikeshean, K. Wijesinghe, S. Prathapan

OP 18

Assessing the completion rate of colonoscopy and factors associated with incompleteness in a selected teaching hospital in Colombo District

S. Kumaravel, A.R.W.M.M.W.H.P. Abeykoon, W.G.S. Lakshitha, R.J. Paranehewa, W.D.O. Stella, C.S.E. Goonewardena, B. Gamage, A.F. Dheerasinghe

Session C

Health Awareness

OP 19

Proportion and knowledge of colour vision deficiency and associated factors among adults in Western Province, Sri Lanka

A.M.A.P. Alahakoon, J.S. Dasanayaka, Y.B. Jayasinghe, K.G.W. Jayawardane, G.O. Wimalanath, S.W. Wimalasekera, C.S.E. Goonewardena

OP 20

Knowledge and practices of paracetamol use as an over-the-counter medicine among adult patients attending a selected hospital setting

L.P.T.D. Wijetunga, M.R.F. Sahna, K.M. Wijesooriya, A.Y. Anuththara, S.D. Amarasuriya

OP 21

Knowledge, attitudes, and associated factors for knowledge on early detection of autism spectrum disorder among mothers of children aged ≤ 2 years attending paediatric clinics at a selected tertiary care hospital in Sri Lanka

T.P. Wickramasinghe, T.L.S.M. Siritunga, M.K.S. Nethmini, P.R.D.L. Polgampola, F.A.A. Ahamed, I. Gunasekara, J. Vidanapathirana

OP 22

Knowledge, attitudes, practices and factors associated with self-medication for selected symptoms among preclinical students of a medical faculty in a selected university

S.I. Hemaratne, S. Cheiyoon, A.M. Liyanage, S.N. Fernando, I.M. Jayawickrama, T. Matthias, N.S. Herath

OP 23

Knowledge, attitudes, practices and associated factors on foot care among diabetic patients admitted to medical wards of two selected tertiary care hospitals in Sri Lanka

P.D.I. Sulakkhana, H.S. Mallawarachchi, J.A.N.D. Jayasinghe, N.K.C.J. Perera, L. Sarukesh, K.L.M.D. Seneviwickrama, S. Balasingham

OP 24

Knowledge and practices on paracetamol use and associated factors among mothers with children under fourteen years attending ,maternal and child health clinics in Borelasgamuwa MOH area

H.V.M. Imaduwa, S. Garthiga, K.G.A.A.S. Jayarathna, W.S.M.P.K. Rathnayaka, A.V.P.B.L. Jayewardene, P. Jayawardane, M. Cader

OP 25

Proportion of patients wearing face masks among those with selected chronic respiratory diseases and their attitudes and associated factors towards wearing them in a tertiary care hospital in Sri Lanka

T.D.C. Vethanayagam, A.M.K.L. Attanayaka, I.A.U. Matharage, A.S. Jayakody, K.A.C.R. Subasinghe, S. Dissanayaka, N. Herath

OP 26

Awareness and practices of screening for breast cancer and associated factors among women aged 18-45 years attending the outpatient department of a teaching hospital in Colombo District

S. Balakrishnan, Y.M. Hettiarachchi, S.D. Mayadunne, M.S.D. Chathurya, K.R.M. De Silva, S. Edirisinghe, N. Herath

Session D

Mental Health and Psychological Wellbeing

OP 27

Factors associated with perception of body image among undergraduates in selected faculties of a government university in Sri Lanka

M.S. Akurugodagama, W.S. Silvapulle, H.C. Munasinghe, H.M.S. Hansika, N.F. Siddeek, K.L.M.D. Seneviwickrama, M.D.J. Amarasingha Vass

OP 28

Sleep quality and associated factors among teachers in government schools during COVID-19 school closures in four districts of Sri Lanka

R.D.S.M. Kumari, U.K.C.D. Kularathne, N.A.U.A. Kulathunga, L.H. Navodya, S.T. Perera, S. Prathapan, C. Undugodage

OP 29

Effects of COVID-19 pandemic lockdown on behavioural patterns and mental state of Sri Lankan university athletes

S. Mahima, M.A. Samaranayake, D.B. Thalawaththa, V.N. Kannangara, T.S. Premathilaka, B.M.H.A. Banneheke, C.S.E. Goonewardena

OP 30

Burnout among intern medical officers in selected tertiary care hospitals during the COVID-19 pandemic

H.D. Dasanayake, P.Y. Jayamanna, P.S. Abey Siriwardana, B.M.I.M. Bandaranayake, J.P.S.C. Jayasundara, S. Prathapan, M. Gamage

OP 31

Prevalence and associated factors of preoperative anxiety among patients undergoing major surgeries at a tertiary care hospital in Sri Lanka

D.A. Wijayasinghe, S. Thulasi, R.P.B.V. Rajakaruna, C.R. Yapa, S.B. Samarasinghe, C.S.E. Goonewardena, K. Wijesinghe, D.S.A.F. Dheerasinghe

OP 32

The behaviours regarding body image and its associated factors among students of selected faculties in a selected university in Sri Lanka

A.A. Izadeen, K.G.S.V. Bandara, W.G.K.M. Tharindi, P.D.H. Chathuranga, J.A.N. Yashodha, U.P.K. Hettiarachchi, V. Kumarapeli

OP 33

Treatment compliance related to mental illness among outpatients with mental illness at a tertiary care hospital in Sri Lanka

M.H.P. Kumari, A.I.S. Dodangoda, R.B. Hapuarachchi, P.S. Alles, D.L.U. Amarakoon

OP 34

Level of cognition and associated factors among elderly individuals aged 60–85 years living in elderly homes in Colombo District

S.S. Paranawithana, T.N. Bulathge, W.A.N.M. Perera, D.M.Y.A. Dissanayake, P. Kishaanthan, K.A.T. Navodani, D.L.U. Amarakoon

Session E

Education & Student Wellbeing

OP 35

Attitudes and associated factors of medical undergraduates towards cadaveric dissection in selected medical faculties of Western Province, Sri Lanka

K.D.A. Sulakna, K.R.M.T.D. Pathirana, M.N. Nusha, D.T.W.A. Jayathilaka,
K.K.D. Chameeka, S. Prathapan, S. Dissanayake

OP 36

Part-time employment and associated factors among medical students at a selected Sri Lankan university

D.C. Dissanayake, M.N. Weeratunga, S.N.M.U.E. Nawarathna, W.M.W.S. Weerasekara,
M.I.M. Infaz, H.T.D.W. Ariyaratne, C.S.E. Goonewardena, O.B.W. Rajapakshe

OP 37

English language barriers in medical education and coping strategies among first-year medical undergraduates of a selected university in Sri Lanka

A.A.C.C. Abeyasinghe, A.R.F. Allana, G.S. Anuththara, D.M.V.V. Atapattu,
A.I.S. Dodangoda, A.H. De Silva, C.S.E. Goonewardene

OP 38

Perceptions on migration and its associated factors among undergraduate students in a selected university

E.S.N. Nanayakkara, H.L.B. De Silva, V.T.P.M. Rohana, T. Tharanika,
K.P.D. Madusanka, K.R. Atukorala, A. Bandusena

OP 39

Knowledge and perception about virginity and associated factors among 3rd year students at a Sri Lankan university

P.K.S.D. Dharamarathne, M.A. Aspa, W.A.H. Dayananda, P.M.P. Premachandra,
H.W.T.T. Welandagoda, C.S. Fernando, M. Cader

OP 40

Sleep quality and associated factors among Advanced Level Science stream, Sinhala medium students attending selected tuition classes in the Nugegoda Medical Officer of Health area, Colombo District

P.S. Wickramasinghe, B.V.I.P. Wickramasiri, L.D. Yasara, P.K.R.P. Lakshika,
K.D.N.H. Amarasinghe, H. Dissanayake, C.S.E. Goonewardena, A. Bandusena

OP 41

Burnout among para clinical medical students in a selected university in Colombo District, Sri Lanka

M.Chethanan, D.S.M.I.I. Nawarathne, H.A.N. Anuththara, H.M.S.S.B. Herath,
W.G.S.D Gunathilake, P.S. Alles, I.E. Gunaratna

Session F

Non-Communicable Diseases

OP 42

Epidemiology of cervical carcinoma and factors associated with its staging in Sri Lanka

W.M.N. Fernando, T.R. Amarasingha, K.J.B. Perera, R.M.G.C. Rathnayaka,
S.R.T. Senevirathna, R. Wickremasinghe, S. Prathapan

OP 43

Compliance and associated factors among patients receiving treatment for dyslipidaemia at a healthcare institution in Sri Lanka

N.H. Jayamuni, M.M.F. Ashfa, M.A.K.G. Kodagoda, K.A.J. Erandika, S.N.W. Dissanayake, T. Matthias

OP 44

Adherence and factors affecting adherence to prescribed medication among patients with hypertension in a selected tertiary care hospital

S. Biremee, G.A.S.D. Wijesekara, L.B.G.S. Bogahawatta, S.M.M.V. Bandara,
E.N. Samadhi, M.N. Senevirathne, S. Ranasinghe, V. Kumarapeli

OP 45

Allergen sensitization patterns and associated factors in adults with asthma and allergic rhinitis in Colombo District

S.W.M.K.D. Wanninayaka, U.S. Sulochana, M.K.D.D. Wijekumara, H.P.H.S. Ilangarathna,
L.H.L.P.K. Wickramasooriya, J.M.C. Jeewandara, M.P.P.U. Chulasiri

OP 46

Physical activity, respiratory functions and influencing factors in chronic obstructive pulmonary disease patients attending a selected clinic in Colombo District

A.I.M. Ihthisham, M.A.S.G. Chandrasena, B.K. Walpita, S.H.P.D.S. Wickramathilaka,
E.M.V.P. Ekanayake, S. Wimalasekera, C.S.E. Goonewardena

OP 47

Assessment of known risk conditions and associated factors for type 2 diabetes mellitus among females attending the Outpatient Department of a tertiary care hospital in Colombo District

H. Perera, T. Jirosini, G. Senanayaka, Y. Vindana, B. Thennakoon, M. Arambewela, N. Thenuwara

Session G

Technology in Health and Education

OP 48

Perception, barriers, and associated factors of online learning among medical undergraduates during COVID-19 restrictions

D.M.N.R. Handagala, D.T.D. Wijesinghe, L.U.I. Kumara, H.B.D. Anjana, M.G.A. Oshilani, K.L.M.D. Seneviwickrama

OP 49

Knowledge, attitudes, and readiness to use modern technology among doctors in improving patient care in a tertiary care hospital

J.D.T.N. Perera, T.K.A. Rajarathna, A.C. Fernando, M.A.I.C. Adithya, R.J. Ahamed, R.B. Marasinghe, N.H. Ubeysekara

OP 50

Development of a mobile application to assess the risk of pregnancy-induced hypertension and prevent complications

I. Perera, I.A. Talagala, S.R. Niyomi, M.F. Sahitha, R.D. Madhushika, M.D.C. Peiris, T.S. Muthumala

OP 51

Clicking for clarity: patterns of online mental health information seeking among patients with mental illnesses attending a tertiary care hospital in Sri Lanka

M.H.P. Kumari, A.I.S. Dodangoda, R.B. Hapuarachchi, P.S. Alles, D.L.U. Amarakoon

OP 52

Development and evaluation of turmeric-based UV-sensitive cards as an affordable, low-cost, and biodegradable tool to monitor solar water disinfection efficacy and sunlight exposure in low-resource communities

W.D.H. Perera, M.K.M. Aluwihare, C.Nanayakkara

Session H

Reproductive, Maternal and Child Health

OP 53

Psychosocial factors among pregnant women attending antenatal clinics of a tertiary care hospital: a comparative study between normal weight and overweight or obese individuals

A.A. Sheriffu, S.K. Hewawasam, V.S. Mendis, A.H.L.K.S. Siriwardene, K.M.N. Rathnayake, M. Jayawardane, S. Godakandage

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Session I

Infectious Diseases

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E.M.M.H. Ekanayake, N.D. Arambawela, J.K.N.P. Jayaneththi, N.H.S. Senatilleke, S.C. Dilrukshi, M.M. Weerasekera, O. Rajapakse

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S.M.A. Aslam, S.R.W. Gamanayake, G.D.A.S. Samarutilake, L.D.R.A. Jayathilake, A.N. Munasinghe, J. Kottahachchi, R.D.S. Ranasinghe

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Pattern, temporal association, and associated factors of notifying Dengue, Tuberculosis, Leprosy, and COVID-19 in a selected Medical Officer of Health area in Sri Lanka during the COVID-19 pandemic (2020–2022)

D.S. Ginigaddara, J. Gowthaman, T.W.K.U.I. Kumari, R.L.D.P. Madusanka, P.V.J.C. Wijethunga, D.R. Wickremasinghe, Y.L.S. Nandasena

LIST OF ORAL PRESENTATIONS

Session A

Primary Health Care

OP 1

The prevalence, aetiological factors, and effects of carpal tunnel syndrome among garment factory workers in the Koggala Free Trade Zone

N.S.R. Perera, H.S. Wijegunawardana, W.H. Wijewardana, J.G.N. Yasara, A.T. Rathnayaka, A. Javahir, R.V.D.S. Rajapaksha

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Background: Carpal tunnel syndrome (CTS) is caused by the compression of the median nerve within the carpal tunnel. Garment factory workers are considered highly susceptible to CTS due to repetitive machinery-related movements. This study aimed to determine the association between CTS and potential contributing factors among garment factory workers.

Methods: A descriptive cross-sectional study was conducted using a structured questionnaire based on the Kamath and Stothard tool, which diagnoses CTS through a scoring system (scores >5 can serve as a screening tool in place of nerve conduction studies). Participants were selected using a convenience sampling method from two factories in the Koggala Free Trade Zone. Associations between CTS and related factors were assessed using the Chi-square test at a 0.05 significance level.

Results: Significant associations were observed with sociodemographic factors such as age ($X^2=5.371$, $p=0.021$), occupational factors such as factory of employment ($X^2=86.515$, $p=0.001$) and rest during work ($X^2=86.515$, $p=0.001$). No significant associations were found with marital status, type of work (cutting, sewing, packaging, ironing, or quality control), or years of service. The prevalence of CTS among garment factory workers was 5.9%.

Conclusion: CTS was significantly associated with age, type of factory, and rest during work, suggesting these as major contributing factors. In addition, CTS was found to negatively affect daily activities, economic status, mental health, and work quality.

Sustainable Development Goals: 1 - Poverty, 3 - Good Health and Wellbeing

OP 2

Knowledge and associated factors on hand hygiene among healthcare workers at a teaching hospital in Sri Lanka

A.A.S. Madusanka, T.S. Thilakarathna, P.D.K. Sewwandi, R.M.S. Rathnayake, M.B.F. Mafaza, D.M.B.T. Dissanayake, R.D.S. Ranasinghe

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Background: Hand hygiene is essential to prevent healthcare-associated infections (HAIs), which cause significant morbidity, mortality and economic loss globally. The WHO's "Five Moments" model highlights proper hand hygiene to improve patient safety and reduce infection spread. However, adherence varies across hospital units due to factors like knowledge gaps, understaffing, and high workloads among healthcare workers. The aim of this study was to assess the knowledge of hand hygiene and its associated factors among healthcare workers at a teaching hospital in Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 355 permanent healthcare workers directly involved in patient care at a tertiary care hospital in Colombo, excluding consultants and therapists. Systematic sampling was used. A modified WHO hand hygiene knowledge questionnaire, translated into Sinhala and Tamil, was administered as a self-administered tool. Associations were tested using Chi-square test with $p<0.05$ considered significant.

Results: Of 355 participants, 245 (69.0%) were female and 205 (57.7%) had higher education. A total of 271 (76.3%) had satisfactory hand hygiene knowledge, with 226 (63.7%) trained in the last 3 years and the majority (99.4%) was using soap and water as the main method of hand hygiene. Only 14.6% knew the correct order of all hand washing steps. Knowledge was significantly associated with designation and education level ($p<0.05$). Doctors (88.1%) and nursing officers (83.3%) had better knowledge than others (57.3%).

Conclusion: Overall knowledge on hand hygiene was satisfactory among the majority of healthcare workers at the selected hospital. Designation and highest educational level were significantly associated with the knowledge.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 3

Factors associated with practices towards household waste management in selected districts in Sri Lanka

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Background: To develop an effective waste disposal system in a community, household waste management is the fundamental unit. This study was conducted among households of selective districts which are Badulla, Colombo, Gampaha, Galle and Kandy.

Methods: This was a descriptive cross-sectional study conducted among adults. Data were collected through a self-administered questionnaire composed of close ended and open-ended questions, complete with an information sheet and consent form. The questionnaire was formulated in both English and Sinhala languages and distributed to the participants via a Google form.

Results: Among the waste disposal practices a larger proportion (59.8%) out of total 350 participants had practiced good practices and other participants (40.2%) had practiced bad practices. Majority of the participants who practiced good practices were in Colombo district (24.8%). There was a significant association among waste disposal practices and the selected districts ($p=0.014$). Larger proportion of the participants who had practiced good practices were female (70.1%). Major proportion of participants who practiced good practices had an adequate knowledge (78.5%). Most of the participants (95%) had a favourable attitude toward household waste disposal practices. Majority of the participants (72.9%) responded that there were inadequate rules and regulations and insufficient government involvement (72.0%) in Sri Lanka toward household waste management. Mostly generated waste type was kitchen waste (333) and least was glass. Majority of the participants (319) had used rubbish bin as their waste storage method. Most of the participants responded that burning was their major waste disposal method (269). Minor percentage used recycling as their waste disposal method.

Conclusion: Majority of the participants of the study population had practiced good practices. There was a significant association between household waste disposal practices and sociodemographic factors which are household's district, highest level of education and average monthly income of households.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 4

Effective therapeutic (doctor-patient) relationship: perceptions of doctors and the general public

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Background: An effective doctor-patient relationship (DPR) is crucial for positive health outcomes. Exploring both patients' and doctors' perceptions reveals key features of a good DPR and identifies potential mismatches in expectations. Evaluation of DPR features has been limited worldwide, and expectations change over time. This study provides insights for practitioners and medical educators.

Methods: A descriptive cross-sectional study was conducted at a tertiary care hospital in Sri Lanka among 130 doctors and 150 members of the general public, recruited through consecutive sampling. The public sample included patients and bystanders aged ≥ 18 years attending the OPD and clinics, excluding foreigners, cognitively impaired individuals, those in poor health, or without doctor contact in the past year. Eligible doctors were those involved in direct patient care at NHK. Data were collected using a pre-tested, self-administered questionnaire covering demographics and ranked features of an effective DPR. The Mann-Whitney U test was used for analysis.

Results: Doctors opined that 'Maintaining confidentiality/privacy', 'Professional behaviour', and 'Doing no harm to the patient and society' as more important. In contrast, the general public considered 'Commitment', 'Ability to understand patient's situation', and 'Being fair' to be more important. However, an equal level of importance was attributed to 'Acting in the best interest of the patient', 'Good communication skills', 'Respecting patient's decisions', and 'Obtaining patient's consent' by both populations.

Conclusion: This study reveals both common ground and differences in expectations of how doctors and the general public perceive the elements that make a therapeutic relationship effective.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 5

Common skin conditions and associated factors among health care workers in selected hospitals in Colombo District

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Background: Skin conditions among health care workers (HCWs) are a significant occupational health concern, affecting both personal wellbeing and the quality of patient care. This study examined common skin conditions among HCWs and factors associated with their prevalence.

Methods: This is a descriptive cross-sectional study conducted among 423 male and female health care workers working in 3 selected hospitals in Colombo District. Data were collected through an interviewer administered questionnaire composed of close ended questions; on presence of skin conditions, information regarding present skin conditions including the site, duration and associated factors, (socio-demographic, occupational, personal and behavioural factors) providing an information sheet and a consent form. The questionnaire was formulated in both English and Sinhala languages and the participants were given language preference. The questionnaire also included photographs of skin conditions.

Results: The larger proportion (n=233, 56.4%) of the HCWs who participated in the study had a skin condition. Majority (n=276, 66.8%) of them were nurses. Face was the most common site (n=87, 30.6%) with skin conditions and dandruff was the most common skin condition (n=77, 30.2%) seen among HCWs. Having a skin condition showed statistically significant association with application of cosmetics, the usage of a corrosive or chemical substance in household and presence of a skin condition, stress due to personal or work-related matter.

Conclusion: Skin conditions are common among the majority of HCWs and the association between using corrosives, stress, using cosmetics and presence of a skin condition was statistically significant.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 6

Prevalence and associated factors of musculoskeletal disorders among garment factory workers in selected garment factories in the Kalutara District

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Background: Musculoskeletal disorders (MSDs) are a significant occupational health concern among garment factory workers, arising from both occupational and socioeconomic factors. Workers in garment factories are frequently exposed to prolonged sitting or standing, repetitive tasks, and poor ergonomic conditions, leading to musculoskeletal strain and injuries.

Methods: The research examined musculoskeletal disorders (MSDs) of garment factory workers in Kalutara, Sri Lanka. The data collection was done through structured interviews with a questionnaire which was conducted in English, Sinhala, or Tamil. Descriptive statistics (means, SDs, frequencies and percentages) and inferential statistics (independent t-test, and Chi-square test) were computed. The significance level was set at p -value < 0.05 .

Results: Neck pain was reported by 11.8% of workers, back pain by 24.6%, upper limb pain by 9.2%, and lower limb pain by 19.3%. Neck pain showed significant associations with age ($p=0.025$), height ($p=0.01$), stress ($p=0.002$), and family history of MSDs ($p=0.009$). Back pain was associated with age ($p=0.014$), education ($p=0.048$), height ($p=0.022$), presence of children ($p=0.003$), and family history ($p=0.002$). Upper limb pain was linked to age ($p=0.014$), religion ($p=0.01$), daily working hours ($p=0.041$), and stress ($p=0.012$). Lower limb pain was associated with age ($p=0.007$), marital status ($p=0.043$), daily working hours ($p=0.048$), presence of children ($p=0.008$), and family history ($p=0.008$).

Conclusion: Age, height, education, stress, family history of MSDs, working hours, and presence of children were significantly associated with MSDs. In contrast, gender, ethnicity, marital status, income, financial support, alcohol consumption, smoking, job satisfaction, and mode of travel showed no significant associations.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 7

Determinants of food choices and dietary habits among adolescents in urban Sri Lanka

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Background: Adolescence is a critical period for establishing lifelong dietary habits that influence long-term health. This study assessed the association of socio-economic determinants and nutritional knowledge with food choices and eating habits among adolescents in Colombo, Sri Lanka.

Methods: A cross-sectional study was conducted among 182 students from two schools in Colombo selected by multistage random sampling. Data on eating habits, food choices, socio-demographic and economic factors, and nutrition knowledge were collected using a validated self-administered questionnaire. Scoring systems categorized food consumption (healthy/unhealthy) and nutrition knowledge (satisfactory/unsatisfactory). Chi-square and Fisher's exact tests were used for categorical variables, and Pearson correlation coefficients for continuous variables. Significance was set at $p < 0.05$.

Results: The population comprised of a male to female ratio of 0.83 with a mean age of 13.8 (SD=0.58) years. Of the participants, 54.4% (n=99) had healthy food choices and nutritional knowledge was satisfactory only in 45.1% (n=82). Almost 89% considered cost when buying food, and 55.5% skipped breakfast due to financial issues. Food choices were not associated with father's occupation ($p=0.260$) or pocket money ($p=0.792$), however, were positively associated with family discussions ($p=0.004$), emphasis on healthy nutrition ($p=0.048$), and religious practices ($p=0.003$). Better nutritional knowledge demonstrated significant

positive associations with female gender ($p<0.001$) and increased family influence ($p<0.001$). However, healthy food consumption was not associated with the nutrition knowledge of the participants ($p=0.332$), depicting a gap between knowledge and practice.

Conclusion: Various socio-economic constraints combined with poor application of knowledge restrict healthy eating among urban Sri Lankan adolescents. Thus, public health strategies must address affordability of healthy foods, while strengthening family involvement and practical nutrition skills to reduce malnutrition.

Sustainable Development Goals: 1 - Poverty, 2 - Zero Hunger, 3 - Good Health and Wellbeing

OP 8

Knowledge, attitudes, practices, and associated factors towards fast food consumption among medical students in a Sri Lankan university

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Background: The prevalence of fast-food consumption has become a global health concern, contributing to the rise of non-communicable diseases. Despite the growing awareness of the impact of dietary habits on health, there is limited research specifically addressing the knowledge, attitude, and practices of fast-food consumption among university students.

Methods: A descriptive cross-sectional study was conducted among medical undergraduates in a selected medical faculty of a government university. A sample of 384 students was selected via convenience sampling. Data were collected using a pretested self-administered questionnaire and analyzed using frequencies and the Chi-square test, with $p<0.05$ was considered statistically significant.

Results: Among the participants, 64.6% were female and the majority (55.2%) were aged 18-23 years. Clinical students made up 57.3% and had better knowledge of fast food (76.8%). Religion and ethnicity showed significant associations; Buddhists had more positive attitudes (57.5%) but poorer practices (54.7%), while non-Buddhists showed more negative attitudes (59.3%) but better practices (65.7%). Similarly, Sinhalese (76.6%) had more positive attitudes (58%) but fewer good practices (54.8%), whereas non-Sinhalese showed the opposite trend. Preference for fast food was noted in 44.5% of participants. Other sociodemographic factors like gender, age, family income were not statistically significant.

Conclusion: The study found a significant link between fast food knowledge and academic progression, especially among clinical year medical students. Many students particularly in clinical years, preferred fast food. Gender, age, university location, employment and income had no significant impact on attitudes or practices. However, religion and ethnicity influenced behaviour; Buddhists and Sinhalese showed more positive attitudes but poorer practices, while non-Buddhists and non-Sinhalese had negative attitudes but healthier habits. These findings highlight the need for currently tailored interventions to promote healthy eating among medical students.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 9

Knowledge, attitudes, practices, and associated factors on prevention of iron deficiency anaemia among first-year students in a selected university in Sri Lanka

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Background: Iron deficiency anaemia (IDA) is the most common type of anaemia in Sri Lanka, primarily due to micronutrient deficiency. University students are particularly vulnerable to IDA because of poor dietary habits, limited awareness, and socio-economic constraints.

Methods: A descriptive cross-sectional study was conducted among 420 first-year students from the Faculties of Medical, Applied Sciences, Management, and Humanities and Social Sciences at the University of Sri Jayewardenepura. Stratified sampling allocated 105 participants from each faculty, followed by simple random sampling. Data were collected using a self-administered bilingual (English and Sinhala) questionnaire.

Results: Overall, 52.4% of participants had good knowledge of IDA prevention. The highest knowledge was observed among medical students (82.9%), whereas most Humanities and Social Sciences students (72.4%) had poor knowledge. Females demonstrated significantly higher knowledge and practices than males ($p=0.018$, $p=0.037$). Higher family income was positively associated with better knowledge ($p=0.002$) and attitudes. Nearly half of students (47.6%) reported difficulty accessing iron-rich food due to living away from home. Students living at home (63.7%) reported better practices compared to others.

Conclusion: Despite university-level education, male students demonstrated poorer knowledge and practices towards IDA prevention. Higher family income and residing at home were associated with healthier attitudes and practices, largely due to better access to balanced diets. Targeted interventions are needed to improve knowledge and dietary behaviours among vulnerable student groups.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

Session B

Surgical Care

OP 10

Obtaining consent from patients awaiting major surgical procedures and factors associated with patient satisfaction in a tertiary care hospital

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Background: Informed surgical consent (ISC) is a vital ethical and legal procedure in surgical treatments. Deficiencies in the consent process, including inadequate explanations, lack of patient involvement, and sociocultural issues, can influence decision-making and patient satisfaction. The aim of this study was to explore the factors influencing patient satisfaction with the consent process in a selected tertiary care hospital.

Methods: A descriptive cross-sectional study was conducted among 357 patients above 18 years of age who underwent major surgeries in three surgical wards of a selected tertiary care hospital. Patients were chosen through consecutive sampling method and a pre-tested interviewer-administered electronic-based questionnaire was executed once ethics and administrative approval had been obtained. This questionnaire contained 10 items on a 5-point-likert scale where 1= very dissatisfied and 5= highly satisfied. Final scores of the participants were later converted to a 100% scale and out of it >75% was considered as 'Highly satisfied', 50-75% as 'Satisfied' and <50% as 'Poorly satisfied'. Associations between independent variables and patient satisfaction was determined using the Chi-square test with p value <0.05 was deemed significant.

Results: The mean satisfaction score for ISC was 86.9%. Overall, 85.7% were highly satisfied, 9.8% satisfied, and 4.5% poorly satisfied. Satisfaction was significantly associated with age ($p=0.001$), ethnicity ($p=0.022$), literacy ($p=0.035$), education ($p=0.002$), occupation ($p=0.008$), language ($p<0.001$), awareness of surgical consequences ($p<0.001$), explanation of risks ($p<0.001$), addressing patient queries ($p<0.001$), and duration of the consent process ($p=0.039$).

Conclusion: The majority of the participants were highly satisfied with the process. Despite that, notable gaps were identified in communication skills of healthcare providers and inadequate time allocation for ISC, which warrant further attention.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 11

Non-invasive management of gastrostomy granulemas in children using table salt: outcomes from a retrospective review

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Background: Gastrostomy-related granulation tissue is a common complication in children receiving long-term enteral feeding. This study evaluated the therapeutic effectiveness of table salt as a simple, low-cost treatment for peristomal granulemas in children.

Methods: A retrospective review was conducted on 52 paediatric patients who received table salt application for gastrostomy granulemas from the clinic database. One session was defined as the application of table salt for 1 hour. The length of the granulation tissue was measured as the largest vertical diameter using a sterile ruler.

Results: Of the 52 patients, 25 (48.1%) were male and 27 (51.9%) were female. The mean age was 5.8 years. All patients achieved complete resolution of granulemas by salt application without requiring any surgical

interventions. The number of sessions ranged from 1 to 5, with a median of 3 and an interquartile range (IQR) of 2–3. A statistically significant association was observed between initial granulation size and number of sessions required (Kruskal–Wallis $H=41.53$, $p<0.001$), with larger lesions needing more sessions. For example, 78% of patients with <1 mm lesions resolved in one session, while all with >3 mm lesions required ≥ 4 sessions. Tube size (16G, 18G, 20G) did not significantly affect treatment duration (Kruskal–Wallis $H=0.587$, $p=0.746$).

Conclusion: Table salt is an effective, safe, and low-cost treatment for gastrostomy-related granulation tissue in paediatric patients. Given its accessibility and minimal side effects, salt therapy can be recommended as a first-line option, particularly in resource-limited settings.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 9 - Innovation

OP 12

Non-fatal falls in adults: injury patterns and associated factors in a tertiary care hospital

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Background: Falls are a leading cause of trauma admissions to hospitals in Sri Lanka and globally, particularly among the elderly. Multiple factors influence the severity of fall-related injuries. A 2019 Sri Lankan study reported a 26% prevalence among community-dwelling elderly. The aim of this study was to describe injury patterns and identify factors associated with non-fatal falls among adults in a tertiary care hospital.

Methods: A descriptive cross-sectional study was conducted among 269 adults presenting with non-fatal falls between June and July 2024. Data were collected using an interviewer-administered questionnaire and an injury information sheet completed by trauma centre personnel. Injury Severity Score (ISS) ≤ 3 was classified as minor; >3 as major.

Results: ISS ranged from 0–18 (mean 4.55 ± 3.88). Nearly half the participants were ≥ 65 years (49.8%) and 54.3% were female. Most injury types, excluding abdominal injuries ($n=24$), significantly affected severity ($p<0.001$), with upper limb injuries being notable. Diabetes was a significant comorbidity influencing severity ($p=0.037$). Slipping was the leading cause (36.4%), often occurring at home while walking (36.2%). Slippery footwear was reported in 79.4% of cases. Fall mechanism and environmental hazards were not statistically significant predictors of severity.

Conclusion: Older age, female gender, specific injury types, and diabetes were key factors associated with higher injury severity. Slipping, particularly at home, was the most common cause, though environmental factors did not significantly influence severity. These findings highlight the need for targeted fall-prevention strategies, particularly among older adults and those with comorbidities.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 13

Renal tumours under the microscope: Characteristics and factors associated with tumour grade from patients in selected tertiary care centres in Colombo District, Sri Lanka

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Background: Renal tumours account for 2–3% of adult malignancies globally and are the 14th most common cancer type. This study aimed to describe histopathological patterns and identify factors associated with tumour grade among patients undergoing nephrectomy in selected tertiary care centres in Colombo District, Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 135 nephrectomised renal tumour patients from one private and one government hospital between January 2011 and January 2024. Data were retrospectively extracted from histopathology reports. Patients without a confirmed histopathological diagnosis were excluded. Tumour characteristics and grade were analysed using Chi-square test, applying the combined WHO/ISUP and Fuhrman grading systems.

Results: Most patients were aged ≥ 50 years (69.4%) and male (72.4%). Tumour size was ≤ 40 mm in 35.8%, 40.1–70 mm in 29.1%, and >70 mm in 35.1%. Clear cell RCC was most common (76.3%), followed by papillary RCC (14.8%). Most tumours were staged as T1a stage (31.1%) while Grade 2 tumours were most frequent (63.4%). Perinephric fat invasion, Gerota's fascia involvement, renal capsule involvement, and renal vein invasion were found in 14.5%, 3.8%, 41.9%, and 20.8% of patients, respectively. Tumour size ($p=0.028$), T stage ($p=0.001$), perinephric fat invasion ($p<0.001$), Gerota's fascia involvement ($p=0.031$), and renal vein invasion ($p=0.001$) were significantly associated with tumour grade, while age, gender, tumour type, and renal capsule involvement were not associated with the tumour grade.

Conclusion: Higher tumour grades were associated with larger size, advanced T stage, and invasion of perinephric fat, Gerota's fascia, and renal vein. These findings highlight the importance of grade-based treatment considerations over tumour type.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 14

Patient satisfaction with pain management and associated factors among acute abdominal pain admissions to the surgical wards of a selected tertiary care hospital

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Background: Pain management satisfaction is a cornerstone of quality healthcare, influencing both standard of care and overall patient experience. This study aimed to assess satisfaction with pain management and associated factors among patients admitted with acute abdominal pain to surgical wards of a selected tertiary care hospital.

Methods: A descriptive cross-sectional study was conducted among 404 patients aged ≥ 18 years, admitted with abdominal pain of <7 days' duration. Participants were selected using systematic random sampling, and data were collected through a pre-tested questionnaire covering sociodemographic, therapeutic, and hospital-related factors.

Results: Most patients (90.4%) reported severe discomfort, with a mean satisfaction score of 7.62/10. Female patients reported higher satisfaction than males ($p=0.024$). Satisfaction was significantly associated with doctor-patient interaction ($p<0.001$), cleanliness ($p<0.001$), hospital amenities ($p<0.001$), and staff politeness ($p=0.032$), but not with nursing staff ($p=0.40$). Combination therapy (46.3%) yielded higher satisfaction compared to single-agent therapy ($p=0.033$).

Conclusion: Both pharmacological and non-pharmacological factors affect how satisfied people are with their pain management. To improve patient experiences, hospital administration should focus on improving therapeutic approaches, hospital amenities and the doctor-patient interaction. In addition, improving hospital architecture and implementing training programs for healthcare professionals would create better pain management results since these factors play a huge role in patient satisfaction. Another crucial choice for pain management is combination therapy. Hence a holistic approach is necessary.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 15

Clinicopathological links in breast cancer: A Sri Lankan study

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Background: Breast cancer is the most common female malignancy in Sri Lanka, with incidence steadily rising. However, detailed local data on clinicopathological characteristics and their associations remain limited. Understanding these factors is vital for evidence-based management and improved outcomes. This study aimed to describe the clinicopathological profile of females with breast malignancies and assess associations between clinical and histopathological factors at a selected tertiary care hospital.

Methods: A descriptive cross-sectional study was conducted on 386 pathology reports of females diagnosed with breast malignancies between January 2010 and August 2024 collected using consecutive sampling. Patients already treated with surgery or adjuvant therapy were excluded. Data were collected using a pre-tested data extraction sheet. Variables included age, presenting complaint, previous investigation results, histopathological characteristics, and immune prognostic markers. Associations between clinical and histopathological factors were determined using the Chi-square test for categorical variables. Fisher's exact test was applied when expected frequencies in contingency tables were ≤ 5 . A p -value < 0.05 was considered statistically significant.

Results: The mean age of patients was 58.78 years (SD ± 11.53), with 53.2% aged below 60 years. A majority (81%) presented with breast/axillary lumps. Tumour sizes ranged between 21-50 mm (62.2%). Histologically, invasive carcinoma of no special type accounted for 79.5%. Immunohistochemistry revealed oestrogen receptor (ER) positivity in 68.3% and HER2 positivity in 19.2%. Statistically significant associations were observed between the following: low Nottingham grade carcinomas and ER positivity ($p < 0.001$); large tumour size (> 50 mm) and high Ki67 index ($p = 0.018$); and HER2 receptor positivity and the presence of ductal carcinoma in situ (DCIS) ($p = 0.003$).

Conclusion: Breast cancer in Sri Lankan females predominantly affects younger populations and presents as intermediate-sized tumours. The proportion of HER2-positive and high Ki67 tumours highlights the need for access to targeted therapies and intensified treatment protocols for these aggressive subtypes. Findings may inform local treatment protocols and screening strategies, though generalisability is limited to a single-centre population.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 5 - Gender Equality

OP 16

Sociodemographic and clinicopathological features of pancreatic carcinoma and factors associated with tumour resectability in a tertiary care centre in Sri Lanka

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Background: Pancreatic carcinoma is among the most lethal malignancies worldwide, with limited treatment options and poor prognosis. Data on its sociodemographic and clinicopathological characteristics and factors influencing tumour resectability in Sri Lanka remain scarce. This study aimed to describe these features and identify factors associated with resectability at a tertiary care centre.

Methods: A descriptive retrospective study was conducted at a selected tertiary care hospital from 2018 to 2023. Records of 310 patients diagnosed histologically with pancreatic carcinoma were extracted from the

hospital database. Data included socio-demographic characteristics, clinical presentation, tumour location and size, serum CA19-9 levels, comorbidities, and management. Associations with tumour resectability were analyzed using appropriate statistical tests. Ethical approval was obtained from the Faculty of Medical Sciences Ethics Review Committee.

Results: Among the 310 patients studied, 56.9% were aged 60 or above, with a slight male predominance (50.6%). The most common symptoms included abdominal pain (52.3%), weight loss (44.2%), and obstructive jaundice (41.3%). Tumours were predominantly located in the pancreatic head (66.8%). Surgical resection was feasible in 54.5% of cases. Significant factors associated with resectability included absence of diabetes ($p=0.013$), lower CA19-9 levels ($p<0.001$), smaller tumour size ($p=0.002$), and earlier TNM stage ($p<0.001$)

Conclusion: This study highlights the need for early detection and comprehensive management of pancreatic carcinoma to improve prognosis. Public health strategies should focus on awareness and equitable access to diagnostic and treatment services, especially in underserved regions of Sri Lanka.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 17

Cutting through the first delay: barriers to timely surgical care in Colombo District, Sri Lanka

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Background: Timely access to surgical care is essential for improved outcomes, yet delays remain a major challenge. Guided by the Three Delays Framework, this study assessed access barriers and awareness-related factors among postoperative patients, including those who underwent bellwether procedures.

Methods: This descriptive cross-sectional study included 200 postoperative patients who underwent emergency surgeries in surgical, gynaecological, obstetric, and orthopaedic wards at two hospitals in Colombo District. After informed consent, participants were interviewed using a structured questionnaire to assess the Three Delays – time from symptom onset to decision-making, arrival at hospital, and initiation of surgery. Awareness-related factors contributing to delays were also explored through closed-ended questions.

Results: The median delay time of the first was 2h (IQR = 48h). Out of the total number of patients, 152 had undergone one of the three bellwether procedures where 55.3% had 2h geographic access to the two selected hospitals. Financial constraints in seeking surgical care, access to reliable transportation to the hospital, awareness of surgical condition as an emergency, awareness of surgical condition as life-threatening requiring immediate care, fear and anxiety towards surgical procedures, hearing of misinformation regarding surgical procedures, cultural beliefs, prior use of traditional/spiritual healing methods, negative past experiences were found to be statistically significant factors for the first delay of more than 1 day when compared to and patients who had no such issues experiencing a first delay of less than 1 day ($p<0.001$).

Conclusion: This study highlights the critical role of patient-related factors in contributing to delays in accessing emergency surgical care, even when geographic access is adequate. Using the Three Delays Framework, it underscores the importance of addressing financial, informational, cultural, and psychological barriers to improve timely surgical access. These insights can inform health policy and community-based interventions aimed at reducing avoidable delays and improving surgical outcomes in similar settings.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 18

Assessing the completion rate of colonoscopy and factors associated with incompleteness in a selected teaching hospital in Colombo District

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Background: Colonoscopy is the gold standard for diagnosing and managing lower gastrointestinal diseases. Incomplete colonoscopies reduce diagnostic accuracy and increase repeat procedures. Despite extensive global research, data on Sri Lankan colonoscopy completion rates remain limited.

Methods: A hospital-based descriptive cross-sectional study was conducted among patients undergoing colonoscopy at the selected teaching hospital. Data were collected using an interviewer-administered questionnaire and procedural records, assessing patient demographics, comorbidities, procedural characteristics, and completion status. Patients who underwent colonoscopy between the research period and were above the age of 18 were included whilst severely ill patients were excluded. Associations were analyzed using Chi-square tests, considering a p -value <0.05 as significant

Results: Out of 216 colonoscopies performed, 85.6% ($n=185$) were complete, while 14.4% ($n=31$) were incomplete. The primary indication for colonoscopy was diagnostic (84.7%, $n=183$), followed by therapeutic (10.2%, $n=22$) and preventive (5.1%, $n=11$) respectively. Among incomplete colonoscopies, 54.8% ($n=17$) were due to patient-related factors, 45.2% ($n=14$) due to setting-related factors, and none were due to endoscopist-related factors. Inadequate bowel preparation was the most significant predictor of incompleteness ($p=0.004$). Although age, gender, BMI, pain levels, and previous surgeries showed variations in completion rates, they were not statistically significant.

Conclusion: The colonoscopy completion rate at the selected tertiary care hospital (85.6%) was comparable to global standards but below the recommended benchmark of $\geq 90\%$. Inadequate bowel preparation was the leading cause of incompleteness, emphasizing the need for improved patient education and standardized bowel preparation protocols

Sustainable Development Goals: 3 - Good Health and Wellbeing

Session C

Health Awareness

OP 19

Proportion and knowledge of colour vision deficiency and associated factors among adults in Western Province, Sri Lanka

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Background: Colour Vision Deficiency (CVD) is an abnormality of photopigments in retinal cones. It can affect anybody of any age, and is often undetected. This study aimed to describe proportion of CVD, and knowledge of CVD and its associated factors among adults in Western Province, Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 423 adults aged above 18 years. Stratified sampling method along with snowball sampling was used within each district as sampling technique. A pre-tested self-administered questionnaire was used for data collection via online platform, with an online colour vision assessment tool. Descriptive statistics and Pearson's Chi-square test were applied in analyzing data. Statistical significance was taken as $p < 0.05\%$.

Results: The majority of participants were female (63.4%) with a mean age of 33 years (SD 12.62). Most were undergraduates (40.2%) or graduates (22.2%). Awareness of CVD was high (92.0%). Thirty-seven participants (9.5%) reported a prior diagnosis, of whom 21.6% had a family history. The online tool identified 22 participants (5.2%) as suggestive of abnormal colour vision. Overall, 53.7% demonstrated good knowledge, particularly regarding colour recognition, risk factors, prevalence, and impact on daily activities and occupations. The internet and social media were the most common knowledge sources (40.6%). Younger age ($p=0.01$), higher education ($p=0.001$), unmarried status ($p=0.01$), and unemployment ($p=0.002$) were significantly associated with good knowledge.

Conclusion: A small proportion of participants showed abnormal colour vision on screening, though most demonstrated good knowledge of CVD. Public awareness campaigns may improve early detection and support occupational guidance.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 20

Knowledge and practices of paracetamol use as an over-the-counter medicine among adult patients attending a selected hospital setting

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Background: Paracetamol is a commonly used over-the-counter (OTC) analgesic and antipyretic medication. Unintentional overdosing of paracetamol following self-medication is a prevalent and concerning issue, as it can cause serious adverse effects, including hepatotoxicity. Public understanding of its safe dosage, frequency of administration and potential drug interactions remains inadequate, as suggested by previous studies. This study aims to evaluate the knowledge, usage patterns and practices related to paracetamol consumption among adult patients attending a selected hospital setting.

Methods: A descriptive cross-sectional study was conducted at the Outpatient Department of the District Hospital Maligawatte. Using systematic sampling, 130 adults aged 20-60 years were recruited. Data were

gathered using a pretested, interviewer-administered questionnaire, validated by experts. The questionnaire explored socio-demographic details, reasons for paracetamol use, dosage practices, and knowledge regarding safety and maximum recommended doses. Knowledge scores were classified into “Satisfactory” or “Poor” categories.

Results: The participants were predominantly female (63.8%), with a mean age of 40.2 years. Overall, 56.2% demonstrated satisfactory knowledge of paracetamol use, with most correctly identifying the recommended 6-hour dosing interval. However, only 17% were aware of the correct maximum daily dose. Paracetamol was primarily used to manage fever (84.6%) and headaches (83.1%). No statistically significant association was observed between knowledge levels and age, gender or education.

Conclusion: Although the majority of the participants demonstrated satisfactory overall knowledge and reported appropriate dosing intervals, the awareness of critical safety parameters, particularly the maximum daily dose, was notably poor. This poses a significant risk of adverse effects, given the widespread use of the medication. Targeted public education, clearer product labelling and routine counselling by healthcare professionals are warranted to mitigate preventable harm.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 21

Knowledge, attitudes, and associated factors for knowledge on early detection of autism spectrum disorder among mothers of children aged ≤2 years attending paediatric clinics at a selected tertiary care hospital in Sri Lanka

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Background: Autism spectrum disorder (ASD) is a neurodevelopmental condition characterized by deficits in social communication and restricted, repetitive behaviours. Early detection is crucial for timely intervention, yet in Sri Lanka diagnosis is often delayed, partly due to limited maternal awareness. As primary caregivers, mothers play a key role in identifying atypical behaviours, making their knowledge and attitudes essential to early detection.

Methods: A descriptive cross-sectional study was conducted among 230 mothers of children aged ≤2 years attending paediatric clinics at a selected tertiary care hospital. Systematic random sampling was used. Data were collected through an interviewer-administered questionnaire covering socio-demographics, knowledge of ASD characteristics, risk factors, developmental milestones, screening practices, and attitudes. Frequency distributions and Chi-square tests were applied in the analysis.

Results: Only 48% (n=111) of mothers had heard of ASD, and 83.5% demonstrated poor knowledge of ASD features. Awareness of developmental milestones in the Child Health Development Record (CHDR) was higher (88.3%, n=204), and those aware of mental milestones had significantly better knowledge (55.4% vs. 33.3%, $p=0.013$). Maternal education ($p=0.019$), household income ($p=0.017$), and employment ($p=0.005$) were positively associated with knowledge. Access to information through prenatal clinics, antenatal clinics, and family physicians/paediatricians also showed significant associations (all $p<0.05$). While 69.2% strongly agreed on the importance of tracking milestones with the CHDR, misconceptions, stigma, and financial concerns negatively influenced attitudes toward early diagnosis and intervention.

Conclusion: Maternal knowledge of early detection of ASD remains inadequate, shaped by education, socioeconomic status, and healthcare access. Integrating ASD awareness into routine maternal and child healthcare services, expanding developmental screening, and leveraging community and media-based education are vital to reducing diagnostic delays and improving outcomes for children with ASD in Sri Lanka.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 22

Knowledge, attitudes, practices and factors associated with self-medication for selected symptoms among preclinical students of a medical faculty in a selected university

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Background: Self-medication refers to the use of medicines without medical consultation, including buying drugs without prescriptions, reusing old prescriptions, or sharing medicines. While responsible self-medication can reduce healthcare burden, inappropriate use risks adverse reactions, resistance, dependence, and waste. Although widely practiced among medical students internationally, Sri Lankan data are limited. This study aimed to assess knowledge, attitudes, practices, and associated factors of self-medication among preclinical medical students.

Methods: A descriptive cross-sectional study was conducted among 278 preclinical medical students between July 2022 and July 2023. Data were collected using a pretested self-administered questionnaire. Descriptive statistics and Chi-square/Fisher's exact tests were applied for analysis.

Results: The study provides insights into demographics, knowledge, attitudes, and self-medication practices. A predominantly female (68.3%) and urban (66.2%) population, with Sinhalese ethnicity (73.7%) and Buddhist affiliation (69.1%) was predominant. Internet usage (68.0%) for medical knowledge is common, yet self-medication knowledge remains poor (62.6%). Factors such as age, gender, and parental occupation significantly influence both knowledge and attitudes towards self-medication. Notably, second-year students exhibit higher self-medication prevalence, primarily for headaches.

Conclusion: Factors such as age, gender, year of study, parental occupation, income, accommodation, and past experiences significantly influence knowledge, attitudes, and self-medication practices. Females exhibited higher knowledge levels, while older participants and second-year students displayed more positive attitudes towards self-medication. Cost influenced self-medication practices, for less severe symptoms.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 23

Knowledge, attitudes, practices and associated factors on foot care among diabetic patients admitted to medical wards of two selected tertiary care hospitals in Sri Lanka

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Background: Diabetes mellitus is a noncommunicable metabolic disorder characterized by chronic hyperglycaemia due to absolute or relative insulin deficiency. Diabetic foot encompasses a spectrum of foot problems, with diabetic foot ulcers (DFUs) being a common and severe complication contributing significantly to morbidity, mortality, and lower extremity amputations in Sri Lanka. Effective management and preventive measures, including appropriate foot care practices, are essential to reduce complications and improve quality of life.

Methods: A descriptive cross-sectional study was conducted at two selected tertiary care hospitals from August 2023 to February 2023 with a sample of 250 diabetic patients. Patients below 18 years were excluded. Data were collected using an interview-administered questionnaire after obtaining consent. Analysis was done with statistical significance set at $p < 0.05$.

Results: Among participants, 54% had good knowledge of diabetic foot care, while 46% demonstrated poor knowledge. Attitudes were positive in 78.8%, and 59.6% reported good practices, whereas 40.4% showed

poor practices. Knowledge was significantly associated with gender and duration of diabetes. Attitudes were significantly associated with age, gender, income, employment, and need of assistance for foot care. Practices were significantly associated with the need of assistance for foot care.

Conclusion: As knowledge was identified as a significant factor influencing both attitudes and practices, public education on diabetic foot care practices is recommended.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 24

Knowledge and practices on paracetamol use and associated factors among mothers with children under fourteen years attending Maternal and Child Health clinics in Borelasgamuwa MOH area

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Background: Paracetamol is one of the most widely used over-the-counter medications, commonly administered for pain and fever relief. However, improper use can lead to serious health risks such as hepatotoxicity. Assessing maternal knowledge and practices is essential for ensuring safe paediatric medication use.

Methods: This descriptive cross-sectional study was conducted at Maternal and Child Health clinics in the Borelasgamuwa MOH area, Sri Lanka. Mothers of children under 14 years who had used paracetamol and lived in the area for at least six months were included; exclusions were cognitive impairment, no prior paracetamol use, or refusal. Consecutive sampling recruited 422 participants, calculated using Lwanga and Lemeshow's formula. A multilingual self-administered questionnaire assessed knowledge (scores >8/12 = good), practices, and factors. Data were analyzed with descriptive statistics and Chi-square tests. Ethics approval was obtained.

Results: A total of 210 responded with a response rate of 84%. The median age of the study participants was 32 years with an IQR of 6. Among the participants, the majority, 51.9% (n=109) demonstrated overall poor knowledge of paracetamol use. A smaller proportion exhibited inadequate understanding of correct dosing and potential side effects. A significant association was found between educational level and knowledge score ($p<0.05$). Mothers with higher education levels were more likely to correctly identify the recommended paediatric dosage and recognize overdose symptoms. Common misconceptions included incorrect dosing intervals and the belief that paracetamol is entirely free of adverse effects.

Conclusion: This study highlights the need for improved educational interventions targeting mothers to enhance their understanding of safe paracetamol use. Healthcare professionals should play a more active role in providing guidance on appropriate dosing and risks. Public health campaigns focusing on medication safety may help prevent potential misuse and associated health complications.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 25

Proportion of patients wearing face masks among those with selected chronic respiratory diseases and their attitudes and associated factors towards wearing them in a tertiary care hospital in Sri Lanka

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Background: Chronic respiratory diseases significantly impact patients' quality of life. Face mask usage plays a vital role in preventing infections and reducing disease exacerbations. Adherence to mask-wearing can vary due to sociodemographic, cultural, and attitudinal factors.

Methods: A descriptive cross-sectional study was conducted among patients with chronic respiratory diseases admitted to medical wards of a selected tertiary care hospital. A sample of 384 patients was selected using systematic sampling. Data were collected through face-to-face interviews with an interviewer-administered questionnaire and analyzed to assess attitudes and associated factors towards face mask use.

Results: Majority of the patients (93.97%) wore face masks, while 6.0% did not. Among non-mask wearers, COPD and bronchial asthma were equally prevalent (43.5% each), whereas among mask wearers, the majority had bronchial asthma (73.3%). The association between chronic respiratory diseases and mask-wearing were found to be statistically significant ($p = 0.001$). Gender and employment status were significantly associated with mask-wearing, with females (96.7%) wearing masks more than males (90.7%) ($p \leq 0.05$) and unemployed individuals (96.9%) wearing masks more than employed individuals (91.7%) ($p \leq 0.05$). Education and training on mask use had a highly significant impact ($p=0.000003$) on confidence in proper mask-wearing and disposal.

Conclusion: Mask-wearing was strongly associated with type of chronic respiratory disease, with asthma patients showing the highest adherence. Gender and employment status also influenced use, while sociodemographic factors such as age and income were less important. Targeted education and training greatly improved correct mask use, highlighting the need for structured awareness programs in clinical settings.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 26

Awareness and practices of screening for breast cancer and associated factors among women aged 18-45 years attending the outpatient department of a teaching hospital in Colombo District

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Background: Breast cancer is among the leading causes of cancer death in women worldwide. Early detection through screening methods such as self-breast examination (SBE), clinical breast examination (CBE), and mammography is crucial for improving survival. Screening behaviour is influenced by various socio-demographic characteristics, knowledge, and availability of health care. There are limited studies on screening behaviour among young women in Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 421 women attending a selected tertiary care hospital. Systematic random sampling was used, and data were collected through an interviewer-administered questionnaire encompassing socio-demographic details, knowledge of risk factors, and screening behaviour. Descriptive statistics and Chi-square tests were utilized to establish relationships between socio-demographic factors and screening behaviour.

Results: Young women (18–31 years) had greater levels of awareness regarding risk factors of breast cancer and screening tests compared to the elderly. Awareness was significantly influenced by level of education, with women who passed the A/L exams performing higher. Women who were unmarried and who had no previous pregnancy also showed higher knowledge levels. Ethnicity did not show a significant correlation with awareness. While a moderate degree of awareness was present, actual participation in screening activities was low.

Conclusion: Although breast cancer screening awareness is moderate, uptake is quite low. Targeted education interventions among older and less educated women and better access to screening centres are needed to increase early detection and preventive care measures.

Sustainable Development Goals: 3 - Good Health and Wellbeing

Session D

Mental Health & Psychological Wellbeing

OP 27

Factors associated with perception of body image among undergraduates in selected faculties of a government university in Sri Lanka

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Background: Perception of body image refers to the way individuals see or feel about their own physical appearance. It can influence mental well-being, self-esteem, and lifestyle. There is a dearth of research in Sri Lanka on the perception of body-image among undergraduates. Our aim was to describe the perception of body-image and its associated factors among undergraduates in selected faculties of a state university in Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 389 undergraduates selected through convenience sampling from the Faculties of Applied Sciences, Medical Sciences, Management and Commerce, and Humanities and Social Sciences of a government university. Data were collected using a validated, pretested, self-administered questionnaire distributed via Google Forms. Body image perception, mental well-being, and self-esteem were assessed using the Body-Focused Shame and Guilt Scale (range 0 to 88, cut-off 37), WHO-5 Well-Being Index (range 0 to 100, cut-off 40), and Rosenberg Self-Esteem Scale (range 10 to 40, cut-off 28), respectively. Attributes were dichotomized using pilot test means. Associations were analyzed using the Chi-square test with a significance level of $p < 0.05$.

Results: Most participants were female ($n=270$, 69.4%), with a median age of 23 years (IQR=4). The majority ($n=242$, 62.2%) had a normal BMI, while 65.3% reported being subjected to body shaming. A negative body image was reported by 39.8% of participants, of whom 69.0% had poor mental well-being ($p=0.005$) and 72.3% had low self-esteem ($p=0.004$). Males (70.6%) had a more positive body image perception than females (55.6%, $p=0.005$). Arts undergraduates were the most affected, while medical undergraduates were the least.

Conclusion: Negative perception on body image is a hidden problem among undergraduates in Sri Lanka. The association of body image perception with gender, mental well-being and self-esteem is significant.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education, 5 - Gender Equality

OP 28

Sleep quality and associated factors among teachers in government schools during COVID-19 school closures in four districts of Sri Lanka

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Background: As a consequence of lock down due to COVID-19 pandemic, physical classrooms were converted to virtual classrooms and thus teachers had to adapt to this new normal condition, which significantly influenced the sleeping patterns and thereby their mental health.

Methods: A descriptive cross-sectional study was conducted in selected government and semi government schools in Gampaha, Colombo, Kandy and Hambantota districts. Data were collected through a self-administered questionnaire as a Google form distributed via social media platforms. A multistage sampling method and internationally validated PSQI and DASS-21 instruments were used. Data is presented

as percentages for qualitative variables and means and SD values for quantitative variables. Associations were determined using Chi-square and Fisher's exact test for qualitative data, with $p < 0.05$ considered as statistically significant.

Results: Of the 336 subjects 37.5% were poor sleepers with a global PSQI score of >5 . The mean sleep duration was 6.59 (SD 1.295). Significant socio-demographic associations were observed with marital status ($p=0.019$) and subjective family support ($p=0.026$). Other significant factors included having at least one family member who tested positive for COVID-19 ($p=0.002$), being quarantined due to close contact ($p=0.010$), work experience ($p=0.016$), and number of comorbidities ($p=0.037$). Higher scores on the stress ($p<0.001$), anxiety ($p<0.001$), and depression ($p<0.001$) subscales of the DASS-21 were also significantly associated with poor sleep quality.

Conclusion: Over one-third of teachers experienced poor sleep quality, despite most perceiving their sleep as good. Average sleep duration was below the 7–9 hours recommended for adults by the National Sleep Foundation. Depression, anxiety, and stress were strongly associated with poor sleep. These findings highlight the need for mental health support and interventions to improve sleep quality among teachers during periods of crisis.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 29

Effects of COVID-19 pandemic lockdown on behavioural patterns and mental state of Sri Lankan university athletes

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Background: In an effort to mitigate the spread of the COVID-19 pandemic, the government implemented various measures, including home confinement. These measures had unintended consequences on the lifestyle of Sri Lankan university athletes. There is lack of data in relation to this field in Sri Lanka. This study aims to determine the effects of COVID-19 pandemic lockdown on physical activity, mental well-being and dietary pattern of Sri Lankan university athletes.

Methods: An analytical cross-sectional study was conducted on athletes from government universities in Sri Lanka. Data were collected from 199 participants from 13 local universities. Athletes engaged in board games and those in private universities were excluded. Stratified sampling was used for data collection. A self-administered questionnaire with the International Physical Activity Questionnaire – Short Form, Short Warwick-Edinburgh Mental Well-Being Scale and Short Diet Behaviour Questionnaire for Lockdown were used. The total scores were calculated both prior to and during the lockdown period using each questionnaire, and these scores were subsequently compared using the paired sample t-test. $P < 0.05$ was considered significant.

Results: Lockdown significantly reduced physical activity, with the total MET score decreasing by 2091.03 ($p < 0.05$). Mean mental well-being scores declined from 23.08 to 20.82 ($\Delta 2.27$, $p < 0.05$). Dietary changes included increases in daily meal frequency (1.97 vs. 2.06, $p < 0.05$), uncontrolled eating (1.06 vs. 1.15, $p < 0.05$), and late-night snacking (1.27 vs. 1.55, $p < 0.05$). Conversely, binge alcohol consumption (0.28 vs. 0.16, $p < 0.05$) and intake of unhealthy foods (1.34 vs. 1.26, $p < 0.05$) decreased during lockdown.

Conclusion: While isolation protects public health, results show it adversely impacts athletes' physical activity, mental well-being and dietary habits. The data will benefit future recommendations during similar restrictions.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 30

Burnout among intern medical officers in selected tertiary care hospitals during the COVID-19 pandemic

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Background: Burnout among medical interns has been widely studied internationally, yet little is known about its prevalence in Sri Lanka. This study aimed to determine the prevalence of burnout and its associations among intern medical officers working in selected tertiary care hospitals during the COVID-19 lockdown.

Methods: This was a descriptive cross-sectional study conducted among intern medical officers who worked in selected tertiary care hospitals in Sri Lanka during the lockdown of the COVID-19 pandemic. Intern medical officers who were on prolonged medical or pregnancy leave were excluded from our study. A total sample of 210 intern medical officers was selected and was provided with a self-administered questionnaire made accessible through Google Forms. The questionnaire comprised of close ended questions, with validated tools being used to assess both burnout and quality of life and an author designed component to assess the coping strategies employed.

Results: A high degree of both personal (60.1%) and work burnout (55.7%) was observed among the majority of interns. On the contrary, the majority was shown to have a low degree of client burnout (70.5%). A statistically significant difference was observed between the degree of client burnout and the current appointment ($p=0.037$) with a comparatively higher percentage of interns currently appointed in medicine suffering from a high degree of client burnout ($n=22$; 40%).

Conclusion: Most intern medical officers who participated in our study had a high degree of both personal and work burnout. In comparison client burnout was found to be less. These findings however were limited to our study's inclusion criteria and thus the study of burnout among interns can further be expanded by assessing its prevalence among medical interns who are working in rural areas.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 31

Prevalence and associated factors of preoperative anxiety among patients undergoing major surgeries at a tertiary care hospital in Sri Lanka

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Background: Pre-operative related anxiety is universal, leading to possible post-operative complications. While previous studies have examined the associated factors and possible complications of post-operative anxiety, such studies in the local setting is limited. Our objective was to assess the prevalence of pre-operative anxiety, its associated factors with post-operative complications among patients who are undergoing major surgeries at a selected tertiary care hospital.

Methods: A descriptive cross-sectional study of 226 surgical patients undergoing major surgeries between 18-70 years were recruited from a selected tertiary care hospital. Sinhala validated Amsterdam-Preoperative-Anxiety-and-Information-Scale (APAIS) was administered one day prior to the surgery. The APAIS consists of six questions which assess three anxiety components: anaesthesia-related-anxiety (Sum A), surgery-related-anxiety (Sum S) and information-desire-component (Sum IDC). The combined score (Sum C) is given by the total of Sum A and Sum S. A Sum C of ≥ 11 indicates significant anxiety. Significance was taken at $p<0.05$.

Results: Almost 30.1% (n=226) had preoperative anxiety. Mean anxiety score was 8.3 (SD = 3.839). Female gender, having lower education level and lower level of income had significant pre-operative anxiety ($p<0.05$). Preoperative anxiety was also significantly associated with higher rates of postoperative complications ($p<0.05$).

Conclusion: It is important to screen pre-operative patients for anxiety, especially high-risk groups and provide them with counselling and use various other methods to reduce pre-operative anxiety.

Sustainable Development Goals: Good Health and Wellbeing

OP 32

The behaviours regarding body image and its associated factors among students of selected faculties in a selected university in Sri Lanka

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Background: Body image is a perception sculpted by societal, cultural, and psychological influences, which propel various behaviours, including dietary, exercise, cosmetic, and social practices. The aim of this study was to assess body image-related behaviours and identify their associated factors among students of selected faculties in a university in Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 288 undergraduates. Data were collected using a structured self-administered questionnaire assessing dietary, exercise, cosmetic, and social behaviours, along with knowledge, perceptions, perceived body size, and self-esteem. Body size ideals were evaluated using the Stunkard Figure Rating Scale and self-esteem with the Rosenberg Self-Esteem Scale.

Results: This study predominantly involved female participants (63.9%) aged 21–23 years. Majority had good dietary behaviours (56.6%), exercise behaviours (51.0%), social behaviours (56.6%) and bad cosmetic behaviours (59.4%), which meant they had used cosmetic products or considered cosmetic procedures to improve their body image. Majority posed good body image knowledge (61.8%), positive perceptions (54.2%) and high self-esteem (94.8%) with overall behaviours. Significant associations between dietary behaviours and religion, income, and body image perceptions were observed while religion, ethnicity, and perceptions were significantly associated with exercise behaviours ($p<0.05$). Cosmetic behaviours indicated significant associations with ethnicity and gender, with females having a higher impact than males and social behaviours with ethnicity, religion, and income level.

Conclusion: Diet, exercise, and social activities positively influenced body image, while cosmetic practices negatively impacted it. Perceptions, cultural factors, and socioeconomic status, particularly religion and family income significantly influenced body image behaviours.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 33

Treatment compliance related to mental illness among outpatients with mental illness at a tertiary care hospital in Sri Lanka

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Background: Awareness of one's own mental health condition plays a crucial role in ensuring treatment adherence. Although Sri Lanka is known for its high literacy rates, limited awareness about mental illness diagnosis remains a significant challenge, particularly due to the nature of many psychiatric disorders. The aim of this study was to assess treatment awareness, medication adherence practices, and associated

demographic factors among patients with mental illness attending outpatient clinics at a selected tertiary care hospital in Sri Lanka.

Methods: A descriptive cross-sectional study was conducted in 342 English speaking patients aged 18–40 years, diagnosed with mental illness for over two months, using an interviewer-administered semi-structured questionnaire.

Results: Majority (66%) were females, and higher education was received by 37.4% and 45.3% were employed. Many (69.9%) knew the name of their diagnosis, 23.7% could describe the illness, and 54.4% knew their medication names. In terms of medication adherence, 80.4% took medication independently, 44.50% relied on family reminders, 9.7% used reminder alarms, 32.7% associated intake with daily chores, 5.3% frequently missed doses, and 20.6% had no method but rarely missed doses. The majority (52%) favoured online reviews during follow-up visits, 36.8% opposed, and 10.5% were neutral. There were no significant associations between gender, age, and awareness of the diagnosis. However, educational levels significantly correlated with the knowledge of medication names ($p<0.001$) and awareness of the diagnosis ($p<0.001$). A significant association existed between patient age and knowledge of the disease name ($p<0.001$).

Conclusion: Awareness of mental illness diagnosis and treatment adherence is satisfactory among the study population. Continuous psychoeducation may further increase the related statistics.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 34

Level of cognition and associated factors among elderly individuals aged 60–85 years living in elderly homes in Colombo District

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Background: The level of cognition refers to the degree of cognitive functioning in an individual, which encompasses various mental processes such as attention, perception, memory, language, executive functions, and visuospatial skills. As individuals age, there is a gradual decline in cognitive abilities, therefore it becomes crucial to assess contributing factors. The aim of this study was to assess the level of cognition and identify associated factors among elderly individuals aged 60–85 years living in elderly homes in the Colombo District.

Methods: The research utilized a descriptive cross-sectional design including 250 elders between 60-85 years living in elderly homes in Colombo District. Data were collected through an interviewer administered questionnaire and analysed using descriptive and inferential statistics, including Chi-square and Fisher's exact tests. P value of less than 0.05 was considered as significant.

Results: Majority have cognitive impairment, where 1/3 show mild cognitive impairment (33.6%), 1/3 have moderate cognitive impairment (32%) although one person has severe cognitive impairment. Findings reveal a predominant cognitive impairment with females (69.7%), those who involved in an occupation without a high cognitive demand (65.7%), no monthly income (71.4%), less than 6 hours of sleep (75%), no engagement in solitary leisure activities (79.6%), hypertension (61.3%). Above mentioned factors were significantly associated with cognitive impairment.

Conclusion: Gender, ethnicity, high cognitive demand involved occupation, monthly income, sleep duration, engagement in solitary leisure activities and hypertension were identified as the predictors of cognition. We recommend holding regular health assessments to monitor hypertension that could impact cognitive function. Engaging in solitary leisure activities should be encouraged to promote mental acuity.

Sustainable Development Goals: 1 - Poverty, 3 - Good Health and Wellbeing, 4 - Quality Education

Session E

Education & Student Wellbeing

OP 35

Attitudes and associated factors of medical undergraduates towards cadaveric dissection in selected medical faculties of Western Province, Sri Lanka

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Background: Cadaveric dissection remains a cornerstone of anatomy education. However, evolving learning technologies and cultural sensitivities challenge its continued relevance. This study explores attitudes and associated factors influencing medical undergraduates' perspectives on cadaveric dissections in the Western Province, Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 375 undergraduates from three medical faculties in Western province using a pretested, self-administered English questionnaire. Participants were selected via multistage stratified sampling. Variables included socio-demographics, physical and psychological responses, sociocultural beliefs, perceptions, and anatomy learning resources. Data were analysed for descriptive and inferential statistics, including Chi-square tests at a significance level of 0.05.

Results: A strong association (93.8%) was observed between dissection involvement and improved understanding of anatomical concepts ($p < 0.05$). Statistically significant associations were also found between positive attitudes and the belief that dissections make learning more interesting and provide a three-dimensional perspective ($p < 0.05$). While 64% preferred prosected specimens, 84.3% favoured traditional lectures, indicating variations in learning preferences. Religious beliefs influenced 86.6% of students. Formalin odour was not a deterrent for 63.3%, though 53% reported dissection-related stress. Positive perceptions correlated significantly with improved engagement and knowledge retention. Institutional and peer support showed strong associations ($p < 0.05$). Difficulty in structure identification was significantly associated with attitudes ($p = 0.032$), indicating a need for structured guidance during sessions.

Conclusion: Most students exhibit favourable attitudes towards cadaveric dissection. However, stress, religious concerns, and shifting preferences towards prosected specimens and lectures highlight the need for culturally sensitive and emotionally supportive anatomy education. Enhancing guidance and institutional support can positively influence learning outcomes. Findings are limited to three faculties and suggest the need for broader research.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 36

Part-time employment and associated factors among medical students at a selected Sri Lankan university

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Background: Medical students, as future physicians, are expected to devote adequate time to academic training while maintaining personal well-being. However, part-time employment has become increasingly common among undergraduates, including medical students, particularly following the recent economic crisis in Sri Lanka. Despite the high academic and personal demands of medical education, the prevalence, motivations, and consequences of part-time employment among medical students remain underexplored.

Methods: A descriptive cross-sectional study was conducted among 417 medical students at the University of Sri Jayewardenepura using a self-administered questionnaire. Batch-wise probability proportionate stratified sampling with simple random sampling within each batch was applied. Data were analyzed for associations using Chi-square tests.

Results: A 19.2% (n=80) of respondents were employed part-time; conducting tuition classes (n=60, 75.0%), clothing and accessories business (n=7, 8.8%), photography (n=3, 3.7%), delivery riding (n=1, 1.2%) etc. Financial need was identified as the primary motivator for employment (82.5%). Employment was significantly associated with male gender ($p<0.001$) and lower family income ($p=0.036$). Despite financial support from family, many students still pursued employment, indicating the persistence of the financial needs ($p<0.001$). 90.0% (n=10) of students with dependents engaged in part time employment ($p<0.001$). The environmental component of quality of life was poor among students working for longer hours ($p=0.012$).

Conclusion: The findings highlight the necessity of financial support to promote economic stability among medical students. Interventions such as arranging scholarships, structured part-time employment schemes, and strengthening of recreational activities within the university are required to improve quality of life. Greater attention is required for students with dependents and low family income which have driven them towards engagement in part-time employment. Further research is encouraged to study in-depth about the impact of part time employment on health and educational performance of these students.

Sustainable Development Goals: 1 - Poverty, 3 - Good Health and Wellbeing, 4 - Quality Education.

OP 37

English language barriers in medical education and coping strategies among first-year medical undergraduates of a selected university in Sri Lanka

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Background: English medium has been the standard of medical education for several decades in Sri Lanka. Medical students from non-English speaking backgrounds face multiple challenges in English medium learning, which can hinder their academic performance. This study aims to describe the perceived English proficiency, language challenges and coping strategies among first-year medical undergraduates of a selected university in Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among 169 first-year medical students at a selected medical faculty of a government university using convenience sampling. Data collected was done via an online self-administered questionnaire and secondary data from English orientation marks were obtained from the examination unit. Significance was taken at $p<0.05$ in the statistical analysis. Likert scales were used to analyse the level of anxiety and confidence.

Results: The mean age of participants was 21.53 years (SD = 0.9). Majority (64.5%, n=109) were female and 87% (n=147) were Sinhalese. Most (60.4%, n=102) had an A grade pass in General English. Most had satisfactory scores in both pre- and post-English assessments during the orientation program. However, speaking was perceived as the most challenging skill, communicating ideas fluently (62%, n=105), presentations (65.1%, n=110) and speaking to lecturers in English (65.1%, n=110). Additionally, students with higher levels of anxiety (45.6%) and lower confidence (43.5%), faced greater challenges ($p<0.05$). Many students reported that language-related challenges affected their academic performance (75.1%, n=127), particularly anatomy (81.7%, n=147). Coping strategies preferred by majority included usage of bilingual dictionaries, watching educational English videos or movies with English subtitles, and peer support.

Conclusion: These findings highlight the gap in English speaking skills, emphasizing the need for focused language support programs and establish peer groups to assist students build up their confidence and communication skills, particularly in the early stages of medical education.

Sustainable Development Goals: 4 - Quality Education

OP 38

Perceptions on migration and its associated factors among undergraduate students in a selected university

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Background: Migration, both internal and international, has major personal, social, and economic consequences. For undergraduates, perceptions of migration influence career decisions, aspirations, and social identities. The objective of this study was to describe perceptions on migration and its associated factors among undergraduate students of a selected university.

Methods: A descriptive cross-sectional study was conducted among undergraduates of the Faculty of Applied Sciences, Faculty of Management Studies and Commerce and the Faculty of Medical Sciences at the University of Sri Jayewardenepura. Data were collected through a self-administered questionnaire. Chi-square test was used to determine the factors associated with perception on migration and its associated factors. Significance was taken as $p < 0.05$.

Results: A total number of 408 students took part in the study. A majority (51.2%) hold a positive perception of migration, with economic opportunities (74.8%) being the most significant driver. Personal experiences (74%) were more influential in shaping migration views than media portrayals (26%). Ethnicity, income levels showed significant associations with migration perceptions, while factors such as gender, academic year, residence type did not. Future migration trends were expected to improve by 58.3% of respondents.

Conclusion: Our study reveals that majority of undergraduate students have a positive perception of migration, with economic opportunities being the most significant motivator. However, migrants often face substantial legal and cultural challenges, highlighting that migration is not just about financial benefits. Students emphasized the importance of policies that support integration, healthcare access, and education to address these difficulties. The findings suggest that students are well-informed about migration complexities and recognize the need for comprehensive support systems to enhance migrant experiences.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 39

Knowledge and perception about virginity and associated factors among 3rd year students at a Sri Lankan university

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Background: Virginity is a sociocultural concept, often intertwined with myths and gender-based expectations, that significantly influences attitudes toward sexuality in many societies. Misconceptions regarding virginity and its association with dignity, sexual health, and social values persist in Sri Lanka, yet scholarly exploration of this topic remains limited. This study aimed to assess knowledge and perception of virginity, and the factors associated with supporting virginity values among university undergraduates.

Methods: A descriptive cross-sectional study was conducted among 427 third-year students from four faculties of the University of Sri Jayewardenepura. Data were collected using a self-administered trilingual online questionnaire. Descriptive statistics were used to assess knowledge and perception, while associations between sociodemographic, cultural, and knowledge-based factors and support for virginity values were evaluated using Chi-square tests ($p < 0.05$ considered significant).

Results: Most participants (73.8%) correctly identified the hymen as a thin elastic membrane, though misconceptions regarding its universality and fragility were common. While a majority rejected virginity as a determinant of dignity or purity, 58.6% supported virginity values, citing its role in reducing sexually transmitted diseases and premarital pregnancies. Significant associations were observed with gender (female 62.0% vs male 51.2%), ethnicity (Sinhala 62.8% vs non-Sinhala 28.3%), religion (Buddhist 62.4% vs non-Buddhist 44.3%), and marital status (unmarried 58.6% vs married 27.3%). Knowledge of sexually transmitted diseases ($p=0.033$) and hymen anatomy ($p=0.017$) were also positively associated with supporting virginity values.

Conclusion: Virginity remains a complex and culturally sensitive concept among educated Sri Lankan youth. Misconceptions persist, yet knowledge and sociodemographic factors significantly influence perceptions. Addressing virginity in an open, evidence-based manner may reduce stigma, enhance sexual health education, and promote rational discourse on sexual values.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education, 5 - Gender Equality

OP 40

Sleep quality and associated factors among Advanced Level Science stream, Sinhala medium students attending selected tuition classes in the Nugegoda Medical Officer of Health area, Colombo District

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Background: Sleep quality is an important factor for the academic and social life among Advanced level students. Due to heavy workloads, sedentary lifestyles, and addiction to modern technology, sleep quality among students is on the decline at present. To describe sleep quality and factors associated among advanced level Science stream, Sinhala medium students who are participating for selected tuition classes in Nugegoda Medical Officer of Health (MOH) area in Colombo District. The objective of this study was to determine the sleep quality and associated factors among Advanced Level Science stream students attending selected tuition classes in the Nugegoda MOH area, Colombo District.

Methods: A descriptive cross-sectional study was conducted among Advanced Level Science stream students in the Nugegoda MOH area. Systematic random sampling was used to recruit 385 participants. Data were collected using a pretested self-administered questionnaire, including the Pittsburgh Sleep Quality Index (PSQI). Associations between sleep quality and explanatory factors were tested, with $p<0.05$ considered statistically significant.

Results: Of the 385 participants, 57.4% were female and 42.6% were male. The PSQI revealed that 56.1% experienced poor sleep quality, while the remainder reported good sleep quality. Physical activity frequency ($p=0.033$) and electronic device use within two hours before sleep ($p=0.041$) were significantly associated with sleep quality. Other factors did not show a significant association.

Conclusion: Interventions targeting lifestyle habits, particularly promoting physical activity and minimizing pre-bedtime device use, may improve sleep quality and enhance students' academic performance and well-being.

Sustainable Development Goals: 3 - Good Health and Wellbeing.

OP 41

Burnout among para clinical medical students in a selected university in Colombo District, Sri Lanka

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Background: Burnout, characterised by emotional exhaustion and disengagement, is common among medical undergraduates, particularly when they balance clinical responsibilities and academic work. Limited data exist regarding burnout among paraclinical students in Colombo district, prompting this study to explore associated factors and coping strategies.

Methods: A descriptive cross-sectional study was conducted among 250 paraclinical medical students from a selected University in Sri Lanka. Data were collected using a self-administered questionnaire including socio-demographics, knowledge, attitudes, associated factors, coping practices, and the Oldenburg Burnout Inventory–Student version (OLBI-S). Data analysis was performed and significance set at $p < 0.05$. Ethical approval was obtained from the Ethics Review Committee of the Faculty of Medical Sciences.

Results: Among the 250 students, 240 (96%) had heard of exhaustion/disengagement, primarily via the internet. The majority (92.8%) had high-level burnout. Burnout prevalence was not associated with gender ($p = 0.997$) but was significantly linked to lower family income ($p = 0.043$) and residence during the academic year ($p = 0.014$). Factors such as demanding SGDs and consultant expectations contributed to burnout. Coping mechanisms like peer discussion, participation in clubs, and engaging in hobbies were linked to lower burnout, while alcohol use was uncommon (10.4%). Attitude toward burnout showed no significant correlation with burnout level ($p = 0.554$).

Conclusion: Burnout is highly prevalent among paraclinical medical students in Colombo district. Socioeconomic factors and workload contribute significantly. Encouraging structured breaks, peer support, and extracurricular engagement may mitigate burnout. Institutional initiatives targeting workload balance and improved access to mental-health resources are recommended.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

Session F

Non-Communicable Diseases

OP 42

Epidemiology of cervical carcinoma and factors associated with its staging in Sri Lanka

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Background: Cervical carcinoma remains a major public health concern, especially in low- and middle-income countries where delayed diagnosis contributes to a high burden of advanced-stage disease. Despite being among the most preventable cancers, its incidence in Sri Lanka is rising. Understanding incidence trends and the sociodemographic determinants of staging at diagnosis is vital to improve early detection and patient outcomes.

Methods: A descriptive study was conducted using secondary data from the Sri Lanka National Cancer Registry, including all clinically confirmed cervical carcinoma cases from 2012–2021. Data were extracted using a standardized record sheet covering patient demographics, tumour characteristics, and staging. Only complete entries were analyzed to minimize selection bias.

Results: Cervical carcinoma incidence in Sri Lanka showed an overall increasing trend across the decade. Most cases were diagnosed at advanced stages, particularly Stage IIB (33.5%) and Stage IIIB (22.8%). Age was significantly associated with staging ($p=0.008$), with elders (≥ 60 years) more likely to present with advanced disease than adults (18–59 years). Lower income was strongly associated with late-stage diagnosis ($p<0.001$). Ethnicity and religion were also significantly linked to staging ($p<0.001$), reflecting disparities in healthcare access and awareness. Squamous cell carcinoma was the predominant histological type, with the highest proportion of advanced-stage presentations.

Conclusion: The rising incidence and predominance of advanced-stage cervical carcinoma highlight an urgent need to strengthen early detection in Sri Lanka. Findings underscore the influence of socioeconomic and demographic disparities on disease stage at diagnosis. Expanding national screening coverage, improving accessibility for low-income populations, and developing culturally tailored awareness campaigns for high-risk groups are recommended. These measures could reduce diagnostic delays, improve prognosis, and ultimately lessen the national burden of cervical carcinoma.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 43

Compliance and associated factors among patients receiving treatment for dyslipidaemia at a healthcare institution in Sri Lanka

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Background: Dyslipidaemia is a major risk factor for cardiovascular disease and requires long-term treatment adherence to prevent complications. With the rising burden of non-communicable diseases in Sri Lanka, understanding compliance and its determinants is essential. This study assessed the compliance rates and associated factors among patients receiving dyslipidaemia treatment at a selected healthcare institution.

Methods: A descriptive cross-sectional study was conducted among patients with dyslipidaemia attending tertiary care hospitals in Colombo District. Data were collected using an interviewer-administered questionnaire in English, Sinhala, or Tamil.

Results: Among 400 patients, 71.8% demonstrated poor compliance. Most were aged ≥ 60 years (67%) and female (65%). The majority were Sinhalese (94%) and Buddhist (87.5%). Socioeconomic findings showed 66.5% unemployed and 52.6% reporting low family income.

Conclusion: Poor medication compliance remains a concern. Barriers include older age, female gender, low socioeconomic status, limited education, comorbidities, and poor disease perception. Improving patient education, doctor-patient communication, and promoting diet and exercise are crucial. Awareness programs, structured counselling, and stronger social support systems are recommended to address barriers and improve outcomes in dyslipidaemia patients in Sri Lanka.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 44

Adherence and factors affecting adherence to prescribed medication among patients with hypertension in a selected tertiary care hospital

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Background: Hypertension is a major global and national health concern. Adherence to antihypertensive medication is critical for disease control and the prevention of complications. However, non-adherence is common and is influenced by patients' knowledge, beliefs, and concerns about medications. In Sri Lanka, no prior studies have explored the association between patients' beliefs and concerns about medication and adherence. This study examined these associations using standardized tools.

Methods: A descriptive cross-sectional study was conducted among hypertensive patients attending medical clinics at a selected tertiary care hospital. Systematic random sampling (skip interval of two) yielded 324 participants. Data were collected via interviewer-administered questionnaires. The Morisky Medication Adherence Scale (MMAS-8) measured adherence; the Hypertension Knowledge-Level Scale (HK-LS) assessed knowledge; and the Beliefs about Medicines Questionnaire (BMQ) evaluated necessity and concern. Chi-square and linear by linear association tests were used to determine associations between adherence and influencing factors.

Results: Among 324 participants, 34.5% demonstrated high adherence, 34.3% moderate adherence, and 31.2% poor adherence. While 81.8% strongly believed in the necessity of medication, this belief showed no significant association with adherence (χ^2 test, $p=0.375$). In contrast, concerns regarding side effects and dependence were significantly associated with lower adherence (linear-by-linear association, $p=0.018$), with 38.3% of participants reporting high concern scores. Sociodemographic factors were not significantly associated with adherence.

Conclusion: Suboptimal adherence to antihypertensive medications was common. High concern about side effects and dependence significantly predicted poor adherence, whereas strong belief in treatment necessity did not. Interventions that directly address patients' concerns may improve adherence and help reduce the long-term burden of hypertension on patients and the healthcare system.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 45

Allergen sensitization patterns and associated factors in adults with asthma and allergic rhinitis in Colombo District

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Background: Allergen sensitization plays a central role in the pathogenesis and exacerbation of asthma and allergic rhinitis. Understanding sensitization patterns and related factors is essential for disease management and prevention. Limited research has explored these patterns among adults in Sri Lanka, particularly urban areas such as the Colombo District. This study aims to evaluate allergen sensitization patterns and their associations with socio-demographic, environmental, behavioural, and socioeconomic factors in adults with asthma and allergic rhinitis.

Methods: A descriptive cross-sectional study conducted among 224 adults who were already diagnosed with asthma and/or allergic rhinitis. They were selected via systematic random sampling from Chest and ENT clinics of a selected tertiary care hospital and allergy clinic of a medical faculty of a government university. Skin Prick Test was conducted after obtaining informed written consent.

Results: More than half of participants were above 60 years (50.4%), the majority female (66.5%) and Sinhalese (87.1%). Most were unemployed or retired (56.7%). Environmental exposures were common, with 51.8% residing in industrial areas and 65.6% experiencing frequent dust exposure. Smoking (26.3%) and alcohol consumption (11.2%) were relatively low. Allergen sensitization was identified in 67.4%, most commonly to house dust mites (62.9%), with polysensitization in 38.8%. No significant associations were found between allergen sensitization and socio-demographic, socioeconomic, or behavioural factors. However, dust exposure was significantly associated with poor asthma control ($p=0.004$). Highlighting environmental influences on disease severity.

Conclusion: Significant proportion of adults suffering from asthma and allergic rhinitis in the Colombo District were sensitized to various aeroallergens, commonly house dust mites. There was no significant association between multiple aeroallergen sensitizations and poor control of asthma and allergic rhinitis. Among the environmental factors studied, only dust exposure showed a significant association with poor control of the disease.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 46

Physical activity, respiratory functions and influencing factors in chronic obstructive pulmonary disease patients attending a selected clinic in Colombo District

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Background: Chronic obstructive pulmonary disease (COPD) is a major public health issue, impairing respiratory function and limiting physical activity. Reduced activity accelerates disease progression and diminishes quality of life. This study assessed respiratory function, physical activity, and associated factors among COPD patients.

Methods: A descriptive cross-sectional study was conducted at the chest clinic of a tertiary care hospital. Respiratory function was assessed using the St. George's Respiratory Questionnaire (SGRQ), physical activity using the Incremental Shuttle Walk Test (ISWT), and associated factors with an interviewer-administered questionnaire. Respiratory function was categorized as mild, moderate, or severe. Associations were examined using chi-square tests, with significance set at $p<0.05$.

Results: A total of 186 participants were included, with a mean age of 62.4 years (SD = 11.1). Respiratory function was classified as mild in 38.2%, moderate in 31.2%, and severe in 30.6% of patients. A progressive reduction in ISWT distance was observed with worsening respiratory function. Significant pre- to post-test declines in SpO₂ were noted ($t=14.2$, $p<0.001$). Smoking status and area of residence were significantly associated with respiratory function ($p<0.05$). Low medication adherence was reported by the majority (73.1%) of participants.

Conclusion: Respiratory function in COPD patients is strongly influenced by smoking, area of residence, and poor medication adherence. Targeted interventions such as smoking cessation programs, patient education to improve medication adherence, pulmonary rehabilitation, and community-based support may enhance physical activity and overall outcomes.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 47

Assessment of known risk conditions and associated factors for type 2 diabetes mellitus among females attending the Outpatient Department of a tertiary care hospital in Colombo District

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Background: Type 2 diabetes mellitus (T2DM) affects 537 million people globally and 9.8% of Sri Lankans, with rising prevalence. Women are particularly vulnerable due to biological and lifestyle factors. Identifying risk conditions among Sri Lankan females is crucial for early intervention.

Methods: A descriptive cross-sectional study was conducted at a selected tertiary care hospital among 218 females aged 18–60 years attending the Outpatient Department. Pregnant and diagnosed diabetic women were excluded. Data collection involved an interviewer-administered questionnaire and anthropometric measurements. A diabetes risk score was computed based on known risk factors. Associations were tested using Chi-square with significance at $p < 0.05$.

Results: Of participants, 86.7% were Sinhalese, with 48.6% aged 18–29 years. 62.4% reported medium stress, 44.0% had normal BMI, and 57.3% engaged in high physical activity. However, 68.8% had a waist circumference ≥ 80 cm. Alcohol use and smoking were negligible. In the cohort, 57.3% were classified as high-risk for T2DM. Statistically significant associations were found between age, marital status, and number of children with diabetes risk ($p < 0.05$). No significant associations were observed with ethnicity, education, or income.

Conclusion: Although physical activity levels were relatively high, abdominal obesity and moderate-to-high stress levels were prevalent. Excessive intake of starchy foods and low consumption of protective foods were also noted. Factors such as age, marital status, and number of children were significantly associated with higher T2DM risk. Educational programs, routine screening, and stress reduction strategies are recommended to mitigate future disease burden.

Sustainable Development Goals: 3 - Good Health and Wellbeing

Session G

Technology in Health & Education

OP 48

Perception, barriers, and associated factors of online learning among medical undergraduates during COVID-19 restrictions

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Background: Online learning was implemented to recommence halted medical education during COVID-19 restrictions. This shift from traditional methods may affect educational quality both positively and negatively. Understanding student perceptions, associated factors, and barriers is crucial to enhancing the effectiveness of medical education in such crises. Our aim was to assess the perceptions, barriers, and associated factors of online learning among medical undergraduates during COVID-19 restrictions.

Methods: A descriptive cross-sectional study was conducted among 338 undergraduates from all six batches at a selected medical faculty of a government university of Sri Lanka, using a multistage-stratified sampling method. Data were collected via a pre-tested, self-administered questionnaire covering socio-demographics, perceptions, barriers, and suggestions for improving online learning. Perception was measured using a Likert scale across four questions, scored and converted into percentages. Scores $\geq 77.69\%$ indicated a good perception. Descriptive statistics and Chi-square tests were used; p -values ≤ 0.05 were considered significant.

Results: Most participants were female (59.8%). The 30th batch had the highest representation (19.5%). A majority reported monthly family incomes of LKR 50,000–100,000. Over one-third used prepaid mobile data for online learning. Most spent $\geq$ LKR 2000/month on internet during the COVID-19 period. Overall, 70.1% had a good perception of online learning. Significant associations with good perception included: district of residence ($p=0.006$), income ($p=0.025$), clinical appointments ($p<0.001$), device used (desktop, laptop, tablet), use of YouTube resources ($p=0.016$), prior online learning experience ($p<0.001$), group study participation pre-COVID-19 ($p=0.007$), and pre-pandemic extracurricular activity ($p=0.006$).

Conclusion: The majority of medical undergraduates were satisfied with online learning during COVID-19 restrictions, although many faced technological and personal barriers. Domestic and institutional challenges were less commonly reported. The significant associations identified suggest that targeted technological, economic, and institutional interventions could enhance the effectiveness of online learning.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 49

Knowledge, attitudes, and readiness to use modern technology among doctors in improving patient care in a tertiary care hospital

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Background: Rapid advancement of technology has transformed many sectors globally, including the health sector. Integration of modern technology for enhancing the quality of care in the Sri Lankan state health sector is also identified as a priority. However, the adoption of new technology is influenced by several factors such as human, logistics and infrastructure. This study aimed to identify knowledge, attitudes and readiness among medical professionals to use modern technology.

Methods: A descriptive cross-sectional study was conducted among 170 randomly selected doctors using a self-administered questionnaire. Data included socio-demographics, prior training, knowledge, attitudes, and readiness to adopt modern technology.

Results: Most participants were female (n=99, 58.6%) and under 40 years of age (n=120, 71%). Good overall knowledge of healthcare technologies was reported by 121 doctors (71.6%), though 142 (84%) had never received formal training in the use of these technologies. A considerable proportion (n=128, 75.7%) expressed interest in receiving further training, and lack of time was the barrier for acquiring knowledge for the majority (n=109, 64.5%). Attitudes on using modern technology were favourable among 95.9% (n=162) of doctors, and 91.7% (n=155) were ready to utilize modern technology. Readiness for new technology had a statistically significant association only with the age ($p=0.017$) and the years of service ($p=0.038$).

Conclusion: Majority of doctors had good knowledge, favourable attitudes and strong readiness towards adopting modern technologies, with a significant number of doctors expressing interest in further training. Higher readiness was observed among younger doctors with less experience. Thus, it is necessary to organize e-health workshops and in-service training programs, and to upgrade infrastructure and e-facilities in hospitals to improve the use of modern technology.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 50

Development of a mobile application to assess the risk of pregnancy-induced hypertension and prevent complications

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Background: Pregnancy-induced hypertension (PIH) poses serious risks to maternal and fetal health, making early identification and effective management essential. Mobile health technologies offer promising tools for monitoring and prevention. This study aimed to develop a mobile application to assess PIH risk and reduce related complications.

Methods: A scoring system was created using statistically identified risk factors, including diabetes mellitus, kidney disease, and family history of PIH. The predictive model was validated in a descriptive study involving 152 pregnant women.

Results: The application features a user-friendly interface for pregnant women, healthcare providers, and clinics, enabling real-time monitoring and early detection of high-risk pregnancies. The predictive model achieved an accuracy of 90.8%, with a sensitivity of 71.4% and a false-positive rate of 13.0% at a cut-off score of 6, as shown by the receiver operating characteristic (ROC) curve. These results demonstrate the tool's effectiveness in identifying pregnancies at risk while minimizing false positives. The app also incorporates blood pressure monitoring functions, further strengthening its utility in PIH management.

Conclusion: The development of a mobile application for PIH risk assessment represents a paradigm shift in prenatal care, emphasizing proactive monitoring, personalized interventions, and ultimately improved outcomes for mothers and fetuses. By harnessing the power of technology, healthcare providers can mitigate the burden of PIH-related complications, setting a precedent for enhanced maternal health.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 51

Clicking for clarity: patterns of online mental health information seeking among patients with mental illnesses attending a tertiary care hospital in Sri Lanka

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Background: Understanding how individuals with mental illnesses use online platforms for mental health information is essential to guide patient education, improve digital health literacy, and integrate reliable resources into mental health care.

Methods: A descriptive cross-sectional study was conducted among 342 patients, aged 18–40 years, diagnosed with mental illness over two months, using an interviewer-administered semi-structured questionnaire.

Results: Majority were females (65.8%), 45.3% were employed, and 63.74% had higher education. Most used smartphones only (59.9%), 37.9% used both smartphones and laptops. 22.8% used smartphones for more than six hours per day, and 49.1% spent over four hours daily on the internet. The most used platforms were YouTube (87.4%), WhatsApp (79.8%), and Facebook (66.1%). 57.6% searched for mental health topics online, 6.5% watched related content for more than 15 minutes. Commonly viewed health topics included general health (65%), exercise (64%), mental health (65%), and nutrition (54%). 49.4% of the participants expressed a willingness to discuss their own mental health, 65.5% were interested in hearing others' recovery stories. However, only 27.8% used health information apps. Statistically significant associations were found between internet use time and age ($p<0.001$), education level ($p<0.001$), and employment ($p<0.001$). Participants aged 18–30, employed, and with higher education levels were more likely to spend over six hours online. Participants with higher education are more likely to search on mental health ($p=0.014$) and other health related topics ($p=0.005$), download health related apps ($p<0.001$) and they are interested in listening stories of other's mental health issues ($p=0.03$). Younger ($p=0.014$), employed ($p=0.005$) individuals demonstrated higher likelihood of searching on mental health related topics.

Conclusion: Younger, educated and employed individuals with mental illnesses use internet frequently, but usage of health apps remains limited, highlighting a need to promote digital mental health literacy and access to trustworthy resources.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 52

Development and evaluation of turmeric-based UV-sensitive cards as an affordable, low-cost, and biodegradable tool to monitor solar water disinfection efficacy and sunlight exposure in low-resource communities

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Background: Solar Water Disinfection (SODIS) using plastic PET bottles is a widely used household water treatment method, currently employed by over 5 million people across more than 50 countries, providing an accessible approach to reduce waterborne diseases using UV exposure and high temperature. Ensuring sufficient UV exposure for effective disinfection is challenging in low-resource settings, where standard UV dosimeters are expensive or unavailable. Turmeric, which contains curcumin, undergoes rapid photodegradation under UV light, offering potential as a biodegradable visual indicator of sunlight exposure. This study evaluates turmeric-based cards for monitoring SODIS efficacy under different conditions.

Methods: Turmeric-infused cards were tested under three conditions: direct sunlight, shade, and placement inside transparent PET bottles, with five replicate trials for each. Colour intensity was measured using a smartphone colour meter, and mean fading times $\pm$ standard deviation (SD) were calculated. Differences in fading behaviour between conditions were assessed qualitatively.

Results: Cards exposed to direct sunlight or placed inside PET bottles faded within 3.0 ± 0.5 hours, whereas shaded cards remained stable, indicating that fading rates are strongly influenced by UV intensity. Notably, fading inside PET bottles occurred at similar rates to direct sunlight, demonstrating that UV A successfully

penetrates transparent plastic. After 3 hours of sunlight exposure, the strips retained $37 \pm 4.7\%$ of their initial yellow intensity (n=5). These results suggest that placing the card underneath a PET bottle during SODIS may provide a more accurate assessment of the UV dose received by water in realistic household conditions.

Conclusion: Turmeric-based UV-sensitive cards offer a low-cost, accessible, and environmentally friendly method to monitor sunlight exposure during SODIS. By visually indicating UV intensity, these cards empower communities to assess water safety and could be further refined using UV-blocking additives or other strategies to quantify exact sunlight exposure required for effective disinfection.

Sustainable Development Goals: 1 - Poverty, 3 - Good Health and Wellbeing, 9 - Innovation

Session H

Reproductive, Maternal & Child Health

OP 53

Psychosocial factors among pregnant women attending antenatal clinics of a tertiary care hospital: a comparative study between normal weight and overweight or obese individuals

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Background: Pregnancy often brings psychological challenges such as depression, anxiety, and fear of childbirth. Maternal overweight and obesity may increase these risks due to associated health complications. Understanding how body mass index (BMI) affects mental health is important for improving prenatal care and providing targeted support for at-risk women.

Methods: A comparative cross-sectional study was conducted among pregnant women attending antenatal clinics at a tertiary care hospital in Sri Lanka. Eligible participants were currently pregnant, able to provide informed consent, and without psychiatric or cognitive disorders. Using systematic random sampling, 188 women were selected. Data were collected through a pretested, interviewer-administered questionnaire assessing sociodemographic factors, psychological distress (using DASS-21 and Kessler K10), social support, and fear of childbirth. BMI was classified according to WHO South Asian guidelines. Participants were recruited during clinic visits; confidentiality and informed consent were ensured. Data were analyzed using the Chi-square test with significance set at $p < 0.05$.

Results: Among 188 participants, most with normal BMI were aged 32–38 and lived in nuclear families. Higher family support was reported by 52.8% of overweight/obese mothers. Most respondents had normal depression (69.7%) and stress (64.7%) levels; only a small percentage showed severe symptoms. A significant association was found between BMI and depression ($p = 0.0477$), anxiety ($p = 0.0045$), and fear of childbirth ($p = 0.0487$). Severe psychological symptoms were more prevalent in overweight/obese mothers. No significant associations were observed between BMI and income, education, or family support.

Conclusion: Higher BMI was linked to increased depression, anxiety, and childbirth-related fear, independent of sociodemographic factors. Routine psychological screening, BMI-targeted interventions, and counselling for childbirth fear are recommended. Further longitudinal studies are needed to explore causality and intervention efficacy.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 9 - Innovation

OP 54

Knowledge, attitudes, practices, and associated factors regarding iron, folate, and calcium supplementation among pregnant women attending antenatal clinics in a tertiary care hospital in Sri Lanka

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Background: Pregnancy is a process during which women require additional nutritional supplements to support both fetal and maternal well-being. Sri Lanka is a country where iron, folic acid, and calcium supplements are provided free by the government to pregnant mothers. Pregnant women must take these

supplements daily and use them correctly to benefit. The aim of this study was to assess the knowledge, attitudes, and practices regarding iron, folate, and calcium supplementation, and to identify factors associated with these practices among pregnant women attending antenatal clinics in a selected tertiary care hospital.

Methods: A descriptive cross-sectional study was conducted among pregnant women attending antenatal clinics at a selected tertiary care hospital. 224 pregnant women were selected through systematic random sampling. Only pregnant women aged 18 and above were included in the study, while pregnant women attending the clinic for the first time were excluded. Data were collected from the participants through an interviewer-administered questionnaire. A self-designed scoring system was used to calculate the total knowledge, total attitudes, and total practices of all 3 supplements.

Results: In the study, 56.2% had good knowledge regarding both iron and folic acid, while only 43.3% had good knowledge regarding calcium supplementation. The age, level of education, and monthly income had significant associations with the level of knowledge. Moreover, only 43.8% of women had good attitude towards supplementation. However, factors like education and income, often assumed to influence health attitudes, did not show a significant association. Furthermore, 59.3% of pregnant women had good practices for iron supplements and 59.4% had good practices for folic acid supplements while 64.6% had good practices for calcium supplements. No significant association was observed between individuals with good attitudes and their practices on iron and calcium supplementation. Furthermore, having good knowledge did not significantly correlate with good practices regarding supplementation.

Conclusion: The maternal knowledge, attitude, and practices on antenatal supplements was not satisfactory. Interventions aimed at improving maternal health knowledge should consider targeting younger women, those with lower education levels, and rural or lower-income populations.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 55

Practices of menstrual hygiene and factors associated with hygiene practices among school girls in selected schools in Sri Lanka

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Background: Menstrual hygiene management is a critical aspect of adolescent health, yet it remains a neglected area in many schools, especially in developing countries. Sri Lanka has diverse menstruation-related beliefs, and it is essential to assess the influence of cultural and social factors on menstrual hygiene practices among adolescent girls. Proper menstrual hygiene practices are crucial to prevent adverse reproductive health outcomes. This study aimed to assess menstrual hygiene practices and associated factors among grade 10 schoolgirls in Sri Lanka.

Methods: A descriptive cross-sectional survey was conducted among adolescent girls in grade 10 from selected government schools, collecting data on menstrual knowledge, hygiene practices, sociodemographic factors and sanitary facilities at schools. Clusters, each comprising 15 female students, were formed, and a pre-tested, self-administered questionnaire was distributed in their preferred language.

Results: The study found that 55.2% (n =159) of participants had satisfactory knowledge levels while 66.3% (n=191) demonstrated satisfactory hygiene practices. Sanitary napkins were utilized by 91% (n=262), with 40.3% (n=116) opting for cloth sanitary napkins. Study revealed that, among students with good hygienic practices, 63.9% did not have proper sanitary facilities at school. Good practices of menstrual hygiene were not associated with having good menstrual knowledge. Good practices were associated with urban residency ($p<0.05$), prior gynaecological consultation ($p<0.05$) and gaining knowledge on menstruation from parents ($p<0.05$).

Conclusion: The study makes a substantial contribution to the scholarly community by addressing a crucial aspect of adolescent health. Although the current study revealed that there was no statistically significant association between hygienic facilities at school and menstrual hygiene practices, majority of participants expressed dissatisfaction on their hygienic facilities at school. Empowering parents with correct knowledge on menstruation is recommended as they were the main source of information for adolescent girls. These findings enrich the existing literature and have practical implications for policymakers, educators, and healthcare providers.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education, 5 - Gender Equality

OP 56

Bridging knowledge-attitude gaps in gestational Diabetes Mellitus: maternal perspectives from Sri Lanka

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Background: Gestational Diabetes Mellitus (GDM) is the most common metabolic disorder in pregnancy, characterized by hyperglycaemia that typically manifests in the second or third trimester. Its rising prevalence poses significant risks for both mothers and infants, including obstetric complications and long-term metabolic consequences. Despite this, maternal knowledge about GDM remains limited. However, positive health attitudes provide a strong foundation for developing innovative and sustainable antenatal education strategies. This study explored maternal knowledge and attitudes toward GDM to identify opportunities for strengthening pregnancy care.

Methods: A descriptive cross-sectional study was conducted among 275 pregnant women attending antenatal clinics at a selected tertiary care hospital and a base hospital from January 2024 to February 2025. Participants were selected via systematic random sampling technique. A pretested, interviewer-administered questionnaire assessed sociodemographic, obstetric, and health-related characteristics alongside knowledge (23 items) and attitudes (5 items) regarding GDM. Descriptive statistics and Chi-square tests ($p < 0.05$) were used in data analysis.

Results: Although only 47.3% of participants had good knowledge, a significant 86.2% expressed positive attitudes towards GDM prevention and management. This attitude-knowledge gap highlights an underused opportunity for antenatal education. The positive attitudes were observed across all demographic groups, suggesting broad receptiveness to health interventions. Determinants of higher knowledge included maternal age, ethnicity, religion, family history of diabetes, history of GDM, and history of hypertension.

Conclusion: Despite knowledge gaps, the overwhelming positivity in maternal attitudes presents a valuable entry point for sustainable antenatal health education. Harnessing this readiness through culturally sensitive, structured educational programs can foster early detection and improve maternal-child health outcomes, aligning with national priorities and global Sustainable Development Goals.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 57

Knowledge, attitudes, and associated factors of sexual relationships among selected university undergraduates in the Colombo District

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Background: Sexual relationships were often kept private and considered to be only among married, now significantly shows an emergence among adolescent and unmarried younger generation. Lack of knowledge and attitudes on this has caused wide range of negative impacts on the society.

Methods: Descriptive cross-sectional study conducted among undergraduates in Faculty of Management studies and Commerce and Faculty of Arts of Colombo and Jayewardenepura universities. A google form composed of close ended questions, along with information sheet and consent form was circulated in both English and Sinhala.

Results: Majority of the study population (55.8%), had good knowledge on sexual relationships. Majority of the population recognized, loss of virginity, unplanned pregnancies and transmission of sexually transmitted infections as consequences of sexual relationships. Knowledge was analysed separately based on age which was categorized into groups. Most 20-22 years old depicted poor knowledge (53.5%), while most 23–25-year-olds depicted good knowledge (63.7%). A significant association was observed between knowledge of participants and religion. Participants belonging to Buddhism predominantly had good knowledge on sexual relationships ($p=0.017$). Majority of the participants had good attitudes (52.5%) regarding sexual relationships. A vast portion of the study population preferred to be in sexual relationships with partners of opposite gender (95.4%). A significant association was observed between religion and attitudes on sexual relationships among study participants ($p=0.026$). Majority of the Buddhists showed good attitudes and those who followed other religions showed poor attitudes. A significant association was observed between the total knowledge and attitudes regarding sexual relationships ($p=0.002$)

Conclusion: As knowledge and attitudes regarding sexual relationships shows significant association, increasing level of knowledge will increase positive attitudes of people and would help to reduce negative outcomes arising from them.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

Session I

Infectious disease

OP 58

Knowledge, attitudes, practices, and factors associated with knowledge on Tuberculosis among first-year students at the University of Sri Jayewardenepura

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Background: Tuberculosis (TB), caused by *Mycobacterium tuberculosis*, primarily affects the lungs but may involve other organs. It remains a major global health concern, especially in developing countries such as Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among first-year undergraduates at a state university in Sri Lanka. Data were collected through a self-administered questionnaire, available in three languages, distributed online with prior information sheets and consent.

Results: A total number of 393 students took part in this study, with a response rate of 93%. The knowledge on tuberculosis (TB) among the participants was moderate, with 48.3% showing good knowledge and 51.7% showing poor knowledge. A considerable number of students had misconceptions that TB transmitted through skin contact (39.7%) and sexual intercourse (41.2%). When it came to assessment of attitude, 49.9% of the participant students had a positive attitude toward TB, while 50.1% showed a negative attitude. Regarding practices, a majority consisting of 58.3% of students demonstrated good TB-related practices, while 41.7% demonstrated poor practices. Factors that were significantly associated with knowledge included gender ($p=0.009$), with female students demonstrating better knowledge than that of the male participants. Nonetheless, no significant association was found between knowledge and attitudes ($p=0.208$) or between knowledge and other socioeconomic factors.

Conclusion: According to the study on overall knowledge regarding tuberculosis, almost equal proportions had good and poor knowledge. Attitudes toward tuberculosis were also similarly divided, while preventive practices were relatively better, with the majority adhering to good practices. The female participants showed higher tuberculosis knowledge compared to males. These findings highlight the need for continued, targeted interventions in order to raise tuberculosis awareness while improving the attitudes and the preventive behaviours of the population.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 59

Knowledge, attitudes, and factors influencing knowledge on waterborne diseases among undergraduate students in a university in Colombo District, Sri Lanka

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Background: Waterborne diseases remain a major global health concern, especially in low- and middle-income countries where safe water access is limited. University students represent an important population in promoting public health awareness. Understanding their knowledge and attitudes can inform targeted health education strategies. The aim of this study was to assess the knowledge and attitudes

regarding waterborne diseases and to identify the factors influencing knowledge among undergraduate students of a selected university in the Colombo District.

Methods: A descriptive cross-sectional study was conducted among 431 undergraduate students from non-medical faculties at a selected university in Colombo District. Participants were recruited using stratified random sampling. Data were collected via a self-administered, pre-tested questionnaire assessing socio-demographic factors, knowledge, and attitudes towards waterborne diseases. Knowledge and attitude scores were categorised as good or poor based on the mean obtained. The associations between knowledge and selected factors were determined using Chi-square test.

Results: Of 431 respondents, 52.2% had good knowledge while 47.8% had poor knowledge. Most students recognized contaminated water as a source of disease and the role of sanitation in prevention. Attitudes indicated that 47.1% agreed on the importance of preventive measures. Knowledge was significantly associated with age ($p=0.001$) and income level ($p=0.003$). Attitudes were significantly associated with faculty of study ($p=0.002$) and prior personal experience ($p=0.024$). Gender and area of residence showed no significant associations.

Conclusion: The majority of students demonstrated good knowledge, gaps remain in understanding transmission and complications of waterborne diseases. Strengthening awareness campaigns and integrating public health education into university curricula can help bridge these gaps and improve disease prevention efforts.

Sustainable Development Goals: 3 - Good Health and Wellbeing, 4 - Quality Education

OP 60

Knowledge of adverse events following immunization and associated factors among mothers of children up to age five attending paediatric clinics at a teaching hospital in Sri Lanka

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Background: Immunization is a vital public health measure in preventing childhood infectious diseases. However, adverse events following immunization (AEFI) could be defined as any untoward medical occurrence after vaccination which may or may not be causally related. Maternal knowledge on AEFI is crucial for prompt recognition and appropriate response. This study aimed to assess the level of knowledge regarding AEFI among mothers of children up to five years attending paediatric clinics and to identify associated sociodemographic factors.

Methods: A descriptive cross-sectional study was conducted at a selected tertiary care hospital and 270 mothers were selected through simple random sampling. Data were collected using a pre-tested, interviewer-administered questionnaire in Sinhala and English. Knowledge was assessed using Yes-No-Don't Know (YNDK) Scale and categorized as poor (<40%), average (40–60%), good (60–80%), and excellent (>80%). Sociodemographic data included maternal age, education, employment, income, and number of children. The associations were determined with Chi-square tests, considering $p<0.05$ as significant.

Results: Among participants, 64.8% ($n=175$) demonstrated average knowledge, 27% ($n=73$) had good knowledge, and 8.2% ($n=22$) had poor knowledge while no mothers had excellent knowledge. The most frequently identified AEFI symptoms were pain at the injection site ($n=241$, 89.3%), redness ($n=227$, 84.1%), and low-grade fever ($n=222$, 82.2%). Only 52.2% ($n=141$) recognized anaphylaxis as a severe AEFI, while 30.4% ($n=82$) identified seizures. Higher maternal education ($p<0.001$) and monthly family income over Rs. 50,000 ($p<0.001$) were significantly associated with better knowledge. Maternal age ($p>0.05$) and number of children ($p>0.05$) were not significantly associated with knowledge levels.

Conclusion: The majority of mothers demonstrated average knowledge of AEFI, with notable gaps in recognizing severe reactions. Education level and income were significant predictors of better knowledge. Targeted health education is needed to improve maternal awareness and enhance vaccine safety surveillance.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 61

Pattern and seasonality of Leptospirosis admissions to government hospitals in selected districts from 2018 to 2021

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Background: Leptospirosis is a zoonotic bacterial infection caused by *Leptospira interrogans*. It is globally prevalent and endemic in Sri Lanka, where seasonal patterns of infection contribute to significant morbidity.

Methods: A descriptive cross-sectional study was conducted using secondary data from the electronic Indoor Morbidity and Mortality Register of the Medical Statistics Unit, Ministry of Health. Data on leptospirosis admissions from government hospitals in Anuradhapura, Kegalle, and Gampaha Districts were analyzed for 2018–2021.

Results: Hospital admissions were 1811 in 2018, 2040 in 2019, 3063 in 2020, and 3873 in 2021, totalling 10,787 cases. Cases were predominantly among males (81.2–85.6%) and the 19–60 age group. Peaks occurred in October–December and May–July, coinciding with the Maha and Yala seasons ($p < 0.001$). Fewer cases were reported during COVID-19 lockdown periods.

Conclusion: Leptospirosis admissions increased steadily between 2018 and 2021, with significant seasonal variation linked to monsoon periods. Young and middle-aged males were disproportionately affected. These findings highlight the need for targeted preventive strategies, particularly during high-risk seasons.

Sustainable Development Goals: 3 - Good Health and Wellbeing

OP 62

Pattern, temporal association, and associated factors of notifying Dengue, Tuberculosis, Leprosy, and COVID-19 in a selected Medical Officer of Health area in Sri Lanka during the COVID-19 pandemic (2020–2022)

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Background: COVID-19, the most recent global pandemic affected almost all the dynamics in the world including day-to-day life of the public, global economy, policies of health authorities, resource distribution and many more. This also had a great impact in the process of notification of infectious diseases. Since this pandemic altered the behaviour of the general public, the process of notification of infectious diseases was vastly affected.

Methods: The study was a descriptive cross-sectional study, conducted based on the relevant secondary data available at the Panadura Medical Officer of Health (MOH) office in Kalutara District, Sri Lanka. Data were collected from the Infectious Disease (ID) register (i.e., dengue and leprosy notifications), the COVID-19 database and the TB register. The data analysis completed with focusing on COVID-19, dengue, TB, leprosy epidemiological trends, demographics, temporal patterns and lockdown effects.

Results: COVID-19 peaked in 2021 with 9452 patients (77.1%). During the period 2020-2022, dengue, TB and leprosy recorded their highest number which were 687 (57.8%), 102 (50.5%), 17 (60.7%) respectively in 2022. Residential mobility had a weak correlation with the daily cases notified for all the diseases (Spearman coefficients ranging from 0.124 to -0.047). Males had higher prevalence in each disease. (proportion ranging from 52% to 71.4%). Age-wise, COVID-19 greatly affected age group 36 or more (53.1%), while dengue greatly affected age group 35 or less (72.3%). Employment status of majority of patients for each disease showed they were employed. TB patients had significantly different mean ages during lockdowns.

Conclusion: A significant association was found between lockdown/non-lockdown periods and selected notifiable diseases. Final outcome of the study showed that adequate infrastructure, facilities and policies would be beneficial in the case of a future pandemic.

Sustainable Development Goals: 3 - Good Health and Wellbeing

Panel of judges

Prof. Maheeka Seneviwickrama

Prof. Lohini Athiththan

Prof. Shalindra Ranasinghe

Dr. Ianthi Gunasekara

Dr. Sriyani Ranasinghe

Dr. Sanath Mahawithanage

Dr. Dumitha Govindapala

Dr. Nilanka Perera

Dr. Sajith Edirisinghe

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Dr. Nimesha Gamhewage

Dr. Kanchana Wijesinghe

Dr. Sashika Alahakoon

Dr. Chaminda Hunukumbure

Dr. Nimali Wanniarachchi

Dr. Thanuja Ranasinghe

Dr. Kavya Botejue

MURS 2025 Logo Design Competition

As part of the Medical Undergraduate Research Symposium 2025, the Research Committee, organised a Logo Design Competition to visually represent the theme ***“Innovative Research for Sustainable Healthcare.”***

The competition was open to all medical undergraduates of the Faculty of Medical Sciences, University of Sri Jayewardenepura, and entries were evaluated by the Scientific Committee based on creativity, thematic relevance, visual impact, and alignment with the Sustainable Development Goals (SDGs).

Winner of the Logo Design Competition:

Zainy Dahlan Zainy Hassan Ziya



Concept:

- **Caduceus** – Symbolises the healthcare system (SDG 3: Good Health and Well-being)
- **Brightened Bulb** – Represents innovation and creative thinking (SDG 9: Industry, Innovation and Infrastructure)
- **Globe** – Highlights the global relevance of research and collaboration (SDG 17: Partnerships for the Goals)
- **Microscope** – Represents scientific research, central to the mission of MURS

Certificate Recipients in Recognition of Creative Contributions

MURS 2025 Logo Design Contest

The following medical undergraduates received **Certificates of Appreciation** for their creative submissions to the MURS 2025 Logo Design Contest:

- **Dihan Anuradha Wijayasinghe**
- **Ranasinghe Dewayalage Nihara Sathsarani Ranasinghe**
- **Sayumi Sakithma Jayalath**
- **Thuvaraga Loganathan**

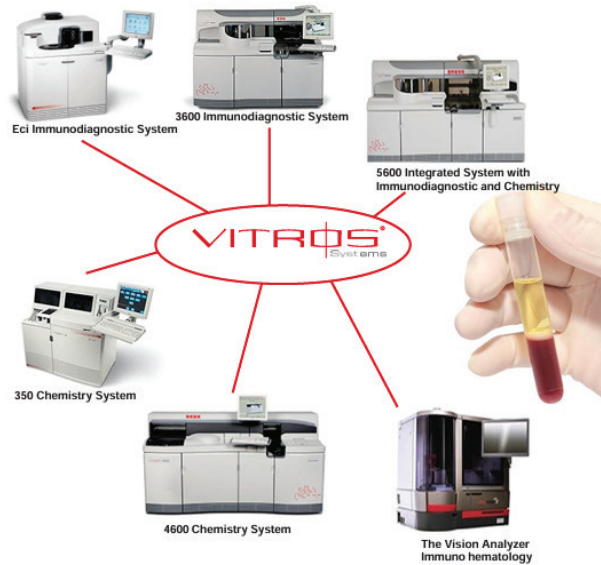
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- Vidyajyothi Professor Asita de Silva, Cadre Chair and Senior Professor, Department of Pharmacology, Faculty of Medicine, University of Kelaniya for accepting our invitation and delivering the keynote speech
- Medical Undergraduates who submitted abstracts for free papers
- The members of the scientific committee who reviewed abstracts
- All academic staff members who chaired the sessions
- All academic staff members who judged oral presentations
- All the sponsors for financial support
- Ashfaaq Sheriffu, Minsandi Fernando, Dihan Wijayasinghe, Azeer Aslam and Sajaa Rasmy of 31st batch for compering
- Nature and Photography club of Faculty of Medical Sciences
- Ananda Press for printing the book of proceedings
- Mr. Chamil Kumara for designing the MURS 2025 web page
- Mr. Darshana Madawala for organizing audio visual support
- Mr. Nishantha Perera for the flower arrangements
- Demonstrators and students of 29th batch who supported in numerous ways
- Non- academic staff members for all their support



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