

Book of Abstracts

The 1<sup>st</sup> International Conference on Public Health  
and Well-being  
(PUBLIC HEALTH'19)

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Book of Abstracts of the 1<sup>st</sup> International Conference on Public Health and Well-being  
(PUBLIC HEALTH'19)

Edited by Prof. Sally Guttmacher and Dr. Ruwan Ferdinando

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## MESSAGE FROM THE CHIEF GUEST PUBLIC HEALTH'19



Representing Ministry of Health Sri Lanka it is an honour to welcome delegates to the International Conference on Public Health and Well-being with the theme, “*Promoting the well-being of humanity to ensure healthy lives for all*”. A role in public health is vital for increasing life expectancy, however, it is rarely thought of until a crisis catches our attention.

Over the years, health initiatives and management for global communities are increasingly recognised as an important component for the overall wellness of human beings. Public health is constantly evolving in response to the needs of the population around the world. Initiatives like clean air, water policies and vaccinations keep people healthy and safe by preventing injury and disease. Hospital based treatment may be more apparent to many; community based health initiatives need to be given more emphasis to increase the awareness of the health professionals, and also the public of their valuable role in a healthy population. It is necessary to remove various cultural, social and logistical barriers to enhance knowledge about healthcare needs, closing the gap in health disparities within countries.

I sincerely hope the International Conference on Public Health and Well-being will facilitate the exchange of research findings, opinions and views on issues related to Public Health among healthcare professionals and academicians from different parts of the world and different health care systems. May the participants today gain valuable experience and put into good use what is learnt.

**Dr. Sunil de Alwis**  
Deputy Director General Medical Services,  
Ministry of Health,  
Sri Lanka.

## MESSAGE FROM THE CONFERENCE CO-CHAIR PUBLIC HEALTH'19



We wish you a very warm welcome to the 2019 Sri Lanka Public Health and Well-being Conference. Our hope is that over the next 2 days you will not only listen to and discuss important and timely issues in public health but that you will also meet and make friends with colleagues from Sri Lanka as well as participants from abroad. We have tried to arrange the presentations in specific areas of interest including: Reproductive & MCH; nutrition; Health Care Management; Epidemiology; Health Promotion and Disease Prevention; Non-Communicable disease; Patient Care and Environmental Health. In addition, please do not neglect to attend the poster session tomorrow morning. Examining posters will give you a chance to discuss in detail with your colleagues not only specific public health issues but the also methods used in attempting to discover causes and solutions.

Astonishingly, some of the major health advances in the past century which were accomplished through Public Health research and measures are currently being challenged. The anti-vaccine or anti-vaxers as they are called have organized and disseminated through social media or non-peer reviewed journals their critiques that vaccination leads to autism or cancer. This leads to the fact that measles is making a come-back in the USA. As recently as a year ago health workers in other parts of the world have been murdered by religious extremists when attempting to vaccinate children against polio. Gun control is another public health measure which has been successfully fought against by gun manufacturers who put their profits above the health of the public. And the free and easy way that “pain killers” have been distributed leading to a continuous climb in drug overdoses and mortality can be attributed to big pharma’s search for profit above public’s health.

Thus, we have many challenges ahead of us and much work to do. It is hoped that by continuing our work and meeting together periodically to discuss research methods and findings that we will further protect and secure the public’s health.

**Prof. Sally Guttmacher**

Emeritus Professor of Public Health,  
New York University, USA  
Senior Technical Advisor,  
HealthRight International, USA

## MESSAGE FROM THE CONFERENCE CO-CHAIR PUBLIC HEALTH'19



I am pleased to warmly welcome all distinguished invitees, delegates, speakers, researchers, health professionals and participants to the International Conference on Public health and Well-being 2019 on 4th and 5th of April in Negombo. This will be the first international conference of this nature which has focused on publishing original research, innovative projects and best practices on the theme “*Promoting the well-being of humanity to ensure healthy lives for all*”.

The emerging public health issues need to be addressed with innovative approaches. Meanwhile some of the innovative projects in public health, field research and best practices are confined to the place of invention; they are not shared with the communities of interest. The present conference has included many papers from Sri Lanka and elsewhere which have dealt in many challenging public health issues. I hope this conference will help the authors of Sri Lanka and elsewhere to share their experiences in bringing about more meaningful solutions to emerging public health challenges.

I am pleased to see that a conference of this nature has committed to maintain the high standards of research practice through anonymous peer reviewing by public health practitioners and maintaining ethical standards. We see nowadays many conferences are organized without giving much attention to scientific integrity and ethical norms. I eagerly hope that this conference will be a trendsetter where public health physicians and other health professionals delineate the standards for scientific validity and ethical practice by taking over the responsibility of partnering with other stakeholders for the betterment of public health.

I would like to close my message with a round of thanks for everyone who made the International Conference on Public health and Well-being 2019 a reality. Our chief guest, Dr. Sunil de Alwis, Deputy Director General (Medical Services), the fellow co-chair Prof. Sally Guttmacher, the keynote speakers Prof. Christina Zarowsky, Prof. Jack Needleman, members of the scientific committee and the conference manager Ms. Thulakshana Liyanage deserve my special thanks for having contributed immensely to making this a success. Also I thank all of you who are participating in this conference from different parts of the world despite your busy schedules.

**Dr. Ruwan Ferdinando**

Deputy Director (Training) of the National Institute of Health Sciences (NIHS), Sri Lanka

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# **ABSTRACTS OF FREE PAPER SESSIONS**

**FREE PAPER SESSION (A)**

**REPRODUCTIVE, MATERNAL, AND CHILD HEALTH**

A1

[01]

**AN EXPLORATION OF HEALTH PROFESSIONALS' PERCEPTIONS AND ATTITUDES TOWARDS PROVIDING INCENTIVES FOR SMOKING CESSATION IN PREGNANT WOMEN**

*Penny, D. F.\** and Morrison, S.

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**Background:** Smoking in pregnancy is harmful to the unborn baby, leading to long term health implications, yet some women continue to smoke during pregnancy. Systematic literature reviews conclude that providing financial incentives for smoking cessation in pregnancy have been successful for stopping smoking. However, there has been limited adoption of incentive programmes by Health Boards.

**Aims:** The purpose of this study was to explore the attitudes and perceptions of health professionals (midwives, smoking cessation specialists and public health managers) to a hypothetical incentivisation intervention for smoking cessation in pregnant women.

**Methods:** A sequential mixed methods study comprising an online questionnaire using a census sampling approach, followed by semi-structured interviews, was undertaken to gather the viewpoints of health professionals within a Scottish Health Board. Twenty-seven professionals responded to the survey and these results were used to inform the development of the interview questions. Ethical clearance was obtained from the Research Review Group of the School of Health Sciences, Robert Gordon University.

**Results:** Six semi-structured interviews were undertaken and four themes were identified as important: acceptability of incentivisation, ethics, communication and relationships with service providers, and organizational risk. All professionals agreed that providing incentives would improve engagement rates with the smoking cessation service however midwives were least likely to find incentivisation acceptable overall. A key barrier to acceptance of an incentivisation intervention was cost.

**Conclusions and Recommendations:** The study findings support that incentives should be tested as part of a cessation programme for pregnant women, with consideration given to the amount, timing and type of incentive in an intervention, in order to maximize the interest of the pregnant smokers in taking part.

Keywords: Incentives, midwives, pregnancy, professionals, smoking cessation

A2

[02]

**ASSOCIATION BETWEEN DIFFERENT FACTORS AND WEIGHT AT LATER LIFE OF CHILDREN IN THE MEDICAL OFFICER OF HEALTH AREA, MEDIRIGIRIYA, SRI LANKA**

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**Background:** Weight gain during the early childhood is considered as one of the key parameters to assess the health status of the child.

**Aims:** to describe the association between different factors and weight gain during the first two years of life in a cohort of children born in year 2005 in the Medical Officer of Health area.

**Methods:** A cross sectional comparative study was conducted in Medirigiriya, a rural, agricultural area situated in the North Central province of Sri Lanka. All physically healthy children born in the year 2005 and residing in the study area were included in the study. The data collection was done from September to October in 2008, using a pre-tested interviewer administered questionnaire. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Kelaniya.

**Results:** 1,062 children were included in the study. The age range was from 32 months to 45 months and 552 (52%) and 510 (48%) were males and females respectively. The weight was considered at two years of age and 228 (21.5%) were under weight. Among the factors considered, the maternal knowledge on each of breast feeding, complementary feeding and feeding during second year of life showed statistically significant ( $p=0.000$ ) association with the prevalence of underweight at 2 years of age while Mother's level of education ( $p<0.05$ ) and literacy of both mother and father ( $p<0.01$ ) were statistically significantly associated with the prevalence of underweight of female children.

**Conclusions and Recommendations:** This study highlights the importance of mother's education and knowledge on feeding the child, in maintaining adequate weight of children.

**Keywords:** Cross-sectional study, weight gain, knowledge on feeding

A3

[03]

### KNOWLEDGE AND HOME PRACTICES ON PARACETAMOL DOSING AMONG PARENTS WITH CHILDREN IN BOPE PODDALA MEDICAL OFFICE OF HEALTH

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**Background:** Paracetamol is an over the -counter, analgesic and antipyretic drug for all age groups. Despite its safety, overdose can cause irreversible organ damage and death. Exploration of parental knowledge and practices at home on paracetamol dosing is important in the context of administration of suprathereapeutic dose of paracetamol for children.

**Aims:** To assess the knowledge and home practices on paracetamol dosing among parents with children in Bope Poddala Medical Office of Health.

**Methods:** A community based descriptive cross-sectional study was conducted in the Medical Office of Health in Bope-Poddala, Galle, recruiting parents with children less than 12 years. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Ruhuna.

**Results:** All the participants (325) used oral preparations (tablet -67.6%, syrup -30.2% and syrup ± tablet -2.2%). Less than 10% knew the weight of paracetamol tablet and only one person knew the concentration of syrup (120mg/5ml) and 52.6% stated that body weight as a dose calculation factor. Supra therapeutic doses were administered 47.6% and sub therapeutic doses were administered by 12.6%. The maximum measured dose was 52 mg/kg and 30.9% exceeded the dose of 20mg/kg. There was no association between education level and dosing accuracy ( $\chi^2=0.4$ ,  $P=0.9$ ) and also correct dosing knowledge and dosing accuracy ( $\chi^2=0.9$ ,  $p=0.3$ ). The majority (121, 74.7%) used standard cup to measure and 25.8% correctly knew the volume of teaspoon among 9.3% of teaspoon users. There was no significant difference between measuring instruments and correct syrup dosing ( $\chi^2=6.2$ ,  $p=0.5$ ). Further, there was a significant difference between measured syrup and measuring instrument ( $\chi^2=15.4$ ,  $p=0.03$ ).

**Conclusions and Recommendations:** Although, paracetamol is widely used, the knowledge and home practices of administration correct dose for children is not satisfactory. Administration of supra-therapeutic and sub-therapeutic doses were common. Therefore, it is important to educate parents on available formulations, their concentrations and calculation of correct dose and use accurate measuring devices.

Keywords: Paracetamol, children, caregiver/ parent, knowledge, practice, therapeutic dose

A4

[04]

**EVALUATION OF THE MATERNAL AND CHILD HEALTH CARE SERVICES OF THE CLINIC ATTENDEES IN MEDICAL OFFICERS OF HEALTH AREA, KURUNEGALA, SRI LANKA**

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**Background:** Maternal and Child Health (MCH) Programme includes interventions that focus the antenatal, intra-natal and postnatal aspects of pregnancy.

**Aims:** To evaluate the MCH services by assessing the maintenance of the Child Health Development Records (CHDR), pregnancy outcomes related services and the post-partum family planning services of the clinic attendees in Medical Officers of Health (MOH) area, Kurunegala.

**Methods:** Institutional based descriptive cross-sectional survey was carried out during January 2018. Systematic-sample of 260 CHDR were analyzed using interviewer-administered pre-tested tool.

**Results:** Out of the study population, 10.8% (n=28) was not given appropriate date and 16% (n=42) was needed nutritional interventions. 8% (n=20) of the children was belonged to less than 2SD, 2.3% (n=6) was less than 3SD and 6% (n=16) was growth faltering. Out of identified 42 cases, 81% (n=34) was not attended any action by Public Health Midwives and height of only 29% (n=76) was measured age appropriately. Normal delivery rate was 65.4% (n=175), forceps delivery rate of 1.5% (n=4), and Caesarian section (LSCS) rate of 33% (n=86). The LSCS rate was higher than the level expected in National level. Out of all deliveries, 80.8% (n=210), 12.3% (n=32) and 11.5% (n=30) were normal weight, Low Birth Weight (LBW < 2.5kg), and overweight (OW > 3.5 kg) respectively. Early establishment of breast feeding is encouraged according to the National policy. According to the CHDR, 14.6% (n=38) was not filled that cage. Out of 14.6%, 31.6% (n=12) was aware of the breast feeding establishment within 1st hour of life. The clients should be referred for services by the 45th postpartum day. In this study group, there was 33% (n=44) of Unmet Need of Family Planning during post-partum period. The commonest method was male condom (13.5%) followed by; oral pills (13%); permanent method (11.5%); Depo-Provera (10%); Intra-uterine devices (8.5%); Implant (7%); and natural method (2.3%).

**Conclusions and Recommendations:** Maintenance of CHDR and clinic care services are average and the post-partum family planning services are not satisfactory in this study population.

**Keywords:** Child health development records, growth faltering, family planning, unmet need of family planning

**FREE PAPER SESSION (B)**

**NUTRITION AND HEALTH**

B1

[05]

## THE EFFECT OF A BISCUIT ON THE LIPID AND ANTHROPOMETRY PROFILES OF TYPE 2 DIABETES PATIENTS

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**Background:** Dyslipidemia in type 2 diabetes patients is characterized by increased triglycerides, decreased HDL level; and increased LDL level. The previous study of the effect of mocaf koro kurma (Caromma) biscuit on blood glucose level (BGL) of diabetes patients showed lowest increase of BGL (6.4 points). However, the effect of Caromma biscuit on the lipid and anthropometry changes of type 2 diabetes patients has not been studied. Therefore, an efficacy study is needed regarding the Caromma biscuit supplementation to the anthropometry and lipid profile changes in type 2 diabetes patients.

**Aims:** To assess the effect of Caromma biscuit consumption on the lipid and anthropometry profiles changes of type 2 diabetic patients.

**Methods:** Pre-post test randomized controlled trial (RCT) design was used on 33 subjects of intervention group (Caromma biscuit) and 31 subjects of control group (Tempe kurma/Temma biscuit) within 4 weeks. Anthropometry data included weight, height, body mass index (BMI), waist-hip circumference ratio (WHCR), body fat percentage (BFP), blood pressure, fasting blood glucose (FBG). Lipid profile included total cholesterol, LDL, HDL, and triglycerides collected before and after study. Ethical clearance was obtained from the Ethics Review Committee of Ministry of Health, Indonesia.

**Results:** The majority of subjects had over-nutrition, high BFP, risk of central obesity from WHCR, pre-hypertension, and high FBG. Lipid profile showed high cholesterol, LDL, triglycerides; and low HDL. There were an increased of weight, BMI, BFP, and WHCR in both groups. Blood pressure, FBG, cholesterol, LDL, HDL, and triglycerides decreased in both groups.

**Conclusions and Recommendations:** Caromma and Temma biscuits can be consumed by diabetic patients to obtain positive blood lipid profile, but not for anthropometric profile.

**Keywords:** Type 2 diabetes, caromma biscuit, temma biscuit, anthropometry profile, lipid profile

B2

[06]

**DIETARY INTAKE AND PROCESSES OF BEHAVIOUR CHANGE IN A NUTRITION EDUCATION INTERVENTION FOR PREGNANT WOMEN IN RURAL MALAWI: A CLUSTER-RANDOMISED CONTROLLED TRIAL**

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**Background:** Dietary behaviour during pregnancy is a key factor determining the pregnancy outcome.

**Aims:** To examine if Theory of Planned Behaviour (TPB) could predict and explain intermediary behaviour effects. We used data from a nutrition education intervention trial (Clinical trials.gov ID: NCT03136393) among rural Malawian pregnant women

**Methods:** We used data from 257 women (15 – 43 years) enrolled in the intervention around the end of first trimester. The theoretically defined mediators of dietary intakes were measured at baseline and at study end. We used the mixed effect (ME) logistic Regression models with random effects at village level to explore changes over time of the binary outcomes adjusted for selected explanatory variables in both the intervention and control groups, and across the groups. Ethical clearance was obtained from the Ethics Review Committee of National Health Sciences Research Committee (NHSRC) Malawi and Regional Committee for Medical and Health Research Ethics of South East Norway Section.

**Results:** Our results showed that the intervention achieved improvements in the 24 hour Dietary Diversity Score (DDS) and the Six Food Group Pyramid (SFG) score, especially in intakes of most food groups being rich in micronutrients. A third of the women in the intervention group attained optimal DDS (score 8-10) whereas about 50% attained optimal SFG (score 6). Most of the behaviour mediators that improved were significantly associated with the attainment of optimal DDS. However, our results revealed limitations of the behaviour prediction capabilities of the TPB, especially in situations where the participants did not have direct volitional control.

**Conclusion:** The intervention design seemed capable to address critical personal and environmental constraints, provided the women had been exposed to the intervention over a longer period of time. We propose early exposure to nutrition education preferably before pregnancy.

Keywords: Theorises, behaviour-change, dietary intakes

B3

[07]

**GLYCEMIC INDICES AND GLYCEMIC LOADS OF SELECTED TRADITIONAL  
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**Background:** Awareness of the nutritive value and health benefits of traditional rice over non-communicable disease have increased the market demand for traditional rice varieties in Sri Lanka. Hence, it is essential to determine the glycemic response of traditional rice varieties.

**Aims:** This study was designed to determine the glycemic index and glycemic load of five traditional rice varieties namely, *Pokkali*, *Murugakayan*, *Kuruluthuda*, *Madathawalu*, and *Rathdel*.

**Methods:** Portion sizes of traditional rice for the glycemic index study provided 50g of available carbohydrate. The glycemic index study was conducted using World Health Organization standard procedure. Apparently healthy men and women; not undergoing any medical treatment (body mass index 18.5 -23 aged between 18-30 years) were selected for the study. Data expressed as mean  $\pm$  standard error of the mean. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura.

**Results:** *Pokkali* ( $53\pm 4$ ), and *Rathdel* ( $50\pm 4$ ) elicited low glycemic index, while *Murugakayan* ( $63\pm 4$ ), *Kuruluthuda* ( $63\pm 5$ ), and *Madathawalu* ( $56\pm 4$ ) elicited medium glycemic index. Low and medium glycemic indexed rice varieties have shown 12.2% and 8.4% average peak glucose reduction compared to glucose standard respectively. More than 80% of population elicited either low or medium glycemic index for all tested rice varieties. Corresponding glycemic loads (26, 31, 32, 28, 25) of all varieties were high. However, all participants were of the opinion that the rice portion sizes were large and thus a further reduction could be achieved with reduction of portion and addition of accompaniments during consumption.

**Conclusions and Recommendations:** These low and medium glycemic index rice varieties can be recommended to the community for adapting a healthy lifestyle.

Keywords: Digestible carbohydrate, glycemic index, glycemic load, traditional rice

B4

[08]

**EFFECT OF FRONT-OF-PACKAGE TRAFFIC LIGHT (FOP-TL) NUTRITION LABEL DESIGN ON ACCEPTABILITY AND UNDERSTANDING OF NUTRITIONAL LABELS ON HYPERTENSION PATIENTS**

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**Background:** The behaviour of reading nutritional labels and understanding information in nutritional labels in Indonesia, especially in patients with hypertension is still low. Front-of-Package Traffic Light (FOP-TL) label can be well received by the community compared to the nutritional value information label. Hypertension sufferers need to understand the FoPTL label to have enough sodium consumption behaviour.

**Aims:** The purpose of the study was to assess the effect of nutritional label designs inclusion on the acceptability and understanding of hypertension patients.

**Methods:** The quasi-experimental design study was applied during three weeks in the control group of 11 subjects (label nutritional value information) and 10 subjects intervention group (label FOP-TL) were selected by purposive sampling. In the first week, the subject was given a pre-test on nutritional labels with the help of dummy to find out the understanding of nutritional value information labels. In the second week, education was given in the form of different booklets and dummies according to the group. At the third week a post-test was given and the nutritional label received in both groups was measured. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Public Health, University of Indonesia.

**Results:** The results showed that there were significant differences in the increase in understanding between the control and intervention groups ( $p = 0.047$ ) and there were differences in the average acceptability score in both groups ( $p = 0.021$ ).

**Conclusions:** FOP-TL can be used to gain an understanding of good nutritional labels in hypertension patients.

**Keywords:** Hypertension, front-of-package traffic light, label nutritional value information, understanding, acceptance

B5

[09]

**MEAL-TAKING BEHAVIOUR STATUS AND ITS INFLUENCING FACTORS  
AMONG THE STAFF OF A MEDICAL FACULTY OF A PUBLIC UNIVERSITY IN  
MALAYSIA**

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**Background:** Other than what we eat, the time, where and when we have our meals will affect our health. This is termed as meal-taking behavior. Especially important for workers who spend at least one third of their time at workplace, having a good meal-taking behavior is crucial to ensure healthy and productive workers. Being employee in a public medical university does not assure that they have a good meal taking behavior. Findings of the study will identify the respondents' level of their behavior on taking meals, which can be used to plan for future health promotion programs to make improvements in the specific components of the meal-taking behavior.

**Aims:** This study was conducted to determine the status of meal-taking behavior and the factors that influence it among the staff of a medical faculty in a public university in Malaysia.

**Methods:** A cross-sectional study was conducted among 160 staff who were selected using simple random sampling, where data was collected using pre tested and validated questionnaire asking about their socio-demographic and employment characteristics, as well as their meal-taking behavior. Ethical clearance was obtained from the Ethics Review Committee of the Universiti Putra Malaysia.

**Results:** The response rate is 85.6% (137 respondents completed the questionnaire). Slightly more than half of them (54%) have good meal-taking behavior. Female gender and non-smokers have statistically significant association with good meal-taking behavior. Those who have home-prepared and canteen foods for breakfast are also significantly associated with good meal-taking behavior.

**Conclusions and Recommendations:** Efforts are needed to increase the proportion of staffs with good meal-taking behavior, to reduce the number of smokers and to encourage staffs to buy canteen foods for breakfast.

Keywords: Meal-taking behavior, university staff, government servant, eating pattern

B6

[10]

**ASSOCIATION BETWEEN LOW BIRTH WEIGHT AND UNDER NUTRITION AT LATER LIFE OF CHILDREN IN THE MEDICAL OFFICER OF HEALTH AREA, MEDIRIGIRIYA, SRI LANKA**

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**Background:** Little is known about association between low birth weight and under nutrition at later life of children.

**Aims:** To describe the association between weight gain during the first two years of life and low birth weight among children born in year 2005 in the Medical Officer Health area, Medirigiriya, a rural, agricultural area situated in the North Central province of Sri Lanka.

**Methods:** This is a cross sectional comparative study. The data collection was done from September 2008 to October 2008. All physically healthy children born in the year 2005 and residing in the study area were included in the study. A pre-tested interviewer administered questionnaire was used in the data collection. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Kelaniya. 1,062 children were included into the study.

**Results:** There were 552 (52%) males and 510 females (48%) whose age ranged from 32 months to 45 months. 228 (21.5%) were under weight. The prevalence of low birth weight was 34.2% among the underweight children at 2 years age compared to 14.3% for normal weight children at 2 years age, and was statistically significant ( $p=0.000$ ).

**Conclusions and Recommendations:** This study highlights the association between low birth weight and under nutrition at later life in children and appropriate measures should be taken to reduce the prevalence of low birth weight.

Keywords: Cross-sectional study, birth weight, under weight

**FREE PAPER SESSION (C)**

**PATIENT CARE**

C1

[11]

**CONCORDANCE TO GUIDELINE-RECOMMENDED STATIN THERAPY: REAL WORLD EVIDENCE FROM INDIA*****Borgharkar S\****

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**Background:** Research which have studied the concordance of guidelines to therapy are few and far between.

**Aims:** To evaluate concordance to the 2013 American College of Cardiology/American Heart Association (ACC/AHA) guideline on the treatment of blood cholesterol for primary and secondary prevention of atherosclerotic cardiovascular disease (ASCVD) in India.

**Methods:** Concordance to the 2013 ACC/AHA guideline was assessed by retrospectively analysing statin prescribing practice as per ASCVD risk score in four statin-benefit groups in 23,295 patients aged 40-79 years from health facilities across India between 2017 and 2018. Ethical clearance was obtained from the Ashirwad Ethics Committee of Ashirwad Hospital and Research Centre, India.

**Results:** Mean ( $\pm$ SD) age of patients was 58.9 ( $\pm$ 9.2) years; 62% were men; 60% (n=14,070) had clinical ASCVD. Among patients without clinical ASCVD (n=7,122), 3.9% (n=278) had low-density lipoprotein cholesterol (LDL-C)  $\geq$ 190 mg/dL, 94.0% (n=6,694) had diabetes mellitus and 2.1% (n=150) patients had 10-year ASCVD risk  $\geq$ 7.5%. Among 18,795 patients (81%) eligible for high-intensity statin, only 34% were concordant whereas 63% were non-concordant and were treated with moderate-intensity statins. Among 2,290 patients (10%) eligible for moderate-intensity statins, 76% were concordant and 18% were non-concordant and treated with high-intensity statins. Among patients with clinical ASCVD (<75 years), 43% received high-intensity statins according to the guideline, 55% received moderate-intensity statins, while 2% did not receive any statins. Among patients with diabetes mellitus and ASCVD risk <7.5%, 86% received apt moderate-intensity statins, but among those with risk >7.5%, 83% remained under-treated. Most patients (82%) with LDL C >190 mg/dL were non-concordant and prescribed with moderate-intensity statins.

**Conclusion:** Most patients were receiving statin at dose intensity non-concordant according to the 2013 ACC/AHA guideline, reflecting gaps in real-world practice of prescribing statins for primary and secondary prevention of ASCVD. Addressing care gaps and promoting compliance to optimise statin therapy will help reduce cardiovascular disease, especially in high-risk population among South Asians.

**Keywords:** Atherosclerotic cardiovascular disease risk, statin, diabetes mellitus, ACC/AHA guideline concordance, real world evidence, India

C2

[12]

**RISK PREDICTORS FOR NEONATAL MORTALITY AND ITS ASSOCIATION WITH HIV INFECTION AMONG POSTNATAL WOMEN ATTENDING SELECTED MATERNITY HOSPITALS-CASE OF PUMWANI MATERNITY HOSPITAL, (PMH) KENYA**

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**Background:** HIV in pregnancy has contributed to early neonatal deaths. Rate of HIV among pregnant women is 15 -40% in countries with the highest overall HIV prevalence. Poor pregnancy outcomes are higher among HIV+ women. PMTCT focus on vertical HIV transmission, but no data on poor pregnancy outcomes with HIV among postnatal women.

**Aims:** To assess risk predictors for neonatal mortality and its association with HIV infection among postnatal women attending selected maternity hospitals-case of Pumwani maternity hospital, (pmh) Kenya

**Methods:** The study design was unmatched case control. The information was extracted from every file records of the woman and the newborn outcome within the first twenty eight days after birth randomly and considering age, sex, anthropometric measurements and other clinical factors of the newborn and mother. A total of 256 records were reviewed to retrieve the information retrospectively on cases and controls at 1:1 ratio. Mothers' pregnancy history, clinical and social economic, co morbidities and health factors were considered for both cases and controls. The data was analyzed using SPSS version 20.0. Chi-square test was used to establish the association between the dependent and independent variables and the level of statistical significance was set at p-value < 0.05. Multiple logistic regression analyses were performed to adjust for confounding. Adjusted Odds ratio (AOR) with corresponding 95% confidence interval was estimated. Ethical clearance was obtained from the Ethics Review Committee of Kenya Medical Training College.

**Results:** Out of 128 cases (neonatal mortalities) 12.5% were born from HIV-positive mothers compared to 3.9% among 128 controls HIV sero-positive was found to be significantly associated with neonatal mortality in bivariate analysis [OR= 3.51; 95%CI: 1.25-9.91; P=0.012] but not sustained after adjusting for other factors at the multivariate analysis [AOR=2.33; 95%CI: 0.76-7.15; P=0.139]. Multiple logistic regression revealed; LBW [AOR= 3.97; 95%CI: 2.26-6.98; P< 0.001], co-morbidities [AOR= 3.84; 95%CI: 1.32- 11.16; P=0.013]. Mother's hemoglobin level [AOR= 3.18; 95%CI: 1.19-8.46; P=0.021], unemployment [AOR=0.43; 95%CI: 0.22- 0.85; P=0.016].

**Conclusions:** There's increased risk of neonatal mortality with HIV infection among postnatal women.

C3

[13]

**ARTHRITIS AND ASSOCIATED FACTORS AMONG PATIENTS ATTENDING RHEUMATOLOGY CLINIC IN TEACHING HOSPITAL JAFFNA**Aravinthan N<sup>1</sup>, *Subaskaran S*<sup>2\*</sup>, Sarathchandra A.W<sup>3</sup>, Prasad R<sup>4</sup>, Perera G.M.K<sup>5</sup>, Timothy E<sup>6</sup><sup>1</sup>Teaching Hospital/Jaffna, Sri Lanka<sup>2</sup>Ministry of Health, Nutrition and Indigenous Medicine, Sri Lanka<sup>3</sup>National Hospital of Sri Lanka<sup>4</sup>Lady Ridgeway Hospital, Sri Lanka<sup>5</sup>Colombo South Teaching Hospital, Sri Lanka<sup>6</sup>Infectious Disease Hospital, Angoda, Sri Lanka\*Email: [saseelasubash@yahoo.com](mailto:saseelasubash@yahoo.com)

**Background:** Arthritis is defined as, acute or chronic inflammation of a joint, often accompanied by pain and structural changes and having diverse causes, as infection, crystal deposition, or injury. The most common types of arthritis are osteoarthritis and rheumatoid arthritis.

**Aims:** This study was carried out to describe different types of arthritis and associated factors of patients attending rheumatology clinic in Teaching Hospital Jaffna.

**Methods:** This was a descriptive cross sectional study carried out in Teaching Hospital Jaffna. The study population was the arthritis patients attending rheumatology clinic in Teaching Hospital Jaffna and 400 patients were included in the study. The data was collected using an interviewer administered questionnaire developed for the study. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Jaffna.

**Results:** All the patients were Tamil ethnicity and great majority were (92%) Hindus. More than half of them were (60.3%) above 50 years old and 6.9% were under 30 years. Out of the patients majority were with rheumatic arthritis (61.8%) and 25.8% were with osteoarthritis and the balance were with other minor arthritis. Among the patients nearly half (52%) were suffering for 5-10 years and 37.1% for less than 5 years. Great majority (of them regularly followed the clinic and treatment. Almost all of them were following homeopathy treatment along with western medicine. Past injury was found significantly associated with osteoarthritis. No other associated factors were identified from this study though family history, smoking, alcohol, coffee and red meat consumption were studied for association.

**Conclusions and Recommendations:** Past injury was found significantly associated with osteoarthritis.

Keywords: Arthritis, associated factors for arthritis, osteoarthritis, rheumatic arthritis

C4

[14]

## AN OVERVIEW OF STROKE PATIENTS AND THROMBOLYSIS IN TEACHING HOSPITAL PERADENIYA

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**Background:** Stroke has graded as the second most common cause of death and third cause of disability world widely. Thrombolysis has aid as a catalyst for huge differences in the management of acute ischemic stroke .Most of the strokes are treatable if diagnosed early. Hence, improved outcome can be gained by early recognition and precise diagnosis.

**Aims:** To describe the profile of stroke patients and thrombolysis therapy in Teaching Hospital, Jaffna.

**Methods:** This study was conducted at the Professorial Medical Unit, Teaching hospital, Peradeniya. Data were collected from the stroke registry in the hospital. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Peradeniya.

**Results:** There were 495 patients with acute strokes during the period of 25 months (since January 2017). Of them, 50.9 %( n=251) were female and 49.1 %( n=242) were male. Mean age was 67.27 years. Majority (83%) were diagnosed as ischemic strokes. weakness was the most common symptom for the stroke (85.2%) and most common risk factor was hypertension (57.4%). Of 495 patients, 43 patients were thrombolysed with tissue plasminogen activator. Twenty four patients had near normal recovery and went home without a support.

**Conclusion:** The most common type of stroke diagnosed was ischemic type and the main symptom was weakness whereas most common risk factor was Hypertension. As majority had an ischemic stroke which is treatable if they admitted within the thrombolytic window. Unfortunately, only 9% reached the hospital within thrombolytic window. Thus, it is important to conduct community based awareness programs regarding stroke prevention and treatment which is mandatory to minimize the disabilities and complications.

Keywords: Thrombolysis, stroke, ischemic

**FREE PAPER SESSION (D)**

**MENTAL HEALTH**

D1

[15]

## QUALITY OF LIFE (QOL) IN DEMENTIA: PERSPECTIVES OF THE PEOPLE WITH DEMENTIA AND THEIR CAREGIVERS

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**Background:** Dementia has become a public health priority along with population ageing worldwide. Owing to its chronic progressive nature in the absence of a cure, maintaining the best possible quality of life (QOL) has become the desired outcome for people with dementia. Its current status is not known in the Sri Lankan setting.

**Aims:** The current study aimed to describe the dementia-specific QOL among dementia patients.

**Methods:** A cross-sectional study was conducted to assess the level of QOL among 272 patient-primary caregiver dyads selected from tertiary care state hospital psychiatry clinics in Colombo district. Dementia was confirmed by documental evidence on the diagnosis made according to diagnostic criteria. Patients with severe dementia (MMSE<10) were excluded. Perspectives of patients and caregivers on the QOL were assessed using the validated DEMQOL and DEMQOL-proxy, respectively. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Colombo.

**Results:** Mean QOL scores were 79.67 (95% CI=78.2, 81.1) for DEMQOL and 70.5 (95% CI=69.1, 72.0) for DEMQOL-proxy. Despite the significant difference in scores ( $p<0.001$ ), the self and proxy ratings were in agreement according to Bland Altman plot. The prevalence of 'good', 'average' and 'poor' QOL among dementia patients was 23.5% (95% CI=19.5, 29.5), 59.2% (95% CI=55.6%, 62.4%) and 17.3% (95% CI=14.7, 19.2), respectively.

**Conclusions and Recommendations:** The current prevalence of 'good QOL' among dementia patients is not satisfactory. In the absence of a cure for dementia, helping dementia patients to enhance and maintain 'good QOL' should be identified and incorporated as an important treatment goal and assessment tool in field as well as clinic practice.

Keywords: QOL, dementia, caregiver

D2

[16]

## HEALTH RELATED QUALITY OF LIFE OF PATIENT WITH HEART FAILURE ON TREATMENT IN NATIONAL HOSPITAL SRI LANKA

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**Background:** According to World Health Organization, 2014 coronary heart disease deaths in Sri Lanka reached 32,582 or 25.74% of total deaths. Patients with heart failure experience various physical and emotional symptoms such as dyspnoea, fatigue, oedema, sleeping difficulties, depression and chest pain. These symptoms limit patients' daily physical and social activities and result in poor quality of life. Understanding the factors which influence for the wellbeing of patients with heart failure will allow nurses to focus on specific intervention for enhancing their quality of life.

**Aims:** To assess health related quality of life of patients' with heart failure on treatment in National Hospital Sri Lanka.

**Methods:** Descriptive cross-sectional study was conducted among randomly selected 197 patients having heart failure on treatment in cardiology clinic. Data were collected using interviewer administered World Health Organization, quality of life questionnaire after the pre-test. Data were analysed using descriptive statistics. Ethical clearance was obtained from the Ethics Review Committee of the KAATSU International University, Battaramulla.

**Results:** Most of the participants were Sinhala (64.3%, n=110), Buddhist (56.1%, n=96) males (66.7%, n=114) belong to age group 50-59 (45%, n=77). Among the participants 83.6% (n=143) were married and 24% (n=143) were educated up to advance level. Most of the participant having poor physical (64.3%), psychological (66.1%) and social (64.3%) quality of life. Nearly half of the participant (48%) having poor environmental quality of life.

**Conclusions and Recommendations:** The overall quality of life was poor in most of the patient with heart failure. Health education and health promotion programmes should be conducted to uplift the quality of life of patients of the patients

Keywords: Heart Failure, Patients, Quality of life

D3

[17]

**QUALITY OF LIFE, AND ASSOCIATED FACTORS OF PRIMARY CAREGIVERS  
HAVING CHILDREN WITH CONGENITAL HEART DISEASES AWAITING  
CARDIAC SURGERY AT LADY RIDGEWAY HOSPITAL**

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**Background:** Congenital heart disease (CHD) is the commonest type of birth defect of which the estimated prevalence is around 8-12/1000 worldwide. Caregivers of children with CHDs are easy victims of low quality of life (QOL), is vital to recognize high risk caregivers early, so that necessary intervention could be planned.

**Aims:** To determine the quality of life and associated factors of primary caregivers having children with congenital heart diseases awaiting cardiac surgery attending cardiology clinics in Lady Ridgeway Hospital, Colombo.

**Methods:** This study was carried out as an institution-based descriptive cross-sectional study, of 422 caregivers, through consecutive convenient sampling methods over three month's period in cardiology unit of Lady Ridgeway Hospital. An interviewer administered pretested validated questionnaire utilized to obtain data on individual level and child factors pertaining to Health Related quality of life. Quality of life and its domains were assessed by WHOQOL-BREF questionnaire. Data extraction sheet was used to collect data from clinic records. Univariate analysis performed to detect association between selected factors and domains of Health related quality of life.  $P < 0.05$  was considered as statistical significant. Ethical clearance was obtained from the Ethics Review Committee of the Post Graduate Institute of Medicine, University of Colombo.

**Results:** Response rate was 99%. Majority (89.3%) of them were mothers. Out of caregivers 51% in the 30 to 39-year age, and 75% were unemployed. Atrial Septal defect was the commonest acyanotic heart disease and Tetralogy of Fallot was the commonest cyanotic heart disease found. Mean score of the quality of life was comparatively low in all domains except in social -relationship domain. Quality of life was associated with age of the caregivers, educational level, marital status, number of children, income, type of the heart disease, and postponement of the surgery. Psychological domain is significantly associated with, caregivers whose children's surgery dates, given in early dates. Quality of life had no association with gender, religion, schooling, employment status and presence of co-morbidities ( $p > 0.05$ ).

**Conclusions:** Caregivers of children with congenital heart diseases are experiencing low quality of life. When planning long term care for these children, factors affecting low quality of life of caregivers also should be considered and services should be provided for better outcome.

**Keywords:** Quality of life, primary care givers, children with congenital heart diseases, awaiting cardiac surgery

D4

[18]

**PREVALENCE OF PSYCHOLOGICAL DISTRESS AND ITS ASSOCIATED FACTORS AMONG SPOUSES OF FISHERMEN IN THE FISHERIES DISTRICT, NEGOMBO**

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**Background:** Psychological distress has been identified as a significant problem in current context of the world. Fisheries community is one of the major contributory work forces for Gross National Production. Spouses of fishermen are the key role in their households while husbands are away for their occupation and they are vulnerable to get psychological distress due to tense environment.

**Aims:** This study was conducted to determine the prevalence of psychological distress and its associated factors among spouses of Fishermen in Fisheries District, Negombo.

**Methods:** Community based cross sectional study was conducted and cluster sampling was used to obtain the sample size (305). Interviewer administered questionnaire was used for data collection including Kessler psychological distress scale. Score 12 or more is defined as having psychological distress. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Kelaniya.

**Results:** Prevalence of psychological distress among spouses of fishermen was 32.4 % (Confidence interval 27.1-37.3). Associated factors identified were: aged more than 34 years; living together without legally married; presence of economic difficulties; having two or more children; having children who are unemployed or schooling; spouse met with an accident while in fishing time are the factors associated with psychological distress among spouses of fishermen.

**Conclusions and Recommendations:** This study shows a higher prevalence of psychological distress in spouses of fishermen than women of reproductive age group in Vavuniya medical officer of health area as found in Sulfica and Ginige in 2017, which was found to be 29.2%. Majority of factors associated with psychological distress are related to children. It is recommended to diagnosis and management of psychological distress among spouses of fishermen.

**Keywords:** Psychological distress, Spouses of fishermen, prevalence, associated factors

**FREE PAPER SESSION (E)**

**EPIDEMIOLOGY**

E1

[19]

**FACTORS RELATED TO MYOCARDIAL INFARCTION AMONG YOUNG MALES  
IN CARDIOLOGY UNIT OF TEACHING HOSPITAL, KANDY: A NON-  
EXPERIMENTAL DESCRIPTIVE CORRELATIONAL STUDY**

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**Background:** Myocardial infarction (MI) is usually known as heart attack. It is a major cause of death and disability worldwide.

**Aims:** The purpose of this study is to examine the factors related to MI among young males (18-40 years) in Cardiology unit at Teaching hospital Kandy, Sri Lanka.

**Methods:** The quantitative non-experimental approach and descriptive correlational design was carried out to explore the factors related to MI among patients attending to cardiology clinic and wards in Teaching hospital Kandy. A self-administered questionnaire was distributed among 177 patients to assess the physical factors, social factors and psychological factors related to MI. Ethical approval was obtained from the Ethics Review Committee of Teaching hospital Kandy, Sri Lanka. Data was analyzed by descriptive statistics using SPSS 22 version.

**Results:** Majority of the participants (97.6%) were between aged 30 to 40. More than 75% of subject presented with dyslipidemia and high dietary intake of meat as physical risk factors. Under social factors, daily alcohol consumption and smoking reported in 53% and 48% respectively while also 77% of participants engage in outdoor leisure time activities. Considerably less than 20% of respondents presented with anxiety and depression as the psychologically affected risk factors. Most of the risk factors which were found are modifiable factors like alcoholism, smoking and high dietary intake of meat.

**Conclusions and Recommendations:** It is recommended to have more awareness programs emphasizing the importance of adhering to life style modifications by means of reducing the risk and to control the further occurrence of MI of affected people.

**Keywords:** Myocardial infarction, cardiology unit, alcoholism, smoking, high dietary intake, life style modifications

E2

[20]

**DEVELOPMENT AND VALIDATION OF MATERNAL COMPETENCIES  
ASSESSMENT TOOL-EARLY INFANCY (MCAT-EI): AN INSTRUMENT TO  
ASSESS PARENTING COMPETENCIES AMONG SRI LANKAN MOTHERS WITH  
INFANTS AT EARLY INFANCY**

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**Background:** Parenting competencies are important in proper child caring. However, there are no validated tools to assess these in Sri Lankan set up for early infancy.

**Aims:** To develop and validate an instrument to assess parenting competencies of Sri Lankan mothers with infants at early infancy.

**Methods:** A 46-item preliminary draft was developed using qualitative and quantitative methods. Items were selected from existing parenting competencies assessment instrument through consensus of experts or developed based on qualitative inquiries with parents and grandparents of infants aged up to six months and maternal and child care service providers. Item analysis was performed based on responses of 50 mothers to develop the 25-item final draft. Multidimensionality of the instrument was established by exploratory factor analysis using responses of 125 mothers. Construct validity was confirmed through correlations of total score with mother's quality of life, perceived stress and frequency of seeking advices from health care providers. Internal consistency and reliability were assessed using Cronbach's alpha and test-retest reliability. All data were analyzed using Statistical Package of Social Sciences statistical software. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Ruhuna.

**Results:** A self-administered, multidimensional instrument -Maternal Competencies Assessment Tool-Early Infancy (MCAT-EI)- was developed with five subscales measuring maternal competencies in feeding, maintaining hygiene, maintaining health and protection, ensuring sleep and comfort and identifying normal growth and development. Judgmental validity of MCAT- EI was established during item generation. Construct validity was confirmed by demonstrating significant moderate to high correlations ( $r \geq 0.3$ ) between scores of MCAT-EI and mother's quality of life, perceived stress and frequency of seeking advices from health care providers. MCAT\_EI had good internal consistency (Cronbach's alpha=0.897) and test-retest reliability.

**Conclusions:** MCAT-EI is a valid and reliable instrument to assess parenting competencies among mothers of infants at early infancy in Sri Lanka.

**Keywords:** Maternal parenting competencies, early infancy, instrument development, Sri Lanka, validity, reliability

E3

[21]

**KNOWLEDGE, ATTITUDES, PRACTICES AND CORRELATES OF PRACTICES  
RELATED TO CHILDREN'S COMMON UNINTENTIONAL INJURIES  
PREVENTION AMONG GOVERNMENT SECTOR PRIMARY SCHOOL  
TEACHERS OF KALUTARA DISTRICT**

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**Background:** Childhood injuries are a growing global public health problem and unintentional injuries significantly contribute to mortality and morbidity in children. The primary school setting is an injury vulnerable place.

**Aims:** The aim of this study was to describe the knowledge, attitudes, practices, and correlates of practices related to children's common unintentional injuries prevention among primary school teachers.

**Methods:** This was a school-based descriptive cross-sectional study. The multistage cluster sampling method was used and the final sample size of 680 was divided among three educational zones of Kalutara district according to the probability proportional to size. A pre-tested self-administered questionnaire was used as the study instrument. Ethical clearance was obtained from the Ethics Review Committee of the National Institute of Health Sciences, Kalutara, Sri Lanka.

**Results:** Majority of participants were married (95.8%) females (92.7%) with completed tertiary education after Advanced Level (56.7%) and most of them were above 40 years old (36%). Majority had a good knowledge on primary prevention of falls (74.4%), choking (98.9%), animal bites (98.0%), cut injury (87.2%), burns (65.2%) and electrocution (96.1%) and also had good knowledge of secondary prevention of choking (61.6%), animal bite (95.3%), burns (88%) and electrocution (73.6%). However, only 21.8% and 36% of participants had good knowledge of secondary prevention of falls and cut injury respectively. Knowledge of basic life support was poor among the majority of 92.7% participants. But all the teachers had favorable attitudes towards injury prevention. According to the study, both risks and injury situations of falls were common compared to other injuries. Risk identification of falls was significantly associated with the type of school, gender, service period as a teacher, service period at present station, stay in the class at the interval, the participation of first aid sessions and knowledge of primary prevention of falls. First aid administration was significantly associated only with gender.

**Conclusions and Recommendations:** Based on the above findings knowledge, attitude and practices of primary prevention are satisfactory compared to secondary prevention of common unintentional injuries. The arrangement of first aid training and environmental risk modification would help in preventing common unintentional injuries among children.

**Keywords:** Childhood unintentional injuries, primary school teachers, injury prevention

**FREE PAPER SESSION (F)**

**HEALTH PROMOTION AND DISEASE PREVENTION**

F1

[22]

**PREVALENCE OF CHRONIC PERIODONTITIS AMONG DIABETIC PATIENTS OF OUT PATIENT MEDICAL CLINIC AT THE TERTIARY CARE HOSPITAL IN KURUNEGALA, SRI LANKA**

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**Background:** Chronic periodontitis is a common chronic inflammatory disease characterized by destruction of the supporting structures of the teeth. Diabetes is a major risk factor for periodontitis.

**Aims:** The study was aimed to assess the prevalence, the severity of the Chronic Periodontitis Disease (CPD) among diabetic patients, and identify its association with hyperglycemia.

**Methods:** A descriptive cross sectional study was carried out among all diabetic patients, aged 30 to 60 years who attended to the OPD Medical Clinic Teaching Hospital Kurunegala (THK), during May 2016 to May 2017. They were assessed for CPD in restorative dental clinic at THK. Eligible population was 390. Ethical clearance was obtained from the Ethics Review Committee of the Teaching Hospital, Kurunegala.

**Results:** Out of them, 62.6% were females. The prevalence of CPD was 40.5% (n=158) and the occurrence among males was 37% and females was 42%. Disease severity was categorized as mild, moderate, and severe. There were 10.3% (n=40) mild, 12.3% (n=48) moderate and 17.7% (n=69) severe patients among the study population. There was a statistically significant association ( $p < .05$ ) between increased severities of the CPD with advanced age. Associations of CPD severity and hyperglycemia were calculated; mild, moderate, severe disease had mean Fasting blood Sugar (FBS) of 152, 180, 187 mg/dl and mean HbA1c of 8.28, 8.68, 9.25 respectively. There was 71.6% (n=245) patients with HbA1C more than 7. Among them, 66.5% was female. There was a statistically significant association ( $p < .05$ ) with high HbA1c and female sex.

**Conclusions and Recommendations:** The prevalence of CPD among the study population was comparable to previous studies, and the disease severity was associated with advanced age.

Keywords: Chronic periodontitis, diabetes, prevalence

F2

[23]

**RE-ADMISSION AND SELECTED ASSOCIATED FACTORS AMONG PATIENTS WITH DIABETIC FOOT DISEASE AT SURGICAL UNIT OF TEACHING HOSPITAL PERADENIYA**

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**Background:** Re-admissions of the diabetics patients due to diabetic foot disease causes a significant socioeconomic burden to the patients and health care system in the country. Diabetic foot represent diagnoses include ulceration, cellulitis, abscess, gangrene and osteomyelitis. It is vital to assess associated factors for readmissions among the patients with diabetic foot disease as it is important for proper managing patients with diabetic foot disease.

**Aims:** The purpose of this study was to assess the associated factors for readmission among patients with diabetic foot disease and to assess the glycaemic control among them.

**Methods:** Descriptive cross sectional study was conducted among 116 type 2 diabetic patients with diabetic foot disease those who attended to the surgical unit, Teaching Hospital, Peradeniya. Participants who readmitted to the same hospital within 30 days from the date of discharge was enrolled to the study. Data was collected using an interviewer administered questionnaire. Descriptive statistics were used to analyze data. Ethical clearance was obtained from the Ethics Review Committee of the KAATSU International University, Battaramulla.

**Results:** Most of the participants 71(61.2%) were males. Statistically significant association for readmission was found with occupation ( $p=0.039$ ), duration of diabetes ( $p=0.039$ ), consumption of alcohol ( $p=0.049$ ), walk without foot ware and lack of foot care of the participants ( $p=0.014$ ). Majority of the participants 87(75%) had poor glycaemia control while 61.2% of them were treated with oral medications. Statistically significant association found between method of treatment and glycaemic control. Seventy one (61.2%) of the participants practiced diabetic diet control, among them forty seven (67.6%) were not achieved glycaemic control.

**Conclusions and Recommendations:** This study suggest the necessity of community base awareness programs which should specially focused on vulnerable occupational groups and other associated factors to prevent recurrent readmissions and maintain optimal glycaemia control among the patients with diabetic foot disease.

Keywords: Readmission, factors, diabetic foot disease, glycaemic control

F3

[24]

## INJURY AND INFECTION IN DENTAL CLINICS: RISK FACTORS AND PREVENTION

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**Background:** Needle stick and sharp instrument injuries are common in dental practice and present the risk of direct exposure to blood-borne pathogens, including hepatitis B virus.

**Aims:** To determine the risk factors of injury and infection in three types of dental clinic in Riyadh, Saudi Arabia.

**Methods:** This was a cross sectional study. A total of 274 male and 241 female dentists completed a structured questionnaire on demographic factors, compliance with infection control practices, and past exposure to injury and infection hazards.

**Results:** Dentists with more years of professional experience were significantly less likely to report having had an injury in the past (unadjusted odds ratios (ORs) and 95% confidence intervals (CIs) were 0.48, 0.27–0.87 and 0.38, 0.16–0.89 for dentists with 10–20 years and for those with over 20 years of experience, respectively). Greater compliance with infection control procedures was associated with significantly fewer reports of previous infection (OR 0.31, 95% CI 0.12–0.84). Experience of occupational safety training was not associated with a lower rate of injury or infection.

**Conclusions and Recommendations:** Greater occupational safety knowledge and compliance with infection control management practices contribute to a reduced risk of injury and infection among dentists. More focused and specialized training on infection control and occupational safety is needed for all practicing dentists and dental students.

**Keywords:** Occupational hazard, workplace infection, safety training, needle stick injury, dental exposure, infection control, injury

F4

[25]

**DENGUE PREVALENCE, KNOWLEDGE, ATTITUDES, BEHAVIOURS AND THE CAPACITY OF THE COMMUNITY FOR DENGUE PREVENTION IN KURUNEGALA DISTRICT, SRI LANKA**

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**Background:** Dengue is a seasonal vector-borne disease which is increased with the onset of the inter-monsoonal rains. The effects of dengue on Sri Lanka is increasing for last two decades. The Kurunegala district was reported a drastic spike in the dengue cases during 2017.

**Aims:** The objectives were to assess the dengue prevalence of the area, knowledge, attitudes, behaviours and community capacity to have sustainable dengue prevention for the householders in Kurunegala district.

**Method:** A descriptive cross sectional study was conducted in the highly epidemic Medical Officers of Health area (MOH) in Kurunegala district during January 2019. The required number of 200 individuals in the separate households were selected using simple random sampling method. It was conducted using a pre-tested, validated, interviewer-administered questionnaire. The response rate was 95.5%. Prevalence of dengue in that area during 2017-2018 was 1.47% (CI 1.437-1.503). Mean knowledge on dengue prevention was 42.5% (SD 16%; range 5 - 82) and among them, 8.9% (n=17), 20.9% (n=40), and 70.2% (n=134) had good knowledge (>70 %), adequate knowledge (50% to 70%) and poor knowledge (<50%) on vector bionomics and dengue prevention respectively. Among them, 66.5% (n=127) had good attitudes (>70%), 60.75% (n=116) had good health seeking behaviours (>70%), 21.5% (n=41) had adequate dengue prevention behaviours (>60%) and 38.7% (n=74) had perceived that the community capacity is adequate (>70%) for dengue prevention. There were statistically significant (p<0.05) correlation between attitude and the community capacity with the observed dengue prevention behaviours and knowledge with the health seeking behaviours. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Colombo.

**Conclusions and Recommendations:** Attitudes and community capacity need to be improved to change the behaviour for dengue prevention and knowledge need to be improved to change the health seeking behaviours.

**Keywords:** Dengue, vector-borne disease, knowledge, attitudes, behaviours, community capacity

**FREE PAPER SESSION (G)**  
**NON COMMUNICABLE DISEASES**

G1

[26]

## HISTOPATHOLOGICAL PATTERNS AND ETIOLOGICAL FACTORS ASSOCIATED WITH ADULT ONSET NEPHROTIC SYNDROME

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**Background:** Nephrotic syndrome is a clinical condition characterized by massive urinary loss of protein (>3.5g/day). Renal biopsy remains the gold standard for diagnosis, predicting outcome and guiding subsequent therapy.

**Aims:** To describe the spectrum of histopathological patterns, secondary etiological factors, pattern of age and gender distribution and to correlate histopathological patterns with renal functions.

**Methods:** Hundred cases were selected from retrospective search of the renal biopsies of patients with adult onset nephrotic syndrome who presented to the nephrology unit of Sri Jayawardenepura General Hospital between January 2008 and October 2012. The data were extracted from histopathological request forms and bed head tickets. Ethical clearance was obtained from the Ethics Review Committee of the National Hospital of Sri Lanka.

**Results:** Males were predominantly affected by adult onset nephrotic syndrome (53%). Primary/idiopathic nephrotic syndrome was identified in 91% of the patients. Systemic lupus erythematosus (SLE), Diabetes mellitus and Amyloidosis were identified as secondary causes with SLE being the most common cause (55.5%). Diabetes mellitus and Amyloidosis were identified with percentage distribution of 22.2% in each category. The majority (57%) developed the disease before 37 years. Minimal change glomerulonephritis (GN) was the commonest underlying cause (38.46%). Male predominance was seen in morphological patterns of minimal change GN, Focal and segmental glomerulosclerosis (FSGS), IgA nephropathy and acute diffuse proliferative GN. Membranoproliferative GN was seen in equal distribution between males and females. In all morphological patterns, patients with better renal functions with creatinine clearance > =60ml/min outnumber the patients with reduced renal functions < 60 ml/min.

**Conclusion:** Most of morphological patterns were shown male predominance. Primary/idiopathic nephrotic syndrome is more common and SLE being the most common cause for secondary nephrotic syndrome.

**Keywords:** Histopathological patterns, etiological factors, adult onset, Nephrotic syndrome

G2

[27]

**PREVALENCE OF MODIFIABLE AND NON-MODIFIABLE RISK FACTORS FOR  
CARDIOVASCULAR DISEASES AMONG GOVERNMENT BANKERS IN  
WESTERN PROVINCE, SRI LANKA**

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**Background:** Cardiovascular diseases (CVDs) are the elite cause of global deaths. Nearly 67% of deaths occur in third world countries. Bankers are notable to have a sedentary lifestyle predisposing to CVDs.

**Aims:** This study investigated the modifiable and non-modifiable risk factors for CVDs among government bankers. Using simple random sampling, 403 bankers were selected from 25 branches of a government bank in Western Province, Sri Lanka.

**Methods:** This is descriptive cross sectional study. The questionnaire was structured and interviewer administered. Descriptive statistics and Pearson's chi square tests were used in analysis. Female preponderance (72%) was noted and 142 (35.24%) were aged between 36-45 years. Only 27.8% (n=112) have engaged in strenuous form of exercises (brisk walking, jogging), among them only 49 have engaged in satisfactory level of strenuous exercise of more than 2 hours per week. Only 40.4% (n=163) have engaged in satisfactory level of mild to moderate exercise of more than 10 hours per week. The majority, 260 (64.5%) were overweight (BMI >23) and was between 41-45 years (84.75%, p <0.05) and married (74.62%, p< 0.05). Among other modifiable risk factors, previously undiagnosed high systolic (n=34, 8.4%) and diastolic (n=74, 18.4%) blood pressures were noted. A minority were smokers (18 males), consumed alcohol (105 males) and used contraceptive pills (17 women). Among non-modifiable risk factors, majority (n=344; 85.4%) had a positive family history of at least one CVD. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, General Sir John Kotelawala Defence University, Sri Lanka.

**Conclusions and Recommendations:** We note a higher prevalence of certain modifiable and non-modifiable risk factors for CVDs, among them relative lack of exercise and overweight being especially notable.

**Keywords:** Cardiovascular Diseases, Modifiable and Non-Modifiable Risk Factors, Government Bankers

G3

[28]

**PERCEIVED FACTORS RELATED TO DELAYED PRESENTATION OF  
CERVICAL CANCER AMONG ADULT FEMALES AT APEKSHA HOSPITAL, SRI  
LANKA**

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**Background:** Globally, cervical cancer is the second most common cancer among women and ranks the second most common cancer among women in Sri Lanka. In poorly resourced settings, lack of community awareness for screening, access to services to offering cervical screening is still a challenge for early diagnosis of cervical cancer. Delay in presentation of cervical cancer causes increase morbidity, mortality and decrease survival rate of these patients.

**Aims:** To determine perceived factors related to a delayed presentation of cervical cancer among women in Apeksha Hospital, Sri Lanka.

**Methods:** Descriptive cross-sectional design was used among convenience sample of 286 participants with cervical cancer. A pre-tested (n=10) interviewer-administered questionnaire was used to collect data. Descriptive statistics were used. Ethical approval was obtained from the Ethics review committee, KATTSU International University, Sri Lanka.

**Results:** Nearly half of the participants (140, 49%) belonged to 56 years and above. More than half of participants (162, 57%) had exposed to intercourse their early age. The majority of them (219, 76%) did not attend to well women clinic and (226, 79%) had not undergone Pap smear test. There was a significant association between age and knowledge regarding cervical cancer, education level and knowledge regarding cervical cancer ( $p<0.05$ ).

**Conclusion:** Low level of education, old age, lack of knowledge about cervical cancer, non-attendance of well women clinic, not done Pap test were associated with a delayed presentation of cervical cancer. Awareness of regular cervical cancer screening targeting participants could reduce delayed presentation.

Keywords: Cervical cancer, delayed presentation, perceived factors, Sri Lanka

G4

[29]

## A STUDY ON DIAGNOSED PATIENTS WITH HYPERTENSION ATTENDING TO OUT PATIENT MEDICAL CLINIC OF A TERTIARY CARE HOSPITAL IN SRI LANKA

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**Background:** Hypertension is a major risk factor for cardio-vascular diseases which is a leading cause for morbidity and mortality globally.

**Aims:** The objective was to assess blood pressure control, to describe the clinic attendance, to evaluate drug adherence and related demographic features among the diagnosed hypertensive patients attending outpatient medical clinic of the Teaching Hospital Kurunegala.

**Methods:** A descriptive cross sectional study was carried out by enrolling 427 hypertensive subjects excluding pregnancy induced hypertension from August to December 2017. An interviewer administered pre-tested validated tool was used to collect data and a part of the questionnaire is designed to extract necessary data from medical records. Ethical clearance was obtained from the Ethics Review Committee of the Teaching Hospital of Kurunegala.

**Results:** The majority, 73.55% (n=314) was female. 21.8% (n=93) were younger (aged 50 years/below) while 81% (n=246) were older (more than 50 years). 24.1% (n=103) were working population and 78.2% (n=334) were educated up to ordinary level or below. They also had other co-morbid conditions; 30.7% (n=131) had diabetes mellitus, 12.4 % (n=53) had ischemic heart diseases, 76.3% (n=326) were hypercholesterolemic and 3.3% (n=14) had history of stroke. The hypertension was diagnosed incidentally in 41.9% of the individuals. The majority 99.3% (n=424) had good clinic attendance but only 66% (n=282) had satisfactory drug compliance. Only 92.3% (n=394) and 86.4% (n=364) had taken drugs in the previous day and the morning dose of clinic day respectively. The systolic blood pressure control was adequate (<140mmHg) in 64.9% (n=277), intermediate (140-160 mmHg) in 27.2% (n=116) and poor (>160mmHg) in 8% (n=34) of the population. 97.4% (n=416) had checked their blood pressure once a month. The younger patients had statistically significant (p<.05) good blood pressure control than older patients. But they had significantly (p<0.05) association with IHD and hypercholesterolemia. Male sex had statistically significant (p<0.05) higher prevalence rate of IHD and stroke with hypertension.

**Conclusion:** Both, the drug compliance and the blood pressure control were unsatisfactory in one third of study population. The younger patients especially males are at higher risk of having more than one cardio vascular risk factors/conditions.

**Keywords:** Hypertension, cardio vascular disease, morbidity, mortality

G5

[30]

**COMPLIANCE WITH MANAGEMENT OF DIABETES MELLITUS AMONG PATIENTS ATTENDING DIABETIC CLINIC IN A TERTIARY CARE HOSPITAL, SOUTHERN, SRI LANKA**

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**Background:** Diabetes Mellitus causes devastating complications which has become a leading cause of mortality as well as a huge social burden all over the world.

**Aims:** To assess the compliance with various measures for the management of diabetes mellitus among 140 previously diagnosed patients attending diabetic clinic of Teaching Hospital, Karapitiya.

**Methods:** A descriptive cross sectional study was carried out, with the approval of Ethical Review Committee, Faculty of Medicine, University of Ruhuna by administering a pre tested interviewer administered questionnaire.

**Results:** 45% (63) of patients were in the age group of 51- 60 and 54% (76) were males. 59% (83) were diagnosed and on treatment for diabetes for more than 3 years, while 13.5% (19) were diagnosed within less than 6 months. Regarding clinic visits, 57.1% (80) of them attended clinics regularly while 12.9% (18) and 30% (42) attended clinics intermittently and after getting symptoms worse respectively. Good compliance (not missing more than two doses in the last 15 days) to hypoglycemic agents was reported by 63.3% (90) of the participants. Although 72.1% (101) practiced dietary modifications, only 30% (42) reported that they are engaged in regular physical exercise. And 4.4% (6) mentioned that they are following stress coping methods. Annual eye check-up was undergone by only 37.8% (53). 54.3% (76) had poor diabetic foot care knowledge while 63.3% (90) of the participants had poor foot care practices.

**Conclusions and Recommendations:** This study emphasizes the need for encouraging individuals regarding importance of proper management of diabetes mellitus to avoid adverse health outcomes and increased health care costs.

Keywords: Compliance, diabetes mellitus, management

**FREE PAPER SESSION (H)**  
**HEALTHCARE MANAGEMENT**

H1

[31]

**INFRASTRUCTURAL REQUIREMENT OF OUTPATIENT DEPARTMENT IN  
INDIAN GOVERNMENT MEDICAL COLLEGE HOSPITALS: MEDICAL  
PROFESSIONALS' PERSPECTIVE**

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**ABSTRACT**

Recent revolution in Indian public healthcare infrastructure for providing affordable treatment to the vast population is primarily backed by various government schemes where outpatient department (OPD) plays a vital role. The recent policies entrust intense responsibilities on OPD but overlook the requirements of a productive work environment for medical professionals spending much longer time there compared to the patients. For assessing such requirements, OPDs of four large government hospitals from the southern state of Kerala were chosen to conduct post occupancy evaluation using indicative level survey. Kerala is a success story in Indian healthcare due to its traditional ayurvedic treatments, high physical quality of life index, widespread literacy, high live birth rate, high life expectancy, low infant mortality, greater number of hospital beds per 1000 population etc. The selected case study hospitals ranks top four in terms of patient influx. Two have undergone recent facility up-gradation while rests are yet to see the changes. Therefore noting the effectiveness of such changes is important to plan for the same for rest of the country. Forty two infrastructure related factors grouped under eight categories were judged by 149 medical staffs. From identified merits and demerits, 15 thrust areas were highlighted focusing on durability, adequacy, maintainability, flexibility for future expansion etc. The findings are useful for systematically strategic planning for setting up new facilities or upgrading an existing one for other parts of the country. As a result, better work environment leading to enhanced patient healing can be planned nationwide.

Keywords: Healthcare infrastructure, indoor environmental quality, medical college hospital, outpatient department, post occupancy evaluation

H2

[32]

**PATIENTS' PERCEPTION OF SATISFACTION ON THE HEALTH CARE SERVICES OF THE CLINICS AT MEDICAL OFFICERS OF HEALTH AREA, KURUNEGALA, SRI LANKA**

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**Background:** Primary health care involves a sustained partnership between patients and providers that addresses the majority of a population's health needs over time. Patients' perception of satisfaction is an aspect of healthcare quality that is being increasingly recognized for its importance.

**Aims:** The objective of this study was to assess the perception of satisfaction on the services provided by preventive sector clinics at the Medical Officers of Health area, Kurunegala, Sri Lanka.

**Methods:** Institutional based descriptive cross-sectional survey was carried out during May to August 2018. Systematic random-sampling techniques was used to select the study sample of 427. A self-administered pre-tested validated questionnaire which was designed by the Management Development and Planning Unit, Ministry of Health, Sri Lanka was used. Ethical clearance was obtained from the ethical review committee of Provincial Director of Health Services, North-Western province, Sri Lanka.

**Results:** The response rate was 93% (n=398). Among them, 58.8% (n=233) had good first impression on service providers and 63.3% (n=252) had satisfied on patient care services. 55% (n=214), 69.1% (n=275), and 56% (n=223) did not satisfy with the waiting time, available facilities and overall quality of care respectively. The client who had good first impression and satisfied with patient care services, waiting time, available facilities and overall quality, were more likely to recommend the clinic for an another client for granting care from those clinic ( $p < 0.05$ ).

**Conclusions and Recommendations:** The quality of care of the clinic services can be improved by improving the first impression, patient care services, available facilities and reducing waiting time.

Keywords: Primary health care, perception, satisfaction, healthcare quality

H3

[33]

### ASSESSMENT OF KNOWLEDGE ATTITUDE AND PRACTICES AMONG ONCOLOGY NURSES ON CHEMOTHERAPY ADMINISTRATION AT APEKSHA HOSPITAL, SRI LANKA

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**Background:** Cancer is second leading cause of deaths in worldwide. It was responsible for 9.6 million deaths in year 2018 (WHO, 2018). In Sri Lanka also the crude rate for overall cancer incident in Year 2014 were 111.2 per 100, 000 populations. Chemotherapy is the commonest prescribed cancer treatment method where oncology nurses play a major role in administering and preparation of chemotherapy drugs (Papa, 2010).

**Aims:** To assess the knowledge, attitudes and practices among oncology nurses on administration of chemotherapy.

**Methods:** A cross sectional study was carried out using 187 nurses who involved in administering chemotherapy Apeksha hospital Maharagama. Data collection was done by using self-administered questionnaire. Scoring system was used to assess the knowledge, attitude and practices. Data were analyzed using descriptive statistics. Ethical clearance was obtained from the Ethics Review Committee of the KAATSU International University, Sri Lanka.

**Results:** Out of 187 nursing officers, 86.6% had good knowledge regarding chemotherapy administration. When consider about the attitude about the chemo drug administration 53% had negative impression on increasing knowledge of the patients about the side effects. Also 56.7% are not voluntarily administering the chemotherapy and 61% know that the chemotherapy administration is different from administering intravenous antibiotics. Sixty two percent doesn't like to work in chemotherapy unit and 42% is agreed with that it is difficult to help the patients in emotionally when administering chemotherapy. In the practices 55% said that they are not wearing protection equipment when administering chemotherapy. Especially they are poor in wearing gowns (74%) and goggles (65%) as they are not wearing it when administering chemotherapy.

**Conclusions:** Nurses are having good knowledge regarding chemotherapy administration, but they are poor in some points in attitudes as working in chemotherapy unit, thinking about patient's emotional conditions and voluntary administration of chemotherapy. In the practices of personal protection from chemotherapy administration, they are poor in wearing gowns and goggles rather than the gloves and masks.

Keywords: chemotherapy, knowledge, attitude, practices, nurses

H4

[34]

**LAWS ON RIGHT TO PUBLIC HEALTH IN INDIA: AN EVALUATION***Vinay Shivappa\**

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Indian Parliament has always been energetic to meet the needs of the changing society. Due to urbanization and industrialization, the social patterns of the people are rapidly changing. The most important part is that, with the changing society, the law needs to be changed protecting the interests of the disadvantageous groups and the weaker sections. The Indian Parliament has done much to improve the social patterns of citizens by enacting social welfare legislations. These legislations are framed in order to achieve the goals set in our Constitution. The different legislations have been made in order to protect different groups of people like women, children, workers etc. Apart from the goals laid down in our Constitution, it also provides for a variety of fundamental rights. Right to Public Health being one of the most important fundamental right needs extra protection by specific legislations. Our Constitution also requires the State to ensure health and nutritional well-being of all people. Before independence, the health care sector was in dismal condition as the number of mortality rate owing to diseases was high. But since independence the main emphasis has been the health care sector. This has been made possible by enacting various legislations. The Researcher has discussed in this paper as to how the different legislations in India protect and ensure public health as a human right of the citizens. It has also discussed Constitutional provisions and detailed legislations with respect to laws on public health in India and to provide workable solution which will be helpful to adopt in international forum. Author has adopted doctrinal method of research and suggests for comprehensive and universal law to ensure public health of general public.

Keywords: Health care services, constitution of India, health laws-fundamental human rights, Indian judiciary, parliament of India

H5

[35]

**PATIENT PERCEPTION ON COMPREHENSIVE DOCTOR HEALTH COMMUNICATION***Ahmad Toni\**

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\*Email: [ahmad.toni@budiluhur.ac.id](mailto:ahmad.toni@budiluhur.ac.id)**ABSTRACT**

This study uses a health communication approach with the post positivism paradigm of perceptions of patient trust in conducting health communication with doctors at Premier Bintaro Indonesia Hospital Internal Medicine Clinic. The results of the study showed that perceptions of patients' trust in conducting health communication with doctors who were conducted nonverbally reached 93%. Perceptions of patient trust in verbal mental health communication reached 88% and perceptions of patient trust in verbal social health communication reached 90%. The average level of perception of confidence in health communication reaches 90.33% so as to provide confidence in a good life expectancy for patients.

Keywords: Comprehensive, Patients Perception, Health Communication

**FREE PAPER SESSION (J)**

**ENVIRONMENTAL HEALTH**

J1

[36]

## KNOWLEDGE, ATTITUDES AND PRACTICES ON PSYCHOLOGICAL FIRST AID FOLLOWING A DISASTER AMONG PUBLIC HEALTH MIDWIVES IN SELECTED MOH AREAS IN COLOMBO RDHS AREA

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**Background:** Disasters can have negative effects on the health of a population both physically and psychologically. Psychological First Aid (PFA) is an internationally accepted humane and supportive response that provides psychological and social support for the affected people.

**Aims:** To assess the knowledge, attitude and practices of PHMs in providing PFA following disaster in selected MOH areas in Colombo district.

**Methods:** A descriptive cross-sectional study was carried among PHMs in five selected MOH areas in Colombo RDHS area with comparatively higher disaster risks. Ethical Clearance was obtained from the Ethical Review Committee, PGIM, Colombo. Knowledge attitude and practices were assessed using a self-administered questionnaire. The questionnaire was formulated based on the WHO Psychological First Aid Guide: Guide for field workers, 2011. It contained four parts that assessed the sociodemographic factors of the participants, their knowledge, attitude and practices in providing PFA following a disaster. Data was analyzed using Statistical Package for Social Sciences (SPSS- Version 15). Descriptive statistics were carried out using means and proportion and cross tabulations were carried out using Chi square statistics. All statistical significance was calculated at  $p < 0.05$ .

**Results:** The study population consisted of 108 participants and the response rate was 100%. The participants were all female and their ages ranged from 21 years to 64 years. Majority of the participants were Buddhists and married. Their period of service extended from less than one year to more than 30 years. Majority of the participants had a satisfactory knowledge on the fundamental principles of PFA. Yet, there were also some gaps in knowledge that pointed to the need of proper education and learning programs for PFA providers. It was also found there was no statistically significant association between PFA knowledge with PHMs' age ( $P=0.297$ ) or duration of service ( $P = 0.757$ ). Most of the PHMs had a positive attitude towards PFA provision in the aftermath of a disaster and there was a general consensus that PFA promotion in Sri Lanka was not adequate. A general majority of the respondents have not had any PFA training. Forty-eight of them had a past experience in managing disaster. Thirty-eight had provided PFA following a disaster. Although they had no proper training, a majority had responded that they followed most of the basic steps in PFA provision. There was no statistically significant association between provision of PFA and age ( $p=0.670$ ) or duration of service ( $p=0.704$ ).

**Conclusions:** Although majority of participants had satisfactory knowledge on fundamental principles of PFA, there were some knowledge gaps. Majority of them haven't had any PFA training.

**Keywords:** Psychological First Aid, Disaster, Public Health Midwives

J2

[37]

**FACTORS ASSOCIATED WITH ROAD TRAFFIC ACCIDENTS IN PEOPLE WHO ARE ADMITTED TO THE ACCIDENT SERVICE IN NATIONAL HOSPITAL SRI LANKA**

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**Background:** Road traffic accidents represents significant causes of morbidity and mortality in both developed and developing countries. Assessment of the risk factors associated with road traffic accidents is vital to prevent road traffic accidents.

**Aims:** To assess the risk factors associated with road traffic accidents in people who are admitted to the accident service in National Hospital Sri Lanka.

**Methods:** Descriptive cross-sectional study was conducted among sample of randomly selected 267 victims of road traffic accidents using interviewer administered questionnaire following the pre-test. Ethical clearance was obtained from the Ethics Review Committee of the KAATSU International University, Battaramulla.

**Results:** Majority of the victims were males (85.4%), belong to 13- 30 age group (48.9%). Common vehicle types used by the victims were motorbikes (44.6%), three-wheelers (34.8%), and vans (10.1%). Most of the victims were drivers (76.9%) and they reported that the speed of the vehicle when the time of accident were of 61kmph- 80kmph (33.3%) and 81kmph- 100kmph (33.4%). More than half of the accidents occurred in mild traffic conditions (57.7%) and dark light condition (52.1%). Most of the victims obeyed to the road traffic rules and regulations such as wearing helmets (94%), seat belt use (93.6%), avoid phone use while driving (85.8%), not driving under the influence of alcohol (85%).

**Conclusions:** Risk factors for road traffic accidents were high speed, driving motorbikes, three-wheelers and poor environment conditions such as dark light conditions.

Keywords: Associated factors, road traffic accidents

J3

[38]

### EXPLORING THE PRESENT STATUS TO STRENGTHEN THE SCHOOL HEALTH PROMOTION ACTIVITIES OF THE KALUTARA EDUCATIONAL DIVISION

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**Background:** Approximately 70% of Sri Lankan adolescents attend schools and will become the workforce of the country. Therefore, schools offer the most feasible and sustainable mechanism to achieve high coverage of health promotion interventions.

**Aims:** To explore the present status to strengthen the school health promotion activities of the Kalutara Educational Division (KED).

**Methods:** Information was gathered through direct observations and interviews with principals, school health teachers, students, Public Health Inspectors and the Kalutara-Medical Officer of Health (MOH). Information collected through quarterly school health returns by the Kalutara MOH was also perused.

**Results:** During focus group discussions and interviews, the following were identified as priority health issues: drug addiction; poor oral and menstrual hygiene; poor water intake and increased consumption of fast foods. Observation of five randomly selected schools showed poor sanitary conditions (inadequate number of toilets, poor cleaning of toilets, inadequate hand washing facilities), poor waste management practices, unavailability of healthy food at school canteen and non-implementation of healthy canteen policy and unsafe environment as issues. There were no functional school health clubs (0%) and none were active health promoting schools (0%). The intersectoral collaboration between the education and health sectors was poor.

**Conclusions and remedial action:** As conditions of schools of KED are not conducive to good health, it is necessary to implement holistic health promotional activities through reactivated health clubs. We improved the interaction and collaboration between KED officials, district health staff & school staff, empowered the school sector individuals to prepare action plans for school health promotion through capacity building workshops. A multi-stakeholder health committee meeting was held for the first time after three years in KED following this intervention.

Keywords: Health Promotion, school health, adolescent health

J4

[39]

**BRETEAU INDEX AS AN EARLY WARNING TOOL FOR PREDICTING DENGUE EPIDEMIC IN KALUTARA, SRI LANKA**

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**Background:** Dengue is currently the major public health burden in Sri Lanka. Kalutara is one of the highly affected districts. Understanding the drivers of dengue is vital in controlling and preventing the disease spread. Dengue vector surveillance is a useful tool in identifying high risk geographical locations and predicting disease trends.

**Aims:** To quantify the temporal relationship between confirmed dengue cases and Breteau Index (BI); and to establish location specific thresholds for BI as an early warning tool for dengue epidemic.

**Methods:** Monthly means of combined BI and monthly notified dengue cases measured in 11 Medical Officer of Health areas from 2010 to 2016 in Kalutara RDHS division were analysed. Distributed lag non-linear model was used to estimate overall relationships between BI and dengue. We incorporated lag period up to 3months and evaluated models based on the Akaike Information Criterion.

**Results:** Consistent exposure-response patterns were observed between BI and dengue for Kalutara district, showing increasing relative risk of dengue with increasing mean combined monthly BI from 15. The strongest association with dengue risk centred around 1.5 to 2 months following BI more than 15. Heterogeneity in exposure response pattern observed among MOH divisions may be due to division specific differences in dengue vector control activities and unmeasured covariates such as host immunity and population movement dynamics.

**Conclusions:** Our findings emphasise the importance of sentinel entomological surveillance for dengue early warnings and would be immensely beneficial for planning and implementation of dengue preventive and control activities.

Keywords: Breteau Index, Early Warning Tools, Predicting Dengue Epidemics

# **ABSTRACTS OF POSTER SESSIONS**

P1

[40]

**KNOWLEDGE AND PREVALENCE ON USAGE OF HERBAL AND  
NUTRACEUTICALS AMONG THE PATIENTS ATTENDING OUT-PATIENT  
DEPARTMENT IN PRIVATE TERTIARY HOSPITAL IN JAFFNA**

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**Background:** Herbal and Nutraceuticals are increasingly drawing the attention of manufacturers, researchers, regulators and health care professionals due to high levels of consumption. Knowledge and prevalence of usage of these products among patients is vital to obtain complete medical history data.

**Aims:** This study aimed to assess the knowledge and the prevalence of usage of Herbs and Nutraceuticals among the patients attending outpatient department in a private tertiary hospital.

**Methods:** A descriptive cross sectional study was carried in a systematically selected sampled patients using interviewer administered questionnaire. Data was entered in the computer and analyzed using SPSS. Two-hundred and ninety two patients were included in the study. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Jaffna, Sri Lanka.

**Results:** Prevalence of usage of herbs and nutraceuticals was 43.5% (n=127). Among the users, 32.2% (n=41) were using without prescription (self-usage). Regarding the knowledge majority of the participants stated that herbs and nutraceuticals are drugs (83.9%, n=245) and beneficial for human health (87.7%, n=256) and 76.4% (n=223) of them were did not know the side effects of the products. Only 19.5% (n=57) of participants stated that, herbs and nutraceuticals can be substituted for natural food. More than half of the participants (54.8%, n=160) stated, herbs and nutraceuticals cannot take without prescription. Only 39% (n=114) of respondents knew, herbs and nutraceuticals can interact with prescription or over the counter drugs. Among the self-usage, 41.5% (n=17) of participants stated that the self-usage is for saving their time.

**Conclusions and Recommendations:** Although, the prevalence of self-usage was low, patients have limited knowledge on usage of herbal and nutraceuticals. Patients need education to improve their knowledge which will also ensure the safe usage.

Keywords: herbals, nutraceuticals, knowledge, prevalence, usage

P2

[41]

**THE EFFECT OF MISSING BREAKFAST AND BODY MASS INDEX ON  
ACADEMIC PERFORMANCE IN GIRLS' SCHOOL STUDENTS IN KANDY  
EDUCATIONAL ZONE**

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**Background:** Hungry child is more likely to have lower concentration levels, poor listening span and problems in retrieving and assessing information than classmates who were fed on time. Therefore, receiving a regular breakfast and maintaining healthy weight leads to positive effects on child's leaning achievement.

**Aims:** To assess the association of missing breakfast and Body Mass Index (BMI) on academic performance of the students.

**Methods:** Descriptive cross sectional study was conducted with 650 girls who were in Grade 10, 11 and 12 in Kandy educational zone, Sri Lanka. Convenient sampling method was used to select the sample. A self-administered questionnaire and student's results records were used to collect data. Data was analyzed using descriptive and analytical statistics. SPSS version 20 used as the analytical tool. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Ruhuna.

**Results:** 66.9% students missed their breakfast. Breakdown of missing breakfast was as follows: frequently 16.6% (108), occasionally 50.3% (327) and never 33.1% (215). There was a significant difference in missing breakfast and academic performance ( $p=0.00$ ). Highest performance had shown by students who never missed breakfast. The mean BMI of participants was  $19.81 \pm 3.99$ . Among the participants, there were 42.0% (273) underweight, 48.6% (316) normal, 7.1% (46) over weight and 2.3% (15) obese students. BMI was negatively correlated with students' academic performance ( $r= - 0.07$ ). Over weight and Obese students had poor academic performance.

**Conclusion:** Missing breakfast and BMI impact on students' Academic Performance.

Keywords: Missing breakfast, body mass index, academic performance, girls' school students

P3

[42]

**EFFECT OF PARBOILING ON GLYCAEMIC RESPONSE OF SOME TRADITIONAL RICE VARIETIES OF SRI LANKA**Thennakoon T.P.A.U, *Ekanayake S\**

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**Background:** Rice is the dietary staple of Asians and contributes to the total carbohydrate and energy intake. Food containing high amount of carbohydrates can generate a stronger postprandial glucose response which ultimately can lead to insulin resistance and obesity related diseases. Glycaemic index and load reflexes the glycaemic response of a food and are classified as high, medium and low.

**Aims:** The aim of this study was to determine glycaemic index and loads of some differently processed traditional rice varieties namely Goda heenati, Batapolel, Unakola samba, Hangimuththan and Dik wee.

**Methods:** Each rice was polished (4%) or parboiled (without polishing) and glycaemic index determined by standard method. Glucose standard (50g) and rice portions containing 50g of digestible starch were given to 10 apparently healthy volunteers (body mass index 18-25 & age 18-30 yrs). Data was analyzed by statistical package. Index values are expressed as (mean±standard error of mean). Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura.

**Results:** All varieties of raw polished rice were categorized as high glycaemic index (70±4 to 76±5). Parboiled rice of the same varieties elicited low glycaemic index(43±3 to 47±5). Glycaemic load of raw polished and parboiled rice varied from 35-38 and 22-23 respectively. When considering an edible portion of parboiled rice glycaemic load ranged 11-12(medium). On average parboiling has contributed to 21%-33% reduction in peak glucose concentration compared to standard. More than 80% elicited either low or medium glycaemic index following consumption of parboiled rice in comparison to 26% following consumption of raw polished rice.

**Conclusions and Recommendations:** Thus these parboiled, under milled traditional rice varieties can be recommended for consumption by individuals seeking to control the blood glucose levels.

Keywords: Parboiled rice, raw rice, glycaemic index, glycaemic load, obesity

P4

[43]

## STRESSFUL LIFE EVENTS AND RISK OF ILLNESS AMONG URBAN ADOLESCENTS

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**Background:** Adolescents' the one-fifth of total population of Bangladesh, which describes the age between 13 to 19year. It can be considered as the transitional stage from childhood to adulthood. In the development of psychopathology in adolescence, stressful life events are studied as both risk and environmental factors. These events are related to the different experiences of conflict and disrupted communication in the family, friends and economy.

**Aims:** To investigate the relationship between stressful life events and risk of illness among the adolescents.

**Methods:** This is a descriptive cross sectional study. Data on lifetime stress about 39 common life events were collected from 384 school going adolescents in Dhaka city. They were interviewed through a semi structured questionnaire by using Holmes and Rahees stress scale. Ethical clearance was obtained from the Ethics Review Committee of the National Institute of Preventive and Social Medicine, Bangladesh.

**Results:** The proportion of adolescents reporting about being a senior in high school (29.9%), breaking up with boy/girlfriends (27.3%), changing in acceptance by friends (25.5%), change in parents financial status (25%), failure in grading in school (22.4%) were statically significant. Correlation analysis shows that risk of illness positively associated with age ( $R=0.001$ ) and negatively with monthly income of family ( $R=0.018$ ). About half of the respondents (49.6%) were at slight risk of illness whether small portion of respondents (17.9%) were at risk of illness. Other variants like sex, living with family, type of house, occupation of mother were not associated with risk of illness.

**Conclusions and Recommendations:** Occurrences of stressful life events should be addressed properly to reduce risk of illness among the adolescents.

Keywords: Adolescents, stressful life events, risk of illness

P5

[44]

**COMPARISON OF ONE ANTISEPTIC AGENT VS TWO ANTISEPTIC AGENTS IN SKIN ANTISEPSIS***Kulatunga K.M.H.H<sup>1</sup>\*, Weerasinghe P.W<sup>2</sup>*<sup>1</sup>Kaatsu International University, Sri Lanka<sup>2</sup>University of Ruhuna, Sri Lanka\*Email: [hiroshani.kulatunga@gmail.com](mailto:hiroshani.kulatunga@gmail.com)

**Background:** Blood culture contamination is a major obstacle in identifying pathogens. 70% alcohol followed by 7.5% povidone-iodine is used in routine clinical practice for skin antiseptics when collecting blood for cultures. This is a time consuming and stressful procedure to the patient. It would be much helpful if it were able to apply one antiseptic agent.

**Aims:** To compare the efficacy of one antiseptic agent vs two antiseptic agents in skin antiseptics

**Methods:** Thirty patients in medical wards were randomly selected for the study. Swabs from both antecubital fossae of patients were collected before and 2 minutes after the application of povidone-iodine and 70% Ethyl alcohol for 30 seconds followed by 7.5% povidone-iodine for 2 minutes and cultured. Mean colony count reductions in each occasion were calculated and compared using Independent t-test. Ethical clearance was obtained from the Ethical Review Committee of the Faculty of Allied Health Sciences, University of Ruhuna.

**Results:** Colony count reduction with one antiseptic agent was 90.13% and it is with two antiseptic agents was 93.42%. Therefore, there is no significant difference between the application of 7.5% povidone-iodine alone and 70% Ethyl alcohol followed by 7.5% povidone-iodine. (p=0.534, CI-13.79 to 7.22)

**Conclusions:** One antiseptic agent is adequate in skin antiseptics.

Keywords: Povidone iodine, antiseptics, alcohol

P6

[45]

## WORK-LIFE BALANCE ASSOCIATED FACTORS AND JOB SATISFACTION AMONG MEDICAL OFFICERS IN LADY RIDGEWAY HOSPITAL FOR CHILDREN

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**Background:** The Medical profession is of heavy clinical or non-clinical work, need more time, therefore, balancing the work and the life would be a difficult task. The job is essential to survive in the current economic state. Good work life balance and good job satisfaction gives numerous benefits to the Medical Officer as well as to patient or the client.

**Aims:** To determine the work-life balance its associated factors and job satisfaction among Medical Officers in Lady Ridgeway Hospital for Children.

**Methods:** Institution based descriptive cross-sectional study was conducted among 420 grade Medical Officers attached to Lady Ridgeway Hospital for Children in Colombo, during August and September in the year 2017. Ethical clearance was obtained from the Ethical Review Committee of the Lady Ridgeway Hospital for Children (Teaching), Sri Lanka.

**Results:** A self-administered questionnaire was used to conduct the study. Descriptive statistics were used to describe variables. Chi-squared test with 5% significance level was used to analyze the associations and analyzed using SPSS version 20. The response rate was 90% (384). Of the participants, 46.1% (177) had good work life balance and 62.5% (240) had good job satisfaction. Work related factors significantly associated with good work life balance were, current designation as Medical Officers and Senior House Officers, service more than 10 years, daily work less than eight hours, off days more than three per one month. Family related factors significantly associated with good work life balance were, not having children less than five years, living with family members, more than 10 hours spent with family members. Personal factors significantly associated with good work life balance were, travelling time equal or less than one hour and engaged in a recreational activity.

**Conclusions and Recommendations:** Respondents who had good work life balance had good job satisfaction and it was statistically significant. It is recommended to create a supportive environment to improve work-life balance and job satisfaction among Medical Officers.

Keywords: Work life balance, job satisfaction, medical officers

# **ABSTRACTS OF VIRTUAL PRESENTATIONS**

V1

[46]

## HEALTH PROMOTION IN SCHOOL-GOING ADOLESCENTS: DOES THE BIOPSYCHOSOCIAL CORRELATES HAVE A SIGNIFICANT ROLE OVER SLEEP BEHAVIOURAL PRACTICES?

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**Background:** Healthy sleep influences health promotion and well-being in adolescence, and plays an important role in adolescents' daytime functioning. Evidence from previous research studies shows that sleep difficulties arise from various biological, lifestyle, behavioural and environmental factors leading to chronic insufficient sleep in adolescents.

**Aims:** The study aimed at examining the influence of various biopsychosocial correlates (age, gender, grade level, problems at home, afterschool classes, extracurricular activities) on adolescents' sleep behavioral variables (sleep hygiene practices, sleep quality, daytime sleepiness).

**Methods:** A cross-sectional study design was used. Participants were 660 healthy adolescents (330 males and 330 females), aged 11-17 years, studying from grade 6 to grade 12 in various schools in Mangalore, India. Data were collected using socio-demographic questionnaire with additional questions on sleep and activities, and standardized questionnaires such as Sleep Hygiene Index, Pittsburgh Sleep Quality Index, and The Cleveland Adolescent Sleepiness Questionnaire. Data analysis was done with descriptive statistics, using frequencies and percentages and inferential statistics such as Mann-Whitney U-Test, Kruskal Wallis test, and Chi-Square test along with post-hoc comparisons. Ethical clearance was obtained from the Ethical Review Committee of the College of Health Sciences, University of Bahrain.

**Results:** The mean sleep hygiene practices, sleep quality and daytime sleepiness were  $M = 28.6 \pm 6.5$ ,  $M = 5.8 \pm 2.2$ , and  $M = 32.9 \pm 8.8$  respectively. Age was significantly associated with sleep quality and daytime sleepiness, with higher daytime sleepiness and poor sleep quality observed with older adolescents. Grade level, average time spent on additional classes, and home atmosphere of the participants were significantly associated with the entire target variables, with higher grade level of adolescents, more hours spent on additional classes, and problems at home contributing to worsening of sleep practices. No significant association of gender and average time spent on extracurricular activities with target variables noticed.

**Conclusions:** The study suggests that various biopsychosocial correlates significantly influence the sleep behavioral practices in adolescents, and a consistent sleep schedule with adequate management of academic and social obligations is required for promoting sleep. Future studies should be encouraged using sleep hygiene intervention and stress reduction techniques directed at individual and family level for improving sleep.

Keywords: Sleep, adolescents, sleep practices, daytime sleepiness, sleep problems

V2

[47]

## EXAMINING THE LEVELS OF THE MOTHERS WITH PRESCHOOL CHILDREN TO USE THE MEDIA TOOLS

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**Background:** A number of studies have concluded that children's excessive use of media tools may lead to obesity, emotional, social and behavioral problems, eye, and joint disorders. All these unfavorable possibilities are closely related to the attitudes of mothers, who are the most important role-models for children, to media tools.

**Aims:** It was aimed to investigate the media usage levels of the mothers with preschool children.

**Methods:** This descriptive study was conducted with the mothers with three-six year-old children, attending the independent kindergartens affiliated with Çankırı Provincial Directorate for National Education in 2017-2018 School Year. In the study, the "General Information Form", developed by the researchers to determine the socio-demographic characteristics of the mothers, "The Mother Interview Form for Media Usage Levels", developed to determine the media tool usage levels of the mothers and put into the final form with the opinions of the academicians, who are experts in their fields, were used. Ethical clearance was obtained from the Ethical Review Committee of the ÇankırıKaratekin University, Turkey.

**Results:** It was determined that 40.9% of the mothers were in the age group of 31-35 years. It was determined that 50.4% of the children of the mothers were boys, 41.4% were six year-old. It was determined that, 48.1% watched TV for one-two hours a day, 51.6% used computer/tablet for one-two hours a day, 93.3% connected to internet via cell phones, 40% connected to internet via cell phones for one-two hours a day, 76.2% did not read daily newspapers, and 88.1% did not read magazines. Based on the results of the study, it was determined that the mothers had high levels of the use of media tools.

**Conclusions and Recommendations:** Based on this result, it may be recommended that the informative studies may be conducted on the fact that their children imitate their mothers' use of media tools, therefore they should use the media tools in a controlled manner.

Keywords: Media, media tools, preschool period, media tool usage attitudes of mothers

V3

[48]

## AN INVESTIGATION ON THE PROBLEMS EXPERIENCED BY TEACHERS WORKING WITH EPILEPTIC CHILDREN IN SPECIAL SCHOOLS

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**Background:** Little is known about the problems encountered by the teachers working with children with epilepsy.

**Aims:** This study aimed to investigate the problems experienced by teachers working with epileptic children. Teachers who were employed at special schools located in Ankara and who agreed to participate voluntarily were included in the study.

**Methods:** Teachers who were employed at special schools located in Ankara, had undergraduate degrees, worked with epileptic children and agreed to participate voluntarily were included in the study. The study adopted the semi-structured Interview method. An interview form developed with peer debriefing by the researchers was used in the determination of the problems the teachers employed at special schools experienced in the course of their work with epileptic children. The interview form comprised questions aimed at determining what the teachers knew about epilepsy, how they intervened when a child had an epileptic seizure, what they did for the children and their parents to promote the children's development, where they acquired their knowledge of epilepsy and where they wanted to obtain this information, and the problems they experienced during their work with epileptic children. The data were qualitatively analysed.

**Results:** It was shown that special teachers working with epileptic children had a general knowledge and understanding of epilepsy, experienced difficulty in administering interventions when a child had a seizure, lacked adequate knowledge of seizure interventions, and focused only on the academic skills of epileptic children. The teachers also emphasized the importance of adherence to medication and of parental training in epilepsy.

**Conclusions and Recommendations:** it is recommended to organize epilepsy training seminars for parents of epileptic children and to organize in-service training courses for teachers working with epileptic children in order to ensure they have access to new and accurate information through the most up-to-date scientific research, other than through the Internet and also to engage them in efforts to raise community awareness on seizure intervention for epileptic children.

Keywords: Epilepsy, health, neurology, public health

V4

[49]

**DISTRICT LEVEL ASSESSMENT OF SPATIAL CLUSTERING AND DETERMINANTS OF DIABETES MELLITUS AMONG OLDER ADOLESCENTS AND YOUNG ADULTS IN INDIA**

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**Background:** Globally, non-communicable disease is the leading cause of death. Amongst all, diabetes mellitus (DM) represents the most important in India. The burden of DM shifting towards the lower ages has received relatively less attention in India.

**Aims:** To assess the district level spatial clustering and determinants of DM among older adolescents and young adults.

**Methods:** The study used data from the fourth round of National Family Health Survey. A person in the age group 15-29 years of age is considered to be older adolescents and young adults. Moran's I and LISA were used to examine the presence of spatial autocorrelation and clustering respectively. Simultaneous Autoregressive Model were used for the assessment of determinants.

**Results:** Prevalence of DM across 640 districts ranged from 0.15 to 35 percent. Global Moran's I is 0.61 implying significant spatial correlation. Significant high-high clustering of the prevalence of DM can be seen in the districts of northeastern states, eastern states, southern states and Delhi National Capital Regions. Also, significant low-low clustering of the prevalence of DM can be seen in districts of northern states and central India. Overweight and professionals who are physically inactive are at higher risk of acquiring DM.

**Conclusions and Recommendations:** As the older adolescent and the young adults are the potential assets to the nation, reduction in prevalence of DM among older adolescent and young adults is necessary and would be possible only if area-specific measures would be adopted on those clusters of districts where diabetes is high considering the other intervening covariates.

**Keywords:** Non-communicable disease, diabetes mellitus, spatial clustering, older adolescents, young adults.

V5

[50]

**MY SRH MY CHOICE: WADING THROUGH UNIVERSITY STUDENT'S  
ENGAGEMENT IN HIGH RISK SEXUAL BEHAVIOR AND CURVING THE WAY  
FORWARD**

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**Background:** High risk sexual behavior (HRSB) among young adults has continuously been on the increase and has become of serious concern for institutions of higher learning because of the adverse consequences that are linked with young adults' engagement in HRSB.

**Aims:** The study sought to identify the level of undergraduate students' in Kenyatta University engagement in high risk sexual behavior, bearing in mind the consequences of the practice that threatens the health of most students as they stand at risk of being infected with HIV and STI increasing their morbidity and mortality rates among the young adults who form a crucial population pillar for the economic and thus threatening to the achievement of sustainable development of Kenya.

**Methods:** The study was guided by the health belief model, proportionate and random sampling were used to select 178 students and data collected using structured questionnaire. Ethical clearance was obtained from the Ethical Review Committee of the Pan Africa Christian University Kenya.

**Results:** Findings revealed that nearly three quarters of the students engaged in lack of/inconsistent use of condom, more than half reported to have sex under the influence of alcohol and substance abuse and having multiple sex partners which are in line with other literature and alarming to the health and wellbeing of youths in the county.

**Conclusions and Recommendations:** This study proposes that there is need for reengineering in the way students should be sensitized on consequences of HRSB, strengthening capacity of reproductive health workers, inventing creative programs and messages to the students.

**Keywords:** High risk sexual behavior, sexual reproductive health, engagement, student

V6

[51]

**RESPECTFUL MATERNITY CARE: ENSURING THE UNIVERSAL RIGHTS OF  
CHILDBEARING WOMEN IN KENYA***Castillo, T.*

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**Background:** Disrespect and abuse (D&A) of women in maternal healthcare is a prevalent and serious issue in many maternities hospitals in Kenya. Although the Kenyan Government seeks to improve maternal health by offering free maternity services in public health facilities, only 46% of women deliver at the public facility. Approximately 20% of pregnant women reported experiencing one form of D&A. Physical abuse, discrimination, lack of informed consent and confidentiality are some common examples of D&A.

**Aims:** To share how HealthRight facilitated a community-led initiative on respectful maternity care (RMC) in Elgeyo Markawet County through a broader 4-year USAID maternal health project.

**Methods:** Our model focused on strengthening the supply, demand and enabling environment to protect pregnant women's dignity. We convened stakeholder workshops, provided RMC provider trainings to drive health systems improvements, and conducted baseline/midline population level surveys (N=683), 23 in-depth interviews with providers and 12 focus group discussions at endline. Trainings included revamping the quality improvement teams, engaging the community, developing accountability mechanisms collaboratively, and strengthening facility health service charter.

**Results:** After one year, small reductions were found in disrespect, while physical and verbal abuse remained high. Our endline qualitative analysis revealed overall improvement in respectful care. The primary project achievement was launching the first county-level RMC policy in Kenya.

**Conclusion:** This promising model has been scaled-up to high-volume health facilities in Nairobi. To ensure that government follows through with their commitments to high quality maternity care, effective accountability mechanisms, efforts should be inclusive and informed by women and their families.

Keywords: Maternal Health, violence, respectful care, Africa

V7

[52]

**EXPLORING HEALTH INEQUITIES AMONG INDIGENOUS WOMEN IN POST-CONFLICT BANGLADESH AND NEPAL: COMMUNITY PERSPECTIVES ON GENDER BASED VIOLENCE AND REPRODUCTIVE RIGHTS**

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**Background:** Subjected to various forms of gender-based violence, indigenous women living in post-conflict settings have endured poor health outcomes, limited support services, and shifts in livelihood due to land displacement. Within Asia, where few countries formally recognize indigenous peoples' rights, only minimal health services and data collection on indigenous women's health status are available.

**Aims:** This exploratory study examined community-based leader perspectives for ensuring indigenous women's health rights in Bangladesh and Nepal.

**Methods:** In collaboration with two local human rights organizations, 23 semi-structured interviews were conducted using a criterion sampling method over a two month period in 2014. Recorded interviews were transcribed for analysis using Atlas.ti 7.0. Data was triangulated using field notes and collected documents. While 12 study findings emerged on the challenges, promising practices, and recommendations for ensuring health rights, this paper focuses on two key findings, violence and reproductive health.

**Results:** Participants discussed eight types of violence: conflict, abduction, witch hunting, domestic violence, sexual violence, trafficking, bonded labor, and child marriage. Violence was compounded by health issues such as HIV, unwanted pregnancy, fistulae, and uterine prolapse. Data analysis revealed that States' efforts were inadequate in addressing survivors' needs and their right to health. Limited availability, quality, and accessibility of services compromised indigenous women's health rights.

**Conclusion:** Further research on indigenous women and girls' mental health is needed to develop responsive programming. Expanded studies on the connection between violence and reproductive health are critical. Data disaggregation, collaborative partnerships, and tailored programming are recommended first steps to improve health.

Keywords: Women, reproductive rights, violence, inequity, indigenous

V8

[53]

## CULTURAL INFLUENCE ON CHILD AND MATERNAL HEALTH IN SINGKIL DISTRICT, ACEH, INDONESIA: A SHORT REPORT

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**Background:** Today, child and maternal health become a serious problem worldwide. Everyday 99% of maternal deaths happening in developing countries especially in rural areas. Furthermore majority of child health challenges occur in the first five years of life. Aceh province has one of the highest child and maternal mortality rates in Indonesia, and Singkil is one of Aceh's districts where the number of these numbers has recently increased every year. Singkil district has strong cultural influences related to maternal and child health called Badapu. Singkil District has strong cultural traditions related to maternal and child health which are involved in their family decision making. One of the strong cultures related to maternal and child health is "Badapu". Badapu is traditional culture which involves food restriction for post-partum women and the women also have to live in a small room full of smoke in order to make sure all of the woman's body will stay warm and fresh. Those women only eat rice without side-dish and only consume less water. The women and her baby will live in room full of smoke as described by Badan Perencanaan Pembangunan Daerah in 2016.

**Aims:** This study aims to report a cultural influence related to "Badapu" on maternal and child health in Singkil District.

**Methods:** This was a qualitative study with phenomenological approach. Participants were women involved in "Badapu" tradition and stake-holders from primary healthcare and health district offices through observation and in-depth interviews. This study was conducted in July 2018

**Results:** Badapu is a hereditary cultural tradition that believes in food restriction, warming the woman and the baby in a room full of smoke. Mothers and their babies have to participate in Badapu for 40 - 60 days. There was a belief that chicken, meat and water make delay in wound healing. Also there was a belief that a woman who sweats will make their wound related to giving birth healed easier. Therefore every woman and her child will stay in a small room to warm up the body. Also self-care is restricted such as taking bath to make sure the body is sweaty. Side effects of Badapu include discontinuation of breastfeeding which makes malnutrition of the baby and the newborns and infants also get impacts to their respiratory tract due to smoke and lack of nutrition according to Local Development Officer. Stakeholders in Singkil are in the process of making collaborative agreements between midwives and the women who helps in child delivery (local shaman) to change behavior according to a Midwife.

**Conclusions and recommendations:**

Badapu is a culture which requires post-partum women to do food restriction, minimize their movement and self-care, and live with their baby in unhygienic and unhealthy conditions. Stake-holders can reduce negative impacts of Badapu by making collaborative agreements for positive behavioral change.

Keywords: Cultural influence, child and maternal health, Badapu, collaboration practice, primary health care

