URSFMAS-2023

2nd and 3rd August 2023



Fifth Undergraduate Research Symposium Faculty of Medicine and Allied Sciences Rajarata University of Sri Lanka - 2023

Abstracts of Poster Presentations

Faculty of Medicine and Allied Sciences
Rajarata University of Sri Lanka



Abstracts of Poster Presentations



KNOWLEDGE, ATTITUDES AND AWARENESS REGARDING CARDIOPULMONARY RESUSCITATION (CPR) AMONG SECOND YEAR UNDERGRADUATE STUDENTS IN FACULTY OF SOCIAL SCIENCES AND HUMANITIES

IN RAJARATA UNIVERSITY OF SRI LANKA

Adikari A.A.H.N.¹, Abayakoon A.M.S.P.¹, Adhikari K.S.I.¹, Afsha M.A.F.¹, Aisha M.S.¹, Amarasiri G.A.S.K.¹, Wickramage S.P.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Physiology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Cardiopulmonary resuscitation (CPR) is an emergency life-saving procedure, performed immediately on a person, who develops cardiac arrest with unconsciousness and found to be pulseless. It is an essential skill everyone should possess. Studies conducted on knowledge and awareness regarding CPR among young adults is scarce.

Objective: To assess knowledge, attitudes and awareness regarding cardiopulmonary resuscitation (CPR) among second year undergraduate students in Faculty of Social Sciences and Humanities (FSSH), Rajarata University of Sri Lanka (RUSL)

Methods: A descriptive cross-sectional study was conducted among all consenting second year undergraduates in FSSH, RUSL. Data was collected through a google form. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine and Allied Sciences, RUSL. Data was analyzed using SPSS statistical software.

Results: A total of 193 students responded – 45 (23.3%) males and 148 (76.7%) females. Knowledge regarding CPR was not significantly different between male and female students (p=0.353). Knowledge and awareness regarding CPR were statistically similar among students from rural and urban home areas (p=0.96). Among the 193 responses, only 60 were able to correctly select the sequence of CPR procedure. Out of 60 students who were confident about their CPR knowledge, 47 (78.3%) were not confident to perform it. Hundred and twenty six (65.3%) students suggested that a formal training on CPR is mandatory during school education.

Conclusions: Though the majority have heard of CPR procedure, overall appropriate knowledge on CPR and confidence to perform CPR if needed, were not satisfactory among university undergraduate students. Knowledge, attitudes and awareness on CPR among undergraduates were not affected by gender or area of residence. Many find it necessary to include CPR training in school education.

Key words: Awareness, CPR, Undergraduates

A CROSS SECTIONAL STUDY OF FACTORS ASSOCIATED WITH ARTERIOVENOUS FISTULA FAILURE AMONG HAEMODIALYSIS PATIENTS, HAEMODIALYSIS UNIT, TEACHING HOSPITAL ANURADHAPURA

Amarathunga I.D.S.M.¹, Amunugama W.A.G.R.M.S.S.¹, Ariyarathna M.G.M.¹, Aseera M.J.F.¹, Ashani R.M.S.N.¹, Asna M.A.F.¹, Srishankar S.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ² Department of Surgery, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Chronic kidney disease has become a significant global burden, doubling its prevalence recently. Hemodialysis is the major treatment option for end-stage-renal failure. Arteriovenous fistula (AVF) is the preferred long-term vascular access for hemodialysis due to its superior survival rates, lower infection rates and complications compared to central-venous catheters and arteriovenous grafts. This study focuses on factors influencing AVF failure.

Objective: To describe the factors associated with arteriovenous fistula failure among hemodialysis patients in Anuradhapura district

Methods: A cross-sectional descriptive study included 108 chronic hemodialysis patients at Teaching Hospital Anuradhapura. Data was collected through semi-structured interview composed of a questionnaire and existing patient reports. Data was entered to excel database and SPSS software using univariate analysis followed by multivariable logistic regression.

Results: A total of 108 patients were interviewed with mean age 52(SD=10). 30.56% were identified as secondary AVF failure. Post-emptive AVF creation had a failure rate of 38.6% and pre-emptive AVF creation had 15.8%,(p=0.016). In binary logistic regression analysis patients with primary education had 162.7 times the odds of AVF failure than those with collegiate education.(AOR=162.728,p< .011). When heparin was given during the procedure, the failure rate is 22.9% and when heparin was not given it is 44.7%,(p=0.028). Patients with Type 2 Diabetes Mellitus had a failure rate of 50.0%, without T2DM had 21.6%,(p=0.006). Patients who had a history of smoking had a failure rate of 45.8%, while non-smokers had 18.3%,(p=0.003).

Conclusions: Preemptive AVF creation had lower failure rate compared to post-emptive creation. Patients with primary education had significantly higher odds of AVF failure. The administration of heparin during the procedure and absence of Type 2 Diabetes Mellitus and smoking were associated with lower failure rates. These findings emphasize the importance of preemptive AVF creation and identify educational background, heparin use, T2DM, and smoking as factors influencing AVF outcomes.

Keywords: Arteriovenous fistula, Chronic kidney disease, Hemodialysis

ASSOCIATED FACTORS OF SCREEN TIME AMONG MEDICAL DOCTORS' CHILDREN LESS THAN 5 YEARS IN SRI LANKA

Athurugiri A.A.V.¹, Azka M.S.F.¹, Balasooriya B.M.N.M.I.M.¹, Balasooriya B.R.S.D.¹, Balasooriya C.H.¹, Koralegedara K.I.S.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ² Department of Anatomy, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Despite the recommendations, children persist in spending a substantial amount of time immersed in screens. The demanding schedules of medical doctors contribute to their children's early exposure to digital media and screens, as well as their increased screen time.

Objective: To determine factors associated with screen time usage among children less than five years of medical doctors

Methods: Doctors were invited through different social media groups. A cross sectional study was conducted using an online questionnaire among medical doctors who are parenting children less than 5 years of age in Sri Lanka. Data were also gathered using a digital questionnaire. Safe screen times were defined according to the WHO and American Academy of Pediatrics (AAP).

Results: For the final analysis, 94 participants were included and of them 33% children were less than 2 years of age. The median average screen time spent last week was 4 hours (IQR 2.0-7.2). All children (100%) under the age of 1 are engaged in screen usage against the recommendations. Age >2 years(p=0.001), tablet use(p=0.008), movies(p=0.011), TV(p=0.087), using device during meal time(p=0.011) and using device during bed time(p=0.062) are associated with increased screen time. Co-view (Child and parents together watching the screen) has negative association with screen time(p=0.029). All four children engaged in gaming, exceeded the screen time limit. Logistic regression revealed that device during bedtime (adjusted OR =17.7,95%CI=1.3-239.8), device during mealtime (adjusted OR=16.1,95%CI=1.4-176.0), TV (adjusted OR=9.1,95%CI=1.0-79.8) were the independent predictors of risky use of screen time.

Conclusions: High levels of screen time pose a significant risk behavior within the study group. It is crucial to recognize that these identified risk behaviors are entirely preventable, thereby allowing for the implementation of effective preventive measures.

Keywords: Associated factors, Children less than 5 years of medical doctors, Screen time

FROM THEORY TO PRACTICE: ASSESSING KNOWLEDGE, ATTITUDE AND PRACTICES OF ANTIBIOTIC PRESCRIBING AMONG SRI LANKAN MEDICAL OFFICERS

Bulathsinghala K.M.¹, Bandara K.B.U.L.K.¹, Chandrakantha L.G.A.¹, Chandrasiri W.K.A.S.T.¹, Bandara W.M.S.N.¹, Bandara R.M.K.V.¹, Gunathilaka M.G.R.S.S.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Microbiology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Antimicrobial resistance (AMR) has become a major global health threat which needs special concern and it has affected majorly developing countries. As prescribers, Medical Officers (MOs) have a major contribution for the phenomenon; AMR. Sri Lanka is included into most affected category as it is a developing country. Assessing knowledge, attitude and practice on AMR of Sri Lankan MOs is very important.

Objective: To describe the level of knowledge on usage of antibiotics and attitude and practices related to the antibiotic prescribing among Sri Lankan MOs

Methods: In this cross-sectional study, a google sheet containing a previously validated self-administered questionnaire was distributed. KAP scores were calculated according to the recommendations of developers. Data were collected, stored in a database and analysed using Statistical Package for the Social Sciences software.

Results: Total 424 responses received out of recruited 1780 MOs, including 187 male and 237 female doctors. Medical Officers scored highest in questions assessing attitude (93.23%) and knowledge (83.12%), but performed poorly in practices (66.70%). The knowledge score ranged from 52.17%-100%, median 82.61% (SD \pm 8.76). Attitude scores ranged from 68.89-100% mean 93.23% median as 95.56% (SD \pm 7.60) Practice scores ranged from 35%-90% mean 66.70% median 65% (SD \pm 9.99). The distributions of knowledge, attitude and practice scores are significantly different (p<0.001, Related samples Friedman's Two-Way Analysis of Variance by ranks). Knowledge scores and practice scores (p<0.001, r=0.283, Pearson Correlation) and attitude scores and practice scores (p<0.001, r=0.360, Pearson Correlation) are significantly correlated. The medians of differences between knowledge and practice scores are significantly different (p<0.001, Related Samples Wilcoxon Signed Rank Test).

Conclusions: Among Sri Lankan MOs, knowledge and attitude scores are high comparatively to practice scores. A significant disparity between knowledge and practice scores indicates a gap of implementation. We recommend interventions to fill this gap.

Keywords: Antibiotic Resistance, Knowledge, Practice

MEDICAL STUDENTS' PERCEPTION TOWARDS THE IMPACT OF ECONOMIC CRISIS ON DRUG COMPLIANCE OF DIABETES MELLITUS PATIENTS IN THEIR FAMILIES

Chathurika K.A.W.¹,Cooray M.R.C.¹, Dahanayake K.D.¹, De Silva H.W.P.M.¹, Dhanasekara D.M.U.S.¹,

Dharmarathne P.K.L.¹, Jayasinghe H.M.I.U.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ²Department of Community Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Diabetes mellitus (DM) is a major non-communicable disease with high prevalence in Sri Lanka and associated with high mortality and morbidity rates. The economic crisis in Sri Lanka since 2020 has led most of the citizens to neglect their basic health. This predicts a major change in drug compliance to non-communicable disease in every aspect.

Objective: To assess medical students' perception towards the impact of economic crisis on drug compliance of diabetic patients in their families

Methods: A cross-sectional study was conducted among 3rd, 4th and 5th year undergraduates in the Faculty of Medicine and Allied Sciences of the Rajarata University of Sri Lanka. An online self-administered questionnaire was distributed through a Google forum within two weeks duration. Drug compliance was assessed by missed clinic visits and new onset complications during crisis period. Economic crisis was assessed by fuel availability and drug availability. Data was analyzed with Chisquare test & Kruskal Wallis Test using SPSS version 23.0.

Results: Among 327 participants,168(n=168) had DM diagnosed patients in their families. Among them 51.8%(n=87) were males and 48.2%(n=81) were females. 55.4% of DM patients were in 50-60 age group. 36.3% reported transport difficulties due to fuel crisis while 26.2% was due to economic issues and both above factors have affected 37.5% patients.37.5% has missed clinic visits due to fuel crisis. 44.6% reported lack of accessibility to medication and has developed DM related complications.73.1% has developed complications due to self-management without medications. Both the associations of fuel crisis with missed clinic visits(p=0.231) and drug unavailability with development of complications (p=0.344) were not statistically significant.

Conclusions: Findings indicate that there was no significant association between the economic crisis and the drug compliance of DM patients according to medical students' perception. However, normal population situation may vary and it needs to be extensively assessed.

Keywords: Compliance, Diabetes, Economic crisis

KNOWLEDGE AND PRACTICES AMONG DOCTORS IN SRI LANKA REGARDING INDIAN POLYVALENT ANTIVENOM SERUM ADMINISTRATION FOR SNAKE ENVENOMING

Edirisinghe E.D.P.R.¹, Edirisinghe E.A.D.U.¹, Diyagama D.M.J.I.¹, Dissanayaka A.K.O.A.¹, Dilrukshi K.K.P.¹, Dharmarathna L.S.¹, Wedasingha W.A.S.N.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

Background: Snake envenoming (SE) is a major issue in tropics. Indian polyvalent antivenom (IPVA) is the only specific treatment. Doctors should have a sound knowledge on administration of IPVA and management of its adverse reactions (ARs).

Objective: To assess the level of knowledge and practices among local doctors regarding IPVA administration and management of ARs

Methods: A descriptive cross-sectional study was conducted among MBBS qualified pre-interns and doctors working in local hospitals. A self-administered 35-item questionnaire was distributed online over 2 weeks. Knowledge and practices related to IPVA were assessed under four domains: indications, how to administer, premedications used, and management of ARs. Mann-Whitney U test was performed to compare scores with the significance level p<0.05.

Results: Of the 262 responses, 29.4% were attached to medical wards. Majority (92.4%) had working experience <10 years and only encountered between 0-10 snakebite cases (46.2%). 61.8% had work experience in a snakebite dense area.

Knowledge on indications for IPVA had a median score of 76.7%. Median score for the knowledge on IPVA administration, premedication and ARs management were <75%. 80.2% scored >75% on how to monitor patients post antivenom: only 36.6% scored >75% regarding other drugs indicated in anaphylaxis management. Lowest median score (23.7%) was recorded on how to administer antivenom.

Significant differences in knowledge were observed 1) between participants who referred national guidelines frequently versus those who did not: regarding premedication (p=0.012,U= 2454) and management of ARs (p=0.001,U=2149.5) and 2) between participants who had experienced >10 cases versus those who had less experience: regarding indications (p=0.046,U= 7328.5), IPVA administration (p=0.010,U=6976.5) and premedication (p=0.001,U=6516).

Conclusions: There is a lack of knowledge in key areas regarding administration of IPVA and management of ARs among local doctors. Continuous programs to update knowledge in par with current national guidelines are needed.

Keywords: Adverse reactions, Indian polyvalent antivenom, Snake envenoming

² Department of Pharmacology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

PERCEPTION ON THE ACCESSIBILITY TO HEALTHY FOOD CHOICES OR ALTERNATIVES OF WORKERS IN SELECTED GARMENT FACTORIES DURING THE ECONOMIC CRISIS

Fernando K.N.A.¹, Edirisinghe E.M.M.N.¹, Edirisooriya S.N.¹, Ekanayake K.L.H.T.¹, Elikewela D.M.J.M.¹, Fernando K.T.S.D.¹, Senadheera S.P.A.S.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Biochemistry, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Economic crisis in Sri Lanka might change dietary habits, aggravating the nutrient deficiencies. Growing and consumption of alternative healthy foods are possible with proper motivation, education and well-managed food distribution system.

Objective: To assess the knowledge on healthy food alternatives, changes in diet patterns due to crisis and the perception on the accessibility to healthy food alternatives of garment workers

Methods: A cross-sectional, self-administered questionnaire based study was conducted recruiting workers of 3 selected garment factories in Hambanthota district (n=423). Data were analysed using SPSS version 23.

Results: Dietary pattern has been changed in majority (80.25%; n=325) with economic crisis. Reduction of average food frequency per week was highest for biscuits and sweets (36.5%) followed by sweetened beverages (31.3%), bakery products (30.8%), milk and dairy products (24.5%), animal origin foods (24.98%), fruits (23.1%). Reduction in food frequency was significantly different (p<0.05) among age ranges and salary scales. Male and female garment workers scored 63.13% and 63.04% mean average knowledge respectively with no statistical significance (p>0.05) among genders, age groups, and educational levels.

Almost 94% perceive that the low accessibility to healthy food alternatives is due to unavailability in the area while 38.3%, 45.4% respectively perceive that these alternatives are not feasible to grow in home gardens and they are expensive. Out of the participants 46.8%, 38.2%, 26.3%, 24.2% respectively indicated that lack of time to grow, damages to crops by pests/diseases, unavailability of fresh food in market and lack of space to cultivate are as reasons for less accessibility to healthy food.

Conclusions: There is a significant reduction in food frequencies among the garment workers owing to crisis. Unavailability in the area, lack of time to grow and damages to crops by pests are the main reasons for less accessibility to healthy food alternatives.

Key words: Economic crisis, Food alternatives, Perception

DAILY DIETARY CALCIUM INTAKE AMONG UNDERGRADUATES OF FACULTY OF MEDICINE AND ALLIED SCIENCES RAJARATA UNIVERSITY OF SRI LANKA

Gamage G.S.V.¹, Fernando L.G.M.P.¹, Fonseka O.M.V.¹, Gamage K.G.M.N.¹, Geethashli H.K.A.V.R.¹, Godamunna M.M.H.D.¹, Weerakoon H.²

Background: High cost and shortage and of food due to the prevailing economic crisis can cause numerous nutritional deficiencies among Sri Lankans.

Objective: To assess the daily dietary calcium intake (DDCI) among undergraduates at Faculty of Medicine and Allied Sciences (FMAS), Rajarata University of Sri Lanka (RUSL), and the food items that mainly fulfill their calcium requirement

Methods: An online survey was conducted in February 2023 among undergraduates at FMAS, RUSL to assess their DDCI. DDCI of each participant was calculated using food composition tables. The percentage of participants with inadequate intake was identified and further categorized into three groups as mild (667-999mg/day), moderate (334-666mg/day) and severe (0-333 mg/day) inadequate intake.

Results: A total of 445 students was responded, and their mean age was 22.7(±1.8) years. The majority of them were females (n=325,73.0%) Only 7 participants were on regular calcium supplementation. The average DDCI of the rest of the study cohort was 639.6(±293.7)mg/day. Only 54(12.3%) had DDCI above the recommendation (≥1000mg/day). Of the participants with an inadequate intake (n=384,87.7%), 149(38.8%), 189(49.2%) and 49(12.7%) had mild, moderate and severe, deficienciess respectively. A significant difference (Anova test, p=0.000), in DDCI was detected across the academic years, in which the participants from the academic year 2021/2022 had the lowest average intake (556.8±239.9 mg/day). A significant difference in DDCI was not observed between males and females (Student's t test,p=0.436). Rice (14.9%), water (13.6%), and milk (13.3%) were the top three calcium sources for the majority.

Conclusions: The study revealed inadequate DDCI among the majority of undergraduates at FMAS, RUSL, and rice; the staple food of Sri Lankans as the main calcium source. Educational interventions to promote the consumption of calcium-rich foods and the introduction of calcium rich food items at a low cost are imperative to ensure the adequate calcium intake.

Keywords: Daily dietary calcium intake, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Biochemistry, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

KNOWLEDGE, ATTITUDES AND PRACTICES REGARDING MALARIA AMONG UNDERGRADUATES OF RAJARATA UNIVERSITY OF SRI LANKA

Godamunne R.W.S.M.¹, Gunasekara D.D.N.¹, Gunathilaka P.K.A.P.¹, Gunawardana L.D.¹, Gunawardana P.K.N.P.¹, Gunawardana S. P.J.U.¹, Weerakoon K.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ²Department of Parasitology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Malaria is a neglected tropical disease caused by the parasite *Plasmodium*, with a significant global burden. Sri Lanka was certificated as a malaria free country in 2016, but has an intrinsic potential for re-establishment of malaria again in the country.

Objective: To assess knowledge, attitudes and practices (KAP) regarding malaria among a cohort of undergraduate students

Methods: Questionnaire-based cross-sectional online survey was conducted among 577 undergraduates of Rajarata University of Sri Lanka. Data were analyzed using statistical package for the social sciences (SPSS) software in terms of measures of central tendencies, and proportion comparisons with chi-square.

Results: Among 577 participants [Female;60.9%, Age-mean;22.7(SD;1.7) years], 46.1%(n=266) and 53.9%(n=311) responders were from medical and non-medical faculties respectively. The KAP was less than 57% among all Participants[K-45.9%(n=265), A-56%(n=323) and P-41.9%(n=242)]. Medical undergraduates[46.1%(n=266)] had better knowledge [OR=1.876 (95%CI:1.344-2.618)] and attitude [OR=0.670 (95%CI:0.480-0.933)] compared to non-medical undergraduates[53.9%(n=311)] while there was no significant difference in terms of practices. Close social-interactions were the main source of knowledge[53.1%(n=165): OR=1.810(95%CI:1.274-2.570)]. Only 26.1%(n=78) could accurately identify the breeding-site of the mosquito and 48.7%(n=205) were unaware of the presence of malaria-causing vectors in the country, of them, 50.2%(n=103) exhibited poor preventive-practices. Of the total 39.7%(n=227) were unaware of current malaria elimination status, and 27.4%(n=156) were unaware of the current malaria re-establishment risk.

Conclusions: Knowledge, attitudes and practices, on Malaria in Sri Lanka, even among a well-educated cohort, is at a basic level with very limited understanding on the vector-mosquito, its behavior, breeding-sites and current status of malaria in Sri Lanka. Taking our own past experiences also into consideration, it is extremely important to improve community awareness on key aspects of malaria to ensure the sustenance of malaria elimination status in the island.

Keywords: Prevention, Educated, Re-establishment, Mosquito-borne, Elimination

KNOWLEDGE AND PRACTICES ON PRIMARY PREVENTION, EARLY RECOGNITION AND EARLY MANAGEMENT OF ACUTE STROKE AMONG FIRST YEAR UNDERGRADUATE STUDENTS OF RAJARATA UNIVERSITY OF SRI LANKA

Gunawardana W.M.M.D.S.¹, Gunawardhana A.S.M.¹, Haaris C.M.M.¹, Hansika H.K.¹, Hansinee L.H.G.M.¹, Harshan S.M.¹, Herath H.M.N.C.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ² Department of Physiology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Acute stroke is a syndrome of sudden onset neurological deficit caused by a focal infarction or hemorrhage. It is the second leading cause of death in worldwide and 5th Leading cause of deaths in hospitals of Sri Lanka in 2020.

Objective: To assess the knowledge and practices on primary prevention, early recognition, and early management of acute stroke among first year undergraduate students of Rajarata University of Sri Lanka

Methods: A cross-sectional study was conducted among 324 participants across six different faculties using a self- administered questionnaire. Among the participants, 25.9%, 24.1%, 19.8%, 13%, 9.3%, 8% were from the faculties of Medicine, Agriculture, Management studies, Applied Sciences, Technology and Social Sciences and Humanities respectively. An overall score was calculated for the awareness and was categorized into more than 75%, 50-74.9%, 25-49.9% and less than 24.9%, as very good, good, poor and very poor respectively.

Results: The mean score for knowledge was $61.35\% \pm 20.19$. There were 52.16%, 25.93%, 13.89%, 8.02% undergraduates with good knowledge, very good knowledge, poor knowledge, and very poor knowledge respectively. There was no correlation between age, sex, ethnicity, monthly income of the family, advanced level stream or the faculty of study with the level of knowledge. Having close relatives or known individuals working in the health sector was associated with higher levels of total knowledge.

Conclusions: The overall knowledge regarding acute stroke is satisfying in the studied sample. Having health care related people in close circle has a positive impact on the overall knowledge.

Keywords: Acute stroke, Stroke prevention, Recognition of stroke, Stroke management

KNOWLEDGE AND PERCEPTION REGARDING HUMAN GENOME EDITING AMONG MEDICAL UNDERGRADUATES OF RAJARATA UNIVERSITY OF SRI LANKA

Hasakelum S.A.A.¹, Hemali W.S.¹, Herath H.M.M.P.K.¹, Herath H.M.M.U.¹, Herath H.M.N.L.¹, Hettiwaththa H.W.D.N.¹, Jayawardana S.M.A.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ² Department of Anatomy, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: The advancement of biotechnology has paved the way to genome editing which allows precise modifications of DNA sequences. These techniques carry a huge potential as well as a huge ethical burden.

Objective: To assess Knowledge and Perception regarding human genome editing among Medical Undergraduates of Rajarata University of Sri Lanka

Methods: A descriptive cross sectional study was conducted among undergraduate students and data was collected using a self-administered online questionnaire. Data was analysed using SPSS software.

Results: A total of 387 students completed the questionnaire and 72.9% of them were females. Among responders 92.2% had some understanding about genome editing. Controversial nature of genome editing was known by 76.7% and 72.9% knew that germline editing is banned in most countries while only 58.7% were aware that it is not accepted in the mainstream biology. Only 64.9% knew that genetically enhanced humans have already been created and 65.6% knew that gene editing can be used to cure inherited diseases like Duchenne Muscular Dystrophy. Majority(77.5%) agreed to use genome editing on somatic cells while only 45.7% accepted it for human enhancement. Almost a half identified the lack of child's consent as an ethical issue while 75.2% identified the possibility of worsening inequality due to restricted access. Religious (36.4%) and cultural(25.1%) backgrounds were not influential for majority in shaping their attitudes. Clinical exposure was significantly associated with knowledge level while gender associated with attitude differences.

Conclusions: Undergraduate medical students' knowledge on genome editing and relevant applications can be regarded as mediocre and needs improvement.

Keywords: Genome editing, Knowledge, Medical student

ZOOM FATIGUE AND BURNOUT AMONG PRIMARY SCHOOL TEACHERS IN THE MAWANELLA EDUCATION ZONE

Indrajith M.H.A.M.¹, Hewapathirana S.D.¹, Imasha L.A.P.¹, Indunil W.N.¹, Ishara M.S.F.¹, Jayalath W.R.H.R.¹, Wickramasinghe N.D.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Community Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri

Lanka

Background: The unexpected demand for the virtualization of school education in Sri Lanka during the COVID-19 pandemic caused an exponential increase in using videoconferencing for teaching-learning activities. However, there is a dearth of local studies assessing the mental health issues among teachers related to virtualization of education.

Objective: To assess Zoom fatigue, burnout, and their associations among primary school teachers in the Mawanella education zone

Methods: A descriptive cross-sectional study was conducted among primary school teachers in government schools in the Mawanella education zone. All primary school teachers in the setting were invited to complete a self-administered questionnaire (in all three languages), including Zoom Exhaustion and Fatigue Scale (ZEF) and Oldenburg Burnout Inventory (OLBI), circulated as a Google form. Data were analyzed using the SPSS version 22.0. Zoom fatigue was described using the mean (SD) ZEF score. Independent-samples t-test was conducted to compare the mean ZEF scores between different sub-groups. Pearson correlation was used to assess the relationship between ZEF and burnout scores.

Results: The final sample consisted of 342 teachers. The majority were females (n=263, 76.9%). The mean (SD) age of the sample was 40.2 (8.5) years. The ZEF score ranged from 15.0 to 65.0 with a mean (SD) of 34.6 (8.7). Teachers who; were currently not married, had to learn Zoom technology from school, had poor family support for teaching, reported statistically significantly higher mean ZEF scores than their counterparts (p<0.05). Teachers who; were excessively self-conscious, found multitasking difficult, stressed to use multiple features in Zoom and learn advanced technology, reported significantly higher ZEF scores than their counterparts (p<0.05). There was a statistically significant positive relationship between ZEF and burnout scores (r=0.254, p<0.001).

Conclusions: The scores of Zoom fatigue among primary school teachers in the Mawanella education zone are high. Providing more support to learn the novel Zoom technology would be beneficial to reduce Zoom fatigue among teachers.

Keywords: Burnout, Primary school teachers, Zoom fatigue

THE ASSOCIATION BETWEEN THIRD DOSE OF COVID-19 VACCINE – PFIZER AND NEWLY OCCURRENCE OF HYPERSENSITIVITY REACTIONS IN ELDERLY POPULATION OVER 50 YEARS OF AGE IN ANURADHAPURA

Jayaratne D.K.S.R.¹, Jayasinghe J.A.T.B.¹, Jayasooriya K.A.H.S.¹, Jayasuriya D.M.S.P.¹, Jayathilaka K.D.S.P.¹, Jayaweera H.H.K.N.D.¹, Hewabostanthirige D.J.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, , ² Department of Anatomy, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Although COVID-19 pandemic has been controlled by giving different vaccines, clinicians have observed emergence of allergy and hypersensitivity reactions after receiving the Pfizer booster as 3rd dose in Sri Lanka. Also, people claim that it has bad effects on their health. To date no proper scientific investigation has been conducted to evaluate this in Sri Lanka. Blood samples of individuals above 50 years with newly occurred allergy/ hypersensitivity were used for this study.

Objective: Determine the association between SARS-CoV-2 IgG levels with newly developed allergic /hypersensitivity reactions among the people who are vaccinated with Pfizer as the 3rd dose.

Methods: A case-control study was conducted on 60 individuals over 50 years of age who received the Pfizer booster dose at the Teaching Hospital Anuradhapura. Blood samples were collected, and a questionnaire on hypersensitivity and allergies was administered. ELISA was used to detect IgG antibodies. Specific antibodies 2200 SARS-CoV-2 IgG panel was used for the qualitative (U/ml) detection of IgG class antibodies against the S2 protein. Results that are less than 20U/ ml are considered negative, and positivity is more than 20U/ml. Data analysis was performed using SPSS software.

Results: The results of the analysis of covariance (ANCOVA) indicate that the study factor (case – "Hypersensitivity reactions after Pfizer vaccination", control – "Hypersensitivity reactions did not present") has a statistically significant effect (p=0.006) on antibody levels, even after controlling for the age and gender of patients. The interaction between factor and gender is not significant (p=0.322). **Conclusions:** The third dose of Pfizer COVID-19 vaccine is significantly associated with new hypersensitivity reactions. No significant gender difference was found. This pilot study had a small sample size of 60 due to limited resources and time. Conducting a study with a larger sample size or considering IgE antibody levels may yield different results.

Keywords: Elderly population, Hypersensitivity reactions, Pfizer Vaccination

WHY PHYSICIANS HESITATE TO DO POSTGRADUATE STUDIES; SELF- PERCEIVED REASONS, PERCEPTIONS, AND EXPECTATIONS OF ROLE STAGNATED MEDICAL OFFICERS IN ANURADHAPURA, SRI LANKA; A QUALITATIVE STUDY

Kulawansa P.D.T.D.¹, Kumarasinghe W.G.G.V.¹, Kulathunga M.E.¹, Kumari R.S.N.¹,

Kirinda G.W.R.W.M.S.I.¹, Kiriwaththuduwa K.N.R.¹, Warnasekara Y.P.J.N.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Community Medicine, Faculty of Medicine and Allied Sciences, Rajarata University

of Sri Lanka

Background: Although Sri Lanka has a relatively better healthcare system in the region, role stagnation (RS) can lower the quality of healthcare services. RS is the inability of advancing one's employment position. The purpose of this study is to describe self-perceived reasons, perceptions, and

expectations of role stagnated medical officers (MO's).

Objective: To describe the factors influencing role stagnation among medical officers in Teaching

Hospital Anuradhapura (THA).

Methods: We conducted a qualitative study at Teaching Hospital Anuradhapura, Sri Lanka, using indepth interviews with MO's served more than 10 years. Data was saturated after 15 interviews.

Following data transcription, inductive thematic analysis was performed.

Results: Environment, motivation, family support, intrinsic factors, work-life balance, contentment, and self-reliance were the major themes favouring RS. University education of most role stagnated MO's in the sample was affected by the country's political instability during the years 1988/89, causing education plan failure owing to ambiguity. Inadequate socioeconomic stability was the most highlighted reason for not continuing their education. The absence of peer and family encouragement is a frequent concern. Thus, MO's put off studies to spend time with their families. The majority believed that delaying postgraduate studies was due to prioritizing family obligations. Currently, they have no specific future plans because they feel that their life goals are already achieved. In the long run, they feel that there are no regrets about not pursuing postgraduate degrees.

Conclusions: The instability of economic, political, and social circumstances limited the confidence and the desire for further studies, jeopardizing the postgraduate preference of MO's. Nevertheless, they are pleased with the outcome.

Keywords: Medical Officer, Postgraduate studies, Role stagnation

IN-SILICO PCR AND MLST TYPING OF *Leptospira interrogans* SRI LANKAN ISOLATES AND SELECTED ASIAN ISOLATES

Lakshan P.M.K.¹, Lasanjanee A.L.K.D.¹, Luphzha M.P.D.L.¹, Madhumali L.L.¹, Madhushani A.M.P.¹, Madhushani A.N.¹, Senavirathna R.M.I.S.K.²

¹Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ²Department of Biochemistry, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Sequence typing, which is based on a variety of surface antigens, is used to categorize leptospiral agents in an arbitrary manner. Multiple Locus Sequence Typing (MLST), a molecular typing technique, has been shown to be useful for characterizing strains. The studies conducted to determine the ST (sequence type) using the whole genome and in silico PCR are scanty

Objective:To perform Insilico PCR and MLST typing of Sri Lankan *Leptospira interrogans* isolates and some selected global isolates recovered from human subject from Asian region

Methods: The whole genomic sequences of the selected global isolates from the Asian region (China and Malaysia) and Sri Lankan were extracted from NCBI (https://www.ncbi.nlm.nih.gov). In silico PCR was conducted using three MLST primer schemes (MLST1, MLST2, MLST3) via simulation on the computer program, and the PCR products were obtained. The MLST typing was performed using the pubMLST database((https://pubmlst.org/), and ST types were identified.

Results: In the study, we included 22 *Leptospira interrogans* isolates, from Sri Lanka (15) China (2), and Malaysia (5). Based on the MLST 1, two Sri Lankan isolates had ST 44, while three had ST 43. Based on MLST 2, one of the Malaysian isolates had ST 108, and two Chinese isolates belonged to ST 3. ST 44, 43, 23, 128, 128, 23, 23, 121, and 23 were found in 9 Sri Lankan isolates. In MLST 3, ST33 was identified in one of the Chinese isolates, while 2, 73, 19, and 149 serotypes were found in four selected Malaysian isolates. Sri Lankan isolates had multiple serotypes under that scheme.

Conclusions: We concluded that some isolates are compatible with global isolates. Due to a lack of allele profiles, some of the Sri Lankan isolates ST types could not be determined. These findings can be utilized to identify the predominant circulating ST type in Sri Lanka.

Keywords: In silico PCR, MLST, Serotype

KNOWLEDGE, ATTITUDES AND PRACTICES TOWARDS ANTIBIOTIC USE AND ANTIMICROBIAL RESISTANCE IN THE GENERAL COMMUNITY OF SRI LANKA

Madhuwantha K.C.¹, Madhushani K.L.J.¹, Madubashini P.R.¹, Madushani W.A.P.¹, Mahindarathna K.G.J.C.¹, Malalgoda M.G.S.A.¹, Jayasundara J.M.D.D.²

Background: Antimicrobial resistance has become a global health issue due to scarcity on knowledge and misuse of antibiotics. Studies on antibiotic use and knowledge among the general population of Sri Lanka are limited, highlighting the need for such studies.

Objective: To assess the knowledge, attitude, and practices about the use of antibiotics and antimicrobial resistance in the general community of Sri Lanka

Methods: A descriptive cross-sectional study was conducted in 6 selected "Grama Niladhari divisions" using a WHO validated self-administered questionnaire. Data was analysed by chi-square test using SPSS software. Spearman Correlation Coefficient was used to assess the correlation. P value of < 0.05 was considered as significant.

Results: A total of 282 individuals responded to the study and 68.6% (n=186) of responders were females. Majority were in the age range of 18-30 years (40.2%) and live in sub urban areas (40%). Two people (0.7%) had no school education while 54.2% completed education up to A/L or less. 46.5% of responders haven't heard the term antibiotic resistance. Knowledge on antibiotics and their use was poor in 34.4%, average in 58.2% and good in 7.4%. Attitudes were poor in 40.1% while 30.5% had good attitudes. Practices on antibiotic use were good in 49.3% and average in 30.5%. A significant association was found between the education level and practice (P<0.01). Participants with good education were 2.2 times likely to have good practices towards antibiotics than others (OR=2.193, CI=1.134-4.238). Significant positive correlations were observed between knowledge and practice (r=0.179, p<0.01), knowledge and attitude (r=0.212, p<0.01), and attitude and practice (r=0.159, p<0.01).

Conclusions: These findings emphasize the importance of proper health education targeting the general population in promoting positive practices towards antibiotic use.

Keywords: Antibiotics, Antimicrobial resistance, Attitude, Knowledge, Practice

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Microbiology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

CHARACTERISTICS OF THE MENSTRUAL CYCLE AND ITS ASSOCIATION WITH ACADEMIC ACTIVITIES OF FEMALE MEDICAL UNDERGRADUATES IN RAJARATA UNIVERSITY OF SRI LANKA

Mendis B.M.N.M.¹, Manawadu D.H.¹, Manawadu N.R.¹, Manomi K.A.N.¹, Mihnas T.F.¹, Munfila A.C.¹, Amarasinghe G.S.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ²Department of Community Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Menstruation can impact different aspects of the daily life of women including their education.

Objective: To describe the characteristics of menstrual cycle, describe access to Menstrual Hygiene (MH) facilities and determine their association with the academic activities of female medical undergraduates

Methods: All female medical undergraduates studying at the Rajarata University were invited to participate in a cross-sectional study. Information and consent forms and a self-completed questionnaire available in Sinhala, English or Tamil were shared as Google forms through WhatsApp. Chi-square tests were used to determine associations.

Results: Of the 396 participants, 40.2% (n=159) were in pre-clinical years. The median duration of a menstrual cycle was 28 days and menstrual period was four days. 54.1% (n=212) used paracetamol for menstrual pain. As MH products, 92.7% (n=335) used pads, while 6.2% (n=21) used cloths. 55.3% (n=171) spent more than LKR 500 on MH products per cycle. During the current year, 20.4% (n=80) had experienced menstrual poverty, while 2.0% experienced it regularly. Respectively, 86.2% (n=338), 58.1% (n=100), and 94.2% (n=355) perceive the water supply at the faculty, hospital and residence adequate for MH. Infrastructural facilities to manage menstruation at the faculty, hospital and residence were adequate according to 64.2% (n=251), 35.1% (n=61), and 81.4% (n=307) of responders, respectively. Using paracetamol was associated with absence for morning (χ 2 =6.430,p=.010) and evening (χ 2 =4.85,p=0.028) clinical work. Menstrual poverty was associated with absence from lectures (χ 2=4.11,p=0.04), and field work (χ 2=10.20, p<0.01). Perceived inadequacy of infrastructural facilities to manage menstruation at the faculty was associated with absence for practicals (χ 2=4.05,p=0.04). Length of period, perceived adequacy of water and infrastructural facilities at hospital or residence had no significant association with absence or perceived attention.

Conclusions: Menstruation and MH are challenging for women pursuing medical training. Policies and interventions are needed to improve equity and facilitate learning.

Keywords: Medical undergraduates, Menstrual cycle characteristics, Menstrual hygiene management

KNOWLEDGE, ATTITUDES, PRACTICES OF CANNABIS USAGE IN ALLOPATHIC MEDICAL PRACTITIONERS AND ALTERNATIVE MEDICAL PRACTITIONERS IN SRI LANKA: A CROSS SECTIONAL STUDY

Nilanaga R.A.D.P.¹, Nanayakkkara J.C.¹, Natha M.N.Z.¹, Navodya H.D.¹, Navodya R.S.¹, Nayanajih M.D.K.¹, Kaluarachchi T. K. P. K.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

Background: Cannabis contains numerous pharmacologically active substances. Regardless, there are safety concerns in terms of health and potential to abuse. Thus, cannabis is a conflictive topic around the world, despite several attempts to legalize its use.

Objective: Determine knowledge, attitude and practices of cannabis usage among Allopathic, Ayurveda, Traditional, Siddha and Unani medical practitioners in Sri Lanka

Methods: A cross sectional study was conducted mainly focused on Gampaha, Kegalle, Kurunegala, Puttlam, Batticaloa and Galle districts. Data was obtained by interviewing 242 Allopathic and Alternative medical practitioners selected through a multistage sampling technique were given a questionnaire. Responses were analysed to describe medical practitioners' discernments.

Results: Out of all participants, 49.58% currently prescribe cannabis, a majority (38.84%) being ayurvedic practitioners and rest from other alternative practices. All Ayurveda, Unani and Sidda practitioners were aware of the presence of a pharmacological effect. Awareness of Allopathic and traditional practitioners were 84.80% and 80.00% respectively. Kalka was found to be the main forms prescribed. Analgesia, neurological disorders and appetite loss were the main indications. Most observed benefits were pain relief, detoxification, improving digestion, absorption, activeness and alertness. Majority (30.58%) was not aware about the harmful side effects. The rest commonly mentioned addiction, memory impairment and drowsiness. 71.90% of the participants accepted cannabis as a medicine. Recreational use was rejected by all participants. 71.90% believed that the cannabis is having a negative cultural impact and its use may lead to drug abuse. 80% traditional practitioners perceive that the awareness of general public of pharmacological benefits is unnecessary. 20% are more favourable towards promoting public awareness. 78.51% of all practitioners believe public awareness on potential side effects should be improved.

Conclusions: All medical practitioners obtaining updated knowledge of medicinal properties and health hazards of cannabis usage is needed.

Keywords: Cannabis, Medical practitioners, Sri Lanka

² Department of Pharmacology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

PERCEIVED SOCIAL SUPPORT AND PROFESSIONAL QUALITY OF LIFE AMONG GOVERNMENT SCHOOL TEACHERS IN THE NUWARAGAMPALATHA EAST EDUCATIONAL DIVISION OF ANURADHAPURA, SRI LANKA: A CROSS-SECTIONAL STUDY DURING AN ECONOMIC CRISIS

Niluminda K.L.S.¹, Nilushika M.P.S.¹, Nimalchandra S.H.H.S.¹, Nishakara W.C.S.¹, Nuwanthika K.P.S.¹, Pabasara W.M.M.¹, Rathish D.²

Background: Social support could play an important role in school teachers' professional quality of life, especially during a pandemic or an economic crisis.

Objective: We aim to determine perceived social support and professional quality of life and describe the association between the study variables among government school teachers in Anuradhapura, Sri Lanka.

Methods: A descriptive cross-sectional study was conducted among teachers of the top three government schools which had the highest student-teacher ratio and grade 1 to 13 classes in the Nuwaragampalatha East educational division of Anuradhapura, Sri Lanka. A self-administered questionnaire including socio-demographic factors, multidimensional scale of perceived social support and professional quality of life scale was distributed among all consenting teachers of the selected schools. Logistic regression and Spearman's Rho were performed (P<0.05).

Results: Data from 336 teachers were included in the analysis. Most of the teachers had a high level of perceived social support (57%), a high level of compassion satisfaction (68%), a low level of burnout (56%), and a moderate level of secondary traumatic stress (60%). Monthly household income [odds ratio – 1.65 (1.01 – 2.69)] and years served as a teacher [odds ratio – 2.85 (1.05 – 7.74)] were significantly associated with overall perceived social support. Living alone [odds ratio – 15.02 (1.43 – 157.74)] and the number of adult females in the household [odds ratio –0.43 (0.24 – 0.75)] were significantly associated with compassion satisfaction. The number of adult males in the household [odds ratio – 2.21 (1.27 – 3.82)] was significantly associated with secondary traumatic stress. Also, the overall perceived social support had a positive significant correlation with compassion satisfaction (p<0.001) and a negative significant correlation with burnout (p<0.001).

Conclusions: Overall perceived social support showed a positive significant correlation with compassion satisfaction and a negative significant correlation with burnout. Optimizing perceived social support would help improve school teachers' professional quality of life.

Keywords: Family, Stress, Work engagement

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Family Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

ASSOCIATION BETWEEN PSYCHOLOGICAL RESILIENCE, COPING STRATEGIES AND PERCEIVED STRESS AMONG MEDICAL UNDERGRADUATES OF RAJARATA UNIVERSITY OF SRI LANKA

Padukka P.V.P.S.¹, Paranagama P.D.N.H.¹, Perera H.N.M.¹, Perera N.S.N.¹, Perera S.A.R.S.¹, Perera T.I.S.¹, Pushpakumara P.H.G.J.²

Background: Promoting resilience and positive coping styles facilitate medical undergraduates to manage their stress in a healthy manner and prevent burnout in their future carrier as physicians.

Objective: To describe the association between psychological resilience and perceived level of stress among the medical undergraduate of Rajarata University of Sri Lanka

Methods: A cross-sectional analytical study, based on a self-administered online questionnaire, was conducted among medical undergraduates in February 2023. Resilience and perceived stress were assessed using Wagnild and Young's Resilience Scale (WYRS) and Perceived Stress Scale (PSS) respectively. A 14-item scale, developed based on Brief-COPE, was used to assess the 14 coping styles.

Results: The sample consisted of 411 medical undergraduates; pre-clinical 212 (51.6%); 292 (71%) females. Mean values of WYRS and PSS in pre-clinical and clinical groups were 120.5(SD17.8), 123.1(SD16.4) and 20.4(SD 5.4), 20.3(SD 5.4) respectively. PSS scores were higher among female undergraduates, p<0.05 (Independent sample t-test); 20.8(5.4) vs 19.1(5.0). There was medium strength, negative correlation between resilience and perceived stress (r = -.36, n = 411, p < .001). Scores of resilience were different in different categories of stress, p<0.0001 (Independent Sample Kruskal-Wallis test); low-stress 135.9, moderate-stress 121.0, high-stress 114.8. There was a significantly higher mean PSS score seen among students who scored high for emotion-focused coping (n=322, mean PSS 20.1) and avoidant-focused coping (n=135, mean PSS 22.2), p=<0.05 (Independent sample t-test), while there were no significant differences in mean WYRS scores. WYRS scores, PSS scores and scores for problem-focused, emotion-focused, and, avoidant coping, were not different in pre-clinical and clinical undergraduates.

Conclusions: Female undergraduates reported high levels of stress. Medical undergraduates with a low level of stress reported a higher level of resilience. Emotion-focused and avoidant coping styles were associated with high levels of stress. Clinical training does not increase the level of stress.

Keywords: Medical undergraduate, Perceived stress, Resilience

¹ Undergraduate medical student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Family Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

THE ROLE OF PORNOGRAPHY IN SHAPING THE SEXUAL SCRIPT AND SEXUAL INSECURITIES OF MALE UNIVERSITY STUDENTS IN SRI LANKA:

A CROSS-SECTIONAL STUDY

Rajapaksha C.¹, Premarathne P.¹, Rajapaksha R.D.T.R.¹, Prathibhani J.A.S.¹, Prasangi K.G.T.¹, Prabashwara R.D.A.N.A.S.¹, Hettiarachchi D.A.U.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Community Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Pornography has become a primary source of sexual education and it plays a major role in the development of the sexual script of an individual. Increased consumption of specific media scripts reinforces those behaviours and worldviews. Growing pornography industry in a background of insufficient sexual education call for a better understanding of its effects.

Objective: To assess the frequency of pornography consumption, the role of pornography in shaping the sexual script, its impact on sexual insecurities and pornography dependence among male university students in Sri Lanka

Methods: Cross-sectional descriptive study was conducted among male university students in Sri Lanka using an online self-administered questionnaire.

Results: Out of 921 participants, the majority were Sinhalese 92.2%(n=849), unmarried 97.2%(n=895) with 78.7%(n=725) identifying themselves as heterosexual. 69.1%(n=636) reported no prior sexual experiences, while 97.9%(n=902) had been exposed to pornography. 75%(n=691) reported high consumption. Penis size insecurity varies significantly between high-frequency and low-frequency consumers (P=0.003). Concerns regarding their sexual abilities and sexual endurance among these two groups were not statistically significant. Favouring pornography and masturbating over actually engaging in sexual activities (19.9%,n=53), and watching pornographic content while having sex (14%,n=39) were not significantly different among the two consumer groups. 81.1%(n=184) of high-frequency users, expressed a desire for their partner to try something they saw in pornography, while among low-frequency users 66%(n=33) made such requests (P=0.010). 54.4%(n=124) of high-frequency users engaged in role-playing scenarios based on pornography scenes compared to low-frequency users 38%(n=19)(P=0.036). Acceptance of having multiple sexual partners, and having an open-relationship were significantly associated with a high-frequency of pornography consumption(P=<0.001).

Conclusions: High level of pornography consumption was observed among the participants with significant associations between pornography consumption and sexual insecurities, as well as pornography dependence in certain aspects. Moreover, it emphasized the strong influence of pornography on shaping an individual's sexual script.

Keywords: Pornography, Sexual insecurities, Sexual script

PREHOSPITAL INTERVENTIONS PRACTICED FOR SNAKEBITE PATIENTS IN ANURADHAPURA: A PROSPECTIVE STUDY OF 3999 PATIENTS

Ranatunga R.M.R.B.¹, Rajapaksha R.P.K.T.¹, Rajapaksha K.D.¹, Ranasinghe R.D.W.U.¹, Rajapaksha R.K.P.A.¹, Randika J.L.P.A¹, Silva N.K.A.²

¹ Undergraduate Medical student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

Background: Understanding pre-hospital interventions practiced by snakebite patients is important for designing awareness programs.

Objective: We aimed to describe the prehospital interventions practiced by snakebite patients in Anuradhapura.

Methods: Data was extracted from Anuradhapura Snakebite Cohort which prospectively recruits all confirmed snakebite patients aged over 16 years admitted to the Teaching Hospital Anuradhapura, from 2017 to 2022. Recommended pre-hospital interventions were defined following Sri Lanka Medical Association's snakebite first aid guide. The association of prehospital interventions with demographic factors described based on odds ratios (OR) and 95% confidence intervals (95% CI).

Results: We recruited 3999 patients [median age, 42 years (IQR: 29-54); males, 64.6%; highest education level <O/L, 48.7%]. Of them, 3062 (76.6%) practiced at least one prehospital intervention following snakebite. 1590/3999 (39.76%) practiced at least one intervention not recommended in Sri Lanka. The commonest recommended prehospital interventions practiced were washing the bite site with water (60.3%), and oral paracetamol for pain relief (5.7%), while the commonest non-recommended interventions were application of a tourniquet on the bitten limb (24.6%), application of lime over the bite site (10.7%) and seeking native treatment (8%). Practice of non-recommended pre-hospital interventions associated with age >60 years (OR, 1.389; 95% CI: 1.153-1.684; p=0.001) but had no association with the highest education level being <grade 10 or involvement in farming. Patients have applied tourniquet for a median time duration of 20 mins (IQR 15-30) and had been removed at the first contact hospital on admission (median age 42 years, IQR 29-54). Application of tourniquet had no significant association with the age being >60 years, highest education level being <grade 10 or farming involvement.

Conclusions: Practice of non-recommended interventions, including tourniquet, are still common among snakebite patients in Anuradhapura. Tourniquet use is brief due to faster hospital admissions.

Keywords: Prehospital intervention, Snakebite, Tourniquet, Sri Lanka

² Department of Parasitology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

EFFECTS OF DANGEROUS DRUGS ON ATTENTION LEVEL

Rathnayake M. D. M.¹, Rathnayake R.M.S.C.¹, Rathnayake R.M.U.S.¹, Rathnayake S.R.P.R.¹, Ravihari K.P.¹, Rupasinghe R.A.T.P.¹, Hewawasam C.²

¹Undergraduate Medical student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ²Department of Physiology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Attention refers to the concentration of awareness on one aspect of a particular stimulus excluding other stimuli. Dangerous drugs have a high tendency to be abused and lead to dependency. Dangerous drugs affect different parts of the brain which are responsible for attention. Studies regarding effects of dangerous drugs on attention level are limited. Commonly used dangerous drugs include cannabis, methamphetamine, cocaine, and heroine.

Objective: To determine the impact of drug addiction on the level of attention

Methods: A cross-sectional study was conducted in the "Mithuru Mithuro" Rehabilitation centre, Rilhena, Pelmadulla Sri Lanka, among a group of male drug addicts. The Control group was composed of males (from Mihintale MOH area, Anuradhapura) who had not currently or previously been addicted to dangerous drugs. Study tool was an online numerical version of Bourdon Wiersma test on a wide screen tablet computer and a live interview questionnaire based on version 10 of Drug Abuse screening Test (DAST-10). Multiple linear regression analysis was performed using SPSS statistics software.

Results: This analysis was based on the data from 85 drug-addicted males (aged between 18-40 years) and 85 males (aged between 18-40 years) who have never consumed dangerous drugs (control group). Majority of the participants of the test group were addicted to cannabis. There was a significant difference in attention between drug addicts group and the control group (Unstandardized coefficient B = -15.844; P<0.001). The level of attention showed inverse moderate correlation with the level of education of the participant (r = -0.350, p<0.001).

Conclusions: Those who are addicted to dangerous drugs have a significant attention deficit. Hence they warrant attention level testing before allowing them to function independently in society and engage in skilled tasks such as driving.

Keywords: Attention, Dangerous Drugs, DAST-10

BREASTFEEDING SUPPORT MECHANISMS AND PERCEIVED PROBLEMS IN SUPPORT EXPERIENCED BY POSTPARTUM MOTHERS IN A POSTNATAL WARD SETTING AT THE TEACHING HOSPITAL ANURADHAPURA (THA), SRI LANKA

Samarasooriya H.G.C.K.¹, Ruwanpura S.N.¹, Sampath T.A.S.B.¹, Samaranayake C.G.K.¹, Rupasinghe R.K.R.S.¹, Samarawickrama I.D.¹, Agampodi T.C.²

Background: Quality early breastfeeding support improves long-term breastfeeding outcomes. However, ascertainment of in-ward support is comparatively unexplored.

Objective: To explore breastfeeding support mechanisms and to describe the prevalence of perceived breastfeeding experiences among mothers in postnatal wards of THA

Methods: We used a novel mixed-method approach. Trained medical undergraduates conducted 24-hour participant observation for 10 days. In the subsequent descriptive cross-sectional study, we assessed perceived maternal experiences on breastfeeding via a self-administered questionnaire prepared using qualitative findings. We thematically analyzed observation data and used proportions, chi-square, and binary logistic regression to describe perceptions.

Results: We identified four major themes assimilating breastfeeding support; environmental, healthcare personnel (HCP), maternal/newborn, and family/visitor related factors. Timely education by the lactation management center, practical assistance and appropriate HCP communication supported mothers, while suboptimal skills and attitudes were harmful. Support on expressing breastmilk (EBM) was propitious for exclusive breastfeeding (EBF), while overemphasis caused stress. Maternal mutual support helped while physical discomfort and visitors' gatekeeping behaviors impeded breastfeeding. A total of 301 mothers, mean age 28 years (SD=5.42), majority Sinhala (84.0%), participated in the survey. Early initiation (EI) and EBF were reported by 78.9% (n=235) and 93.3%, respectively. Breastfeeding difficulties were encountered by 57.9%, with primi majority (P<0.050). Each additional childbirth rendered mothers 0.56 times less likely to experience breastfeeding problems (OR=0.56, 95% CI 0.38–0.83). Pain hindered breastfeeding in 29.5%, where non-normal vaginal deliveries were a significant predictor (OR=2.26, 95% CI 1.07-4.81). Of the mothers, 58.2% claimed a delay in receiving the routine breastfeeding education session.

Conclusions: Our mixed-method approach indicates that postpartum mothers in THA receive favorable support to overcome breastfeeding problems. However, optimizing EI, pain management and HCP's continuous professional development policy and practice will further improve breastfeeding.

Keywords: Breastfeeding support, Participant observation, Mixed methods

¹ Undergraduate Medical student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Community Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

QUALITY OF LIFE OF SCHOOL PASSED-OUTS OF THE 2014 ORDINARY LEVEL BATCH OF RAJAPAKSHA CENTRAL COLLEGE, WEERAKETIYA, SRI LANKA

Sanjeewa R.A.M.¹, Saranga A.G.C.¹, Sarathchandra G.G.B.¹, Senadeera M.A.T.S.¹, Senevirathna W.M.E.A.¹, Shasna M.S.F.¹, Abeyrathna P.²

Background: Quality of life (QOL) can be considered as an indicator of holistic well-being and satisfaction in Life. QOL of young adults is insufficiently addressed in local literature.

Objective: To describe the QOL and socio-demographic factors in school passed-outs (SPOs) of the 2014 Ordinary Level batch of Rajapaksha Central College, Weeraketiya (RCCW), Sri Lanka

Methods: A cross-sectional, online survey was conducted among 356 SPOs who were contacted through social media from the 2014 Ordinary Level batch of RCCW using the validated World Health Organization Quality of Life Scale - Brief (WHOQOL-BREF) questionnaire.

Results: A total of 211 SPOs responded (response rate 59.3%). Male SPOs were the main respondents (54.0% n=114) and the mean age of a SPO was 24 (SD 0.36) years. The majority of the participants were unemployed (67.3% n=142) and were involved in higher education (76.3% n=161). QOL was highest in the physical health domain (mean score 67.87 SD12.55), followed by the psychological (66.98 SD13.71), social relationship (64.69 SD18.31), and environmental (61.86 SD14.06) domains. SPOs who were either unemployed (independent samples T-test physical health p=0.027, psychological p<0.001, social relationships p=0.004 environmental p<0.001) or with a chronic illness (independent samples T-test physical health p=0.003, psychological p<0.001, social relationships p=0.045, environmental p<0.006) reported lower QOL in all 4 domains. A significant difference was observed in the psychological domain of the QOL with the presence of an acute illness (independent samples T-test, p=0.014). A statistically significant difference in QOL was not observed among SPOs due to gender, marital status, level of education level and residency.

Conclusions: QOL of young adults was greatly influenced by physical and psychosocial well-being and employment status. Interventions should be introduced at policy, community, and individual levels to improve the QOL of young adults.

Keywords: Quality of life, WHOQOL-BREF, Young adults

 $^{^{1}}$ Undergraduate Medical student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Family Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

EPIDEMIOLOGY OF ATOPIC DISEASES, LUNG FUNCTION TESTING IN 13-14-YEAR-OLD ADOLESCENTS OF THE ANURADHAPURA MUNICIPAL COUNCIL AREA, CHALLENGES FACED BY PARENTS CARING FOR CHILDREN WITH ASTHMA AND INDOOR PARTICULATE MATTER LEVELS IN SCHOOL CLASSROOMS

Sivabalan P.S.¹, Siriwardhana S.J.T.C.¹, Subhanee K.K.T.¹, Sulakhana M.S.¹, Sumanapala S.D.V.K.¹, Thennakoon T.M.S.L.¹, Rajapakse R.M.S.I.²

¹ Undergraduate Medical student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ² Department of Physiology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Atopic diseases are common in adolescents and addressing the challenges faced by parents is crucial in patient care.

Objective: To describe the epidemiology of atopic diseases among 13-14-year-olds, lung functions of severe asthmatics, challenges faced by parents, and the indoor particulate matter(PM) levels in the classrooms of schools

Methods: An analytical cross-sectional study was conducted in 32 classes of six schools in the Anuradhapura municipal council area selected using multistage sampling. The epidemiology of atopic diseases and asthma control was assessed with the validated International Study of Asthma and Allergy in Childhood and Asthma Control Test questionnaires. Fifteen adolescents with severe asthma were selected for spirometry and impulse-oscillometry(IOS). Thirty parents of adolescents with severe asthma were interviewed and their responses were analyzed by thematic qualitative analysis. PM levels were measured using a video particulate counter(VPC300TM).

Results: The study sample included 528(51.3%) boys and 501(48.7%) girls. Prevalence of severe asthma, allergic rhinitis, and eczema was 10.8%(95%CI9.0-12.8;n=111), 25.9%(95%CI23.2%-28.6%;n=266), and 3.2%(95%CI2.2-4.5;n=33). Severe asthma independently associated with eczema(OR6.2;95%CI2.8-14.1), allergic rhinitis(OR5.5;95%CI3.6-8.5), frequent consumption of curd(OR1.8;95%CI0.9-3.4), sleeping on a clothe(OR22.02;95%CI3.3-146.7), and using sawdust for cooking(OR14.6;95%CI1.8-117.4). Having domestic dogs was a protective factor(OR0.6;95%CI0.4-0.9). Most asthmatics(n=70,70.7%) had good asthma control. Allergic rhinitis independently associated with severe asthma(OR5.7;95%CI3.7-8.7), sleeping on a coir mattress(OR1.6;95%CI0.9-2.7), and playing 4-6 times a week(OR1.5;95%CI0.9-2.2). asthma(OR6.7;95%CI3.2-14.1), close contact with domestic animals(OR2.3;95%CI1.0-5.1), passive smoking(OR2.6;95%CI1.0-6.4), using kerosene lamps(OR6.4;95%CI1.8-22.5) female sex(OR1.9;95%CI0.9-4.1) independently associated with eczema. Of 15 severe asthmatics, airway obstruction was detected with spirometry and IOS in 4(26.7%) and 2(13.3%). The PM_{0.3}, PM_{0.5}, PM_{1.0}, PM_{2.5}, PM_{5.0}, and PM_{10} levels exceeded recommendations in 32(100%), 30(93.8%), 28(87.5%), 26(81.3%), 32(100%), 30(93.8%) and 30(93.8%) classrooms. Most parents(23;76.7%) knew of asthma symptoms and treatments but lacked guidance on inhaler usage. Parents(8:26.7%) faced difficulties addressing their needs.

Conclusions: Atopic diseases were highly prevalent, and providing appropriate parental guidance is required.

Keywords: Adolescents, Atopic diseases, Epidemiology

PREVALENCE AND ASSOCIATED FACTORS OF STRESS, ANXIETY AND DEPRESSIVE SYMPTOMS AMONG UNDERGRADUATES OF RAJARATA UNIVERSITY OF SRI LANKA DURING THE CURRENT ECONOMIC RECESSION

Weerakkodi W.K.D.¹, Thennakoon T.R.N.K.B.¹, Thomas D.D.P.¹, Wedage S.P.¹, Weerakoon W.M.G.K.L.S.¹, Weerasekara J.A.A.U.R.¹, Isuru L.L.A.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ² Department of Psychiatry, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: The prevalence of stress, anxiety and depressive symptoms are reported to be high in university students. Although many related studies have been carried out on this topic, studies during an economic recession are scarce in Sri Lanka.

Objective: To assess the prevalence and associated factors of stress, anxiety and depressive symptoms among university undergraduates of Rajarata University of Sri Lanka during current economic recession.

Methods: A descriptive cross-sectional study was conducted among first year to final year students of Faculty of Medicine and Allied Sciences, Faculty of Social Sciences and Humanities and Faculty of Agriculture using stratified random sampling technique. Google form consist of Sinhala, Tamil and English translations was used to collect socio-demographic data. DASS-21score was used to screen stress, anxiety and depression.

Results: Of 424 responders, screen positive for stress, anxiety and depression were 35.8% (n=152), 50.1% (n=213),56.2% (n=239) respectively. Faculty of Agriculture had highest prevalence of stress (41.7%), anxiety (65.7%) and depression (76.1%). Having a physical illness[p=0.002(S),0.000(A),0.001(D)], alcohol consumption [p=0.009(S), 0.008(A), 0.001(D)]academic problems [p=0.000(S,A,D)],problems[p=0.000(S,A),0.002(D)] and relationship problems[p=0.000(S,A,D)] were significantly associated with stress(S), anxiety(A) and depression(D). Inadequacy of money given by home for expenses has a significant association with anxiety (p=0.001) and depression(p=0.026). Due to increased travel costs with economic recession 79.1% of respondents' home visits have been reduced and significantly associated with stress (p=0.028, OR=1.7, CI (1.06-3.01), anxiety(p=0.04,OR=1.6,CI=1.02-2.83). Family income is significantly associated with depression (p=0.032). Around 75% of respondents reported that they have financial problems. After binary logistic regression, academic problems [p=<0.001, CI=0.109-0.521(S),0.043-0.384(A),0.041-0.339(D)] and relationship problems [p=<0.001, CI=0.030-0.255(S),0.022-00269(A),0.029-0.366(D)] were independently associated with stress, anxiety and depression.

Conclusions: The prevalence of psychological morbidity was high among university students of Rajarata University of Sri Lanka. Academic problems and relationship problems were identified as independent predictors of psychological morbidity. Students will be benefited by establishing screening and psychological support system in the university.

Keywords: Anxiety, Depression, Stress

KNOWLEDGE AND ATTITUDE OF WEARING FACEMASKS IN PREVENTING RESPIRATORY TRACT INFECTIONS AMONG YOUNG PEOPLE IN HEALTH SECTOR AND NON-HEALTH SECTOR AND THE BACTERIAL AND FUNGAL PROFILE ON USED FACE MASKS

Weerasinghe W.A.H.W.¹, Weerasinghe W.D.S.P.¹, Welathanthri T.I.¹, Wettamperuma W.A.P.M.¹, Wickramasinghe Y.D.S.S.¹, Wijekoon W.M.N.C.¹, Illapperuma S.C.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

Background: Masks are recommended to prevent respiratory infections. Entry of pathogens to respiratory tract is prevented by proper use of masks. Incorrect usage including disposal of masks spreads infections.

Objective: To compare knowledge and attitude regarding using masks to prevent respiratory Infections among undergraduates of health and non-health sector and to determine microbial profile on used masks

Methods: A descriptive, cross-sectional study was conducted using a self-administered online questionnaire among 647 students aged 23-28 years selected by stratified random sampling among faculties of Medicine (medical students) and Social Sciences (social students) of Rajarata University. Data was analyzed using SPSS software. Masks used for 4 hours were pressed on agar plates, incubated and bacterial and fungal colony counts were scored using a 4-grade scale.

Results: About (623)97% knew facemask is used to avoid spreading and acquiring infection, (577)89.2% knew that infected and non-infected people should wear masks. About 275(42.5%) knew N95 as the best but 477(73.3%) used surgical masks. About 207(32%) selected wearing two surgical masks. Only 99(15.3%) chose wearing surgical mask for 4 hours. About 46% experienced exertional dyspneoa with masks. Respiratory transmission of Monkey pox and Chicken pox was known by only 22% and 11% respectively. Only 64% knew disposed masks blocks drains. Only 41% social science students and 35% medical students used masks in lecture halls. More social science students (p≤0.0001) used masks always 60% and in crowded places 90% respectively. Most used facemasks had a bacterial and fungal growth with uncountable colony forming units on both sides.

Conclusions: Compared to social science students, knowledge regarding respiratory infections and preventive methods on transmitting infections are higher among medical students. However, facemask usage and attitudes are higher among social science students. Facemasks is a barrier in transmission of life threatening infections, thus recommended in prevention of respiratory tract infections.

Keywords: Knowledge, Attitude, Masks, Respiratory diseases

² Department of Microbiology, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

POPULARITY AND PERCEPTION TOWARDS BEVERAGES FOR WEIGHT LOSS AMONG

MEDICAL STUDENTS IN RAJARATA UNIVERSITY OF SRI LANKA

Wijerathne S.S.¹, Wijerathna I.H.T.N.¹, Wijerathna P.G.K.I.S.¹, Wijesinghe D.D.G.M.¹, Wijesooriya A.¹,

Wijewardena P.I.U.¹, Bandara P.R.S.R.J.²

¹ Undergraduate Medical Student, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka,

² Department of Biochemistry, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Weight loss has gained popularity as a solution for obesity, using numerous methods,

including certain beverages, to maintain a healthy body composition.

Objective: To determine the popularity and perception towards beverages for weight loss among medical

undergraduates in Rajarata University of Sri Lanka (RUSL)

Methods: A cross-sectional study, using self-administered questionnaire via Google form, was conducted

among medical undergraduates of Faculty of Medicine & Allied Sciences, RUSL. Google form was open

until the completion of minimal sample size. Data analysis was conducted using the SPSS statistical

software.

Results: Of the total sample of 473 [122 (25.8%) males], 274 (57.8%) students (59.8% of males and

57.3% of females) were concerned about weight loss and 33 (7%) were using beverages for weight loss;

among them 5% were underweight, 5% were healthy weight, 11.5% were overweight and 13.6% were

obese. Of the total sample, green tea, water, lime-juice, ginger tea, coffee, black tea, avocado-juice,

cumin tea, hibiscus tea, pomegranate juice and beet juice were popular as weight losing beverages

respectively among 73.2%, 63%, 34.5%, 17.5%, 15.4%, 11%, 5.1%, 5.1%, 4.2%, 3.4%, and 2.3%

medical students. All participants believed that at least one of the beverages is effective in losing weight.

Advertisements were the main portal for popularity of green tea, black tea, ginger tea, beet juice, cumin

tea, pomegranate juice and, avocado juice while water, coffee, and lime juice were popular due to their

availability.

Conclusions: A high proportion of students were concerned about weight loss. Despite the majority's

positive perception on effectiveness of beverages on weight loss, only a minority consumed them. Social

influence through advertisements was the leading mode of popularity for the beverages to be used in

weight loss.

Keywords: Beverages, Weight loss, Medical students

30 | Page

ATTITUDES AND PERCEPTIONS OF MEDICAL STUDENTS AT RAJARATA UNIVERSITY OF SRI LANKA TOWARDS VOLUNTEERING IN EMERGENCY SITUATIONS

Shaifa M.S.¹, Wimalarathne H.M.P.¹, Withanage W.S.S.G.S.¹, Zahra F.H.F.¹, Zaina M.H.F.¹, Lakranda W.M.C.Y.¹, Paththinige C.S.²

¹Undergraduate of Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka, ²Department of Anatomy, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

Background: Frequent healthcare emergencies place significant strain on healthcare systems, creating a need for additional volunteer support. It remains unclear if Sri Lankan medical students are willing to offer such support during emergency situations.

Objective: To evaluate attitudes and perceptions regarding volunteering in healthcare-related emergencies, and to determine the factors affecting willingness to volunteer in these situations among medical undergraduates of Rajarata University of Sri Lanka (RUSL).

Methods: A descriptive cross-sectional study was conducted among medical undergraduates of RUSL. Data were collected using an online questionnaire and analyzed using descriptive statistics and Chi-square test.

Results: A total of 422 students responded (response rate-44.5%). Majority (86.3%, n=364) expressed willingness to volunteer in healthcare emergencies, mostly in natural disasters (89.1%, n=326) and infectious disease outbreaks (88.9%, n=313). Significant associations of willingness to volunteer were observed, with clinical exposure, previous volunteering experience, personal experience in disaster situations, and knowledge and experience in first-aid (p<0.05). Altruism (67.4%, n=288), personal interest in developing skills (61.8%, n=264) or confidence (55.3%, n=236), and sense of social obligation (44.7%, n=191) were the main motivating factors to volunteer. Self-perception of lack of knowledge (59.0%, n=252), skills (48.5%, n=207) or lack of confidence (36.5%, n=156), lack of information or opportunities (35.4%, n=151) were the main barriers in volunteering. Majority (97.0%, n=414) believed that medical students should be encouraged to volunteer in emergency situations.

Conclusions: Medical students demonstrate a high level of interest in volunteering during emergencies. Implementation of structured training programs in health-related disaster management can be beneficial in preparing students for such events.

Keywords: Disaster management, Health-related emergencies, Medical undergraduates.