



World Conference on Public Health 2020

WCPH2020

“ Strengthening Global Research and Innovation to HEAL as ONE ”

11th – 12th December 2020 | Virtual Conference

BOOK OF ABSTRACTS

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(WCPH 2020)

11th– 12th December 2020

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Dear Colleagues, Scientists, and Friends,

I am truly honored and delighted to take this opportunity to invite delegates from all around the world to the World Conference on Public Health 2020 (WCPH2020) which has the theme “Strengthening Global Research and Innovation to HEAL as ONE.” The emergence of illnesses and diseases pose severe threats to global health security at large. This situation has remarkably urged the healthcare industry to look for cure and preventive health measures and to ensure the safety of everyone. WCPH2020 will be held from 11th to 12th of December 2020 as a virtual conference. The conference has 80+ Participants from 20 different countries across the globe.

The conference days will be dedicated to cover a broad spectrum of subthemes related to Public Health. There are 11 major sessions with an exclusive track on COVID-19. There are two days of the program that would focus on a broad range of issues and challenges in healthcare which will be weaved through the participation of keynotes and plenary speakers.

Furthermore, the conference brings in together the stakeholders and decision-makers from different sectors across the globe. Our collaborative forces and winning breakthroughs in science and innovation can achieve change and provide a firm spot to HEAL as ONE. The international partnership and collaboration that will be forged in this conference would play a crucial promoting role for jointly set projects from different viewpoints.

The conference is designed to facilitate learning, share innovation, promote new ideas, and most importantly, relax and have some fun. I look forward for you to enjoy the conference and that your interaction with your colleagues across the globe will stimulate a creative exchange of ideas and be personally rewarding. I look forward to seeing you at the virtual conference.

Welcome to WCPH 2020!

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ORAL PRESENTATIONS

CREATING KNOWLEDGE TO MANAGE STRESS

DOES FACEBOOK CREATE KNOWLEDGE?

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ABSTRACT

With the rapid development of technology, people are increasingly using computer-mediated communication to share ideas, experiences, ask for advice, support and build communities in virtual environments. In this context, individuals are keen on receiving social network support for managing stress levels and stressful conditions. Facebook (FB) is one such social networking site heavily immersed in people's lives around the globe. Though the general purpose of FB is to act as an online platform for users to make friends and interact with them, nowadays, such social networking sites are also used to build online stress management communities. There are shreds of evidence on online communities providing emotional support, learning new ways to cope and discovering new strategies for improving their members by sharing insights gained from the first-hand experience. Using empirical evidence from Facebook data and adopting Theory of Knowledge Creation authors seek the possibility of generating knowledge through the FB platform to manage stress. The current study examines three main areas; 1. How knowledge is created in FB, 2. How FB supports or facilitates the knowledge creation process and 3. How FB communities trigger stress management. The findings revealed that FB provides a variety of features and digital content supporting knowledge creation processes. Further, such communities can be considered as emerging social movements that enable a viable and efficient mode of stress management.

Keywords: Facebook, stress management, knowledge creation, online communities, Theory of Knowledge Creation



A2

[02]

**PATIENT PERCEPTION ABOUT GENERIC (JAN AUSHADHI) VS BRANDED
MEDICINES PRESCRIBED IN A TERTIARY CARE HOSPITAL IN NORTHERN
INDIA - A DESCRIPTIVE STUDY**

Tripathi S. and Bhattacharya S.

University of Lucknow, India

ABSTRACT

Aim & Objectives: The concept of generic prescription is widely accepted in various parts of the world. Nevertheless, it has failed to gain popularity in India due to factors such as non-availability and distrust on the product quality. However, since 2012, the Government of India, has initiated exclusive generic drug outlets called Jan Aushadhi stores. This study was undertaken to evaluate the experience and attitude of patients who were consuming generic drugs purchased from these stores.

Materials and Methods: It was a questionnaire-based cross-sectional study where we have interviewed total 100 patients consuming generic and branded drugs, respectively. The perceived effectiveness, cost of therapy, quality of drugs was asked.

Results: In our study 72 % participants heard about generic medicine and 65% knew the difference between generic and branded medicines. 67% agreed that generic medicines are cheaper than branded medicines but only 35% of them preferred to buy generic medicines. Most (64%) of the patients never asked his/her doctor or pharmacist (59%) to prescribe/distribute generic medicines. Majority of them (61%) believed that generic medicines have lower quality than branded medicines. According to patients, 45% responded that doctors preferred branded medicines over generic medicines. In this hospital, 37% patients were prescribed generic medicines. Most of them (67%) did not become aware of the government rules about prescribing generic medicines. Only 24% responded that government should promote generic medicines. According to 13% of patients suggest that there should be more generic medicine shops present in the hospital. Interestingly, 45% of them suggested that generic medicines should be available in all medicine shops.

Conclusion: Our findings suggest that knowledge and attitude about generic medicines among participants were poor. Some of them had wrong information, which is not a good sign for implementation and sustainability of Jan Aushadhi scheme in government hospitals.

Keywords: Branded drug, cost of therapy, generic prescription, health policy

HUNDREDS SMOKING CESSATION SMARTPHONE APPS: CAN THEY BE EFFECTIVE INTERVENTIONAL TOOLS?

Soe-Soe-Aye

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ABSTRACT

BACKGROUND – Tobacco use remains one of the biggest threats to public health and the leading preventable cause of mortality and morbidity. There are more than 2 billion smartphone users worldwide, hence using smoking cessation smartphone applications (Apps) can be an effective low-cost intervention. **AIMS** – To evaluate the Apps 1) on their characteristics namely, compliance index score to the Public Health Service’s Clinical Practice Guidelines (PHS CPG) for Treating Tobacco Use and Dependence; percentage in each of five different categories ; the strength and omission features 2) to compare Android and iOS smoking cessation Apps. **METHODS** – A total of 100 smoking cessation Apps were randomly identified from the App Store and Google Play. Four trained coders evaluated the smoking cessation apps based on specific categories and also on level of adherence to 20 items of specific guidelines. SPSS version 23.0 software was used for data entry and statistical analysis. Mean of adherence score was compared between the two operating systems. **RESULTS** – The mean compliance index score to Guidelines was 32.4% in iOS and 46.3% in android. Commonest category in android was calculator type 50.6% and in iOS was coaching 51.26%. Smoking specific is strength areas for both (100% android & 94% iOS). Mean adherence score for android was 26.72 (moderate) whilst for iOS was lesser 22.72 (moderate). T-test of equality of means between iOS and Android gave a significant difference of 0.029. **CONCLUSION** – Only three percent of both Apps had strong adherent score towards the Guidelines. Interprofessional team including both Information Technology (IT) and healthcare experts should create a more reliable, safe and effective interventional tool for smoking cessation.

Keywords: Android; iOS; Information Technology (IT); PHS CPG for Treating Tobacco Use and Dependence; Smoking cessation Smartphone Apps.



A4

[04]

CALL FOR TELECONSULTATION SERVICES IN PEDIATRIC PRIMARY HEALTHCARE AND BEYOND - A REVIEW OF THE PRACTICABILITY, APPLICABILITY, AND POTENTIALS OF TELECONSULTATION SERVICES FOR THE PEDIATRIC HEALTHCARE PROVISION IN AUSTRIA

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ABSTRACT

Background: Maintaining primary healthcare is one of the major challenges of healthcare system and comes to a head in sensitive times like a pandemic. Ambulatory pediatric treatment and patient triage aggravated due to the current situation and pediatric primary care accessibility has become more critical with general practitioners facing an increasing comprehension of pediatric healthcare. Teleconsultation services provide a great opportunity to facilitate and strengthen interdisciplinary collaboration and access medical expertise, particularly regarding diagnostic uncertainties. **Purpose:** The purpose of this study was to investigate and evaluate the use and attitude towards an Austrian teleconsultation platform for doctors (Diagnosia), emphasizing its value to strengthen collaborative efforts to ensure quality care in infant, child and adolescent health, focussing on diagnostic acceleration, verification and correction upon the development of a treatment plan. **Methodology:** Existing data regarding geographical and professional distribution were analysed, and the findings of 14 quantitative surveys and 2 qualitative semi-structured interviews were interpreted. **Results:** Benefits of location-independent and immediate exchange of medical expertise were most apparent in shorter diagnosis times and a potential quality increase in care. Teleconsultation chats were rated as clinically beneficial and the hypotheses regarding the improvement and stimulation of cooperation between doctors, especially in structurally weaker areas was confirmed. **Conclusion:** An overall positive attitude towards the teleconsultation-chat and the existing potential regarding improvements of quality in pediatric primary care, shorter diagnosis time, and counteracting a pediatric undersupply became obvious. Therefore, political and legal structures must be established, and the procrastinating attitude towards progression urges Austrian health authorities to promote and ensure a continuing advancement in the development of telehealth solutions to maintain quality primary healthcare in pediatrics and beyond.

Keywords: teleconsultation, telehealth, pediatric care, health communication

**COMPARING INFANT AND UNDER-FIVE DEATHS ACROSS STATES AND
REGIONS IN MYANMAR: AN INDIRECT METHOD OF MORTALITY
ESTIMATION**

Yadanar A.^{1,2}

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²*Department of Medical Research-Pyin Oo Lwin Branch, Myanmar*

ABSTRACT:

Child mortality especially infant and under-five mortality rates are important indicators of health and country's socio-economic development. From 2014 Census, applied United Nations 'Chilean' model life table was applied to find out the time reference and parameter estimates for coefficient values while Myanmar Demographic and Health Survey in 2015-16 (DHS) were used to estimate the probabilities of dying by exact ages of children q1 and q5. The probabilities of dying by exact ages of one year and five-year-old children was estimated from the proportions dead of children classified by age-group of mothers. The objectives of this study were to evaluate the situation of mortality differences at national (urban/rural) level and analyze the secondary data set of Census and DHS Survey by expanding the sample to all reproductive age women who were in all states and regions of Myanmar. Results from this study showed that under-one and under-five mortalities at rural areas were higher than those of urban areas. The lowest area of both types of mortality was Yangon region within the under-one mortality range of 40 to 60 (per 1000) and the under-five mortality range of 50 to 70 (per 1000). The highest estimated mortalities using data classified by age of mothers were in Ayeyarwaddy region that infant mortality 96 (range of 86 to 106) and under-five mortality 117 (range 104 to 128) per 1000 who was born from the mothers at the age group of 15-19 years. Thus, it recommends to reduce high mortality of children and further analysis is needed if the 2024 Census data of Myanmar would be available.

Keywords: one census method, indirect technique, infant mortality, under-five mortality, Census and DHS-Myanmar



B2

[06]

**HOW TO EVALUATE THE CONTENT VALIDITY OF HEALTH-RELATED
MEASUREMENT INSTRUMENTS: BASED ON A SYSTEMATIC REVIEW
ASSESSING THE CONTENT VALIDITY OF CAREGIVER-REPORTED
INSTRUMENTS ON CHILD ABUSE**

Sangwon Y.

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ABSTRACT

The choice of high-quality measurement instruments that accurately assess health condition is strongly determined by their content validity. However, content validity is complex and challenging to evaluate; so far, there is no comprehensive and standardized criteria for assessing the quality of the content validity of health-related measurement instruments. Accordingly, the Consensus-based Standards for the selection of health Measurement Instruments (COSMIN) group has developed a comprehensive methodological guideline for systematically assessing the content validity of health-related measurements. The COSMIN guideline includes: (1) a framework for terms and definitions related to three aspects of content validity (relevance, comprehensiveness, and comprehensibility); (2) a checklist for assessing the methodological quality of studies on the content validity of instruments; (3) criteria for evaluating each result of single studies on the content validity of instruments; and (4) a rating system summarizing the results of all the studies on each aspect of content validity and grading the quality of all the evidence used to evaluate both the quality of the study design and the content validity. This presentation describes how to assess the quality of the content validity of health-related measurement instruments according to the COSMIN methodological guideline, using as an example a systematic literature review assessing the content validity of caregiver-reported instruments on child abuse and neglect.

Keywords: Child abuse, content validity, COSMIN, measures

**VALIDITY AND RELIABILITY OF THE ARABIC VERSION OF THE EUROPEAN
HEALTH LITERACY QUESTIONNAIRE (HLS-EU-Q47-ARABIC)**

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ABSTRACT

Health literacy is a major public health issue that relates to the capacity of a person to view, comprehend, interpret and apply health information to prevent disease and encourage healthier lifestyles. The European Health Literacy Questionnaire (HLS-EU-Q47) is a globally recognized tool for assessing Health literacy status. This study aimed to adapt the European Health Literacy Questionnaire (HLS-EU-Q47) into Arabic. The questionnaire was translated into Arabic. The Forward-backward translation method was used for linguistic validity. Public health expert panels judged the content of the questionnaire. Face validity was assessed among a purposive sample of Libyan parents of primary school students in the West area of Libya. HLS-EUQ47 was administered in the West Region of Libya to 470 Libyan parents of primary school students. Confirmatory factor analysis has been used to assess construct validity. The Composite Reliability (CR) and Average Variance Extracted (AVE) were used to test convergent validity. For discriminant validity, it was tested by examining the square root of AVE for each construct against correlations, and reliability was examined by Cronbach's alpha coefficient and Intra-Class Correlation Coefficient. The questionnaire was shown to have strong construct validity, acceptable goodness-of-fit of the data to the hypothetical model in three domains of health literacy (GFI, AGFI, CFI, IFI, and NFI) were > 0.90 , high-level of internal consistency (Cronbach's alpha >0.90). The AVE from the three constructs was found to be higher than 0.50 which indicated adequate convergent validity. This study demonstrated that the HLS-EU-Q47-Arabic was a valid and reliable instrument, Moreover, the questionnaire is an acceptable and comprehensive health literacy measurement tool for apply in Arab countries.

Keywords: Validation, Health literacy, HLS-EU-Q47Arabic, Confirmatory Factor Analysis, Libya



B4

[08]

OBESITY AND ITS ASSOCIATED FACTORS AMONG OLDER ADULTS: MY-HEBAT (MALAYSIAN HEALTH AND WELL-BEING ASSESSMENT) STUDY

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*Asia Metropolitan University, Malaysia***ABSTRACT**

Background: Currently, the obesity prevalence is rising progressively among worldwide, but it is preventable. The prevalence of obesity and its associated factors among older adults remains unclear in Malaysia. Objective: To determine the prevalence of obesity and associated factors among older adults aged ≥ 60 years who voluntarily attended the health screening programs as part of the MyHEBAT Study. Methods: A cross-sectional study was conducted including 716 participants who were aged 60 years and above in Malaysia. The standard Questionnaire was used to gather information regarding sociodemographic status, family, and medical history, etc. Anthropometric indices, blood pressure, and selected biochemical blood analysis were collected. Participants whose BMI were ≥ 30 kg/m², classified as obese and those with BMI < 30 kg/m² as non-obese. Age was categorized into three subgroups: 60-69 years, 70-79 years, and ≥ 80 years old. The factors associated with obesity among older adults were then identified using the MLogR. Results: In our study, total of 716 older adults age ≥ 60 years (mean \pm SD: 66.6 \pm 6.0 years) were involved. The obesity prevalence among older adults was 15.8%, higher prevalence was found among females (42.9 %) compared to males (38.3%). The prevalence of obesity decreased with increasing age (48.5% in 60-69 years, 20.8% in 70-79 years, and 11.8% in age group ≥ 80 years). Conclusions and Recommendations: The current national health promotion and education programs relating to identifying the factors associated with obesity should be improved and modified, particularly for older adults in Malaysia.

Keywords: Older adults, Obesity, Prevalence, Associated Factors, Malaysia

INSTRUMENTAL ACTIVITIES OF DAILY LIVING (IADL) DISABILITY AND ITS ASSOCIATED FACTORS AMONG THE ELDERLY IN KELANTAN

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ABSTRACT

Disability among older person is usually associated with health problems, personal and environmental factors as well as psychosocial and lifestyle factors. Disability can be measured using instrumental activities of daily living (IADL) which consists of complex activities that allow an elderly to live independently. Studies identifying associated factors of IADL disability among elderly in Malaysia are still lacking. This study aimed to determine the proportion of IADL disability and its associated factors among older person attending health clinics in Kelantan. A guided questionnaire consists of sociodemographic characteristics, health-related conditions, Lawton IADL scale, Elderly Cognitive Assessment Questionnaire (ECAQ), Geriatric Depression Scale (GDS) and Duke Social Support Index (DSSI) was provided to 248 elderly from 12 health clinics in Kelantan. Multiple logistic regression (MLR) was performed to assess associated factors of disabled IADL status. The proportion of those reporting IADL difficulties was 36.3%. In the final MLR model, associated factors of IADL disability among elderly attending health clinics in Kelantan were age group 80 years old and above (Adj. OR 14.61; 95% CI: 2.57, 83.07, p-value=0.003), being unmarried (Adj. OR 2.20; 95% CI: 1.15, 4.21, p-value=0.017), no formal education (Adj. OR Adj. OR 3.86; 95% CI: 1.57, 9.50, p-value=0.003), low level of income (Adj. OR 2.54; 95% CI: 1.18, 5.48, p-value=0.018) and those who reported fair or poor self-rated health status (Adj. OR 2.63; 95% CI: 1.35, 5.13, p-value=0.005). Therefore, recognition of these factors is critical to improve our elderly care and services. Policies should aim at reducing the burden of health-related conditions that accompany old age and assistance should be offered to the disabled elderly in the country.

Keywords: Aging, Disability, Factors, IADL, Lawton scale



C1

[10]

**PSYCHOSOCIAL IMPACT OF LOCKDOWN AND COPING STRATEGIES
AMONG STUDENTS OF HEALTH SCIENCE UNIVERSITY IN COVID 19: A
CROSS SECTIONAL STUDY**

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ABSTRACT

The COVID 19 pandemic caused by SARS CoV-2 has put the entire world to a standstill, with almost all countries clamping restrictions on public movement, imposing mandatory lockdown across the world. Academics too, has taken a major blow. The student mindset due to restrictions on academic as well as non-academic activities has led to major psychosocial instability. This study evaluates the psychosocial impact of lockdown and coping strategies among students of Health Sciences University during the COVID-19 pandemic. A cross-sectional study was carried out on 1330 undergraduate students both males and females of the University. Psychosocial Impact Scale developed and standardized by Dr. Tendolkar and the COPE Inventory by Carver was used for data collection. The results showed that 14.96% of students showed normal response to the lockdown situation, 33.38% of students showed borderline negative, 33.31% of students had mild negative, 14.21% students had moderate negative and 4.14% student had a severe negative impact of lockdown. In Problem-focused coping strategy, 54.45% of students used active coping, 57.05% students used planning, 51.80% students used suppression of competing activities, 51.05% students used restraint coping strategy, and 53.35% students used instrumental social support. In emotion-focused coping strategies 48.7% used emotional social support, 60.75% used positive reinterpretation, 53.95% students used acceptance, and 40.80% were in a denial state. 52.30% students turned to religious activities. 38.7% used Humor, 40.10% used Behavioral Disengagement, 50.75% used Mental Disengagement, 49.15% students focus on and venting of emotions, 24.65% used Substance Abuse. The findings conclude that psychosocial status of students has been negatively hampered due to lockdown.

Keywords: psychosocial impact, coping strategies, Lockdown

**EVALUATION OF PSYCHOLOGICAL IMPACT, DEPRESSION, AND ANXIETY
AMONG PREGNANT WOMEN DURING THE COVID-19 PANDEMIC IN
LAHORE, PAKISTAN**

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ABSTRACT

Introduction: The substantial burden of the COVID-19 pandemic has led to increased feelings of fear and uncertainty. The contagious nature and high mortality associated with the disease has caused psychological distress, depression, stress, and anxiety among the general population, including pregnant women. **Objectives:** The study aims to assess socio-demographic factors, psychological impact, levels of depression and anxiety, lack of appetite and sleep disturbances and its associations with perception of pregnant women towards COVID-19 Pandemic. **Methods:** Descriptive cross-sectional study on pregnant women visiting Outpatient department (OPD) of Obstetrics and Gynecology, Sheikh Zayed Hospital, Lahore was conducted from 6th August 2020 to 20th August 2020; non-probability (consecutive sampling technique) was used. Psychological impact towards COVID-19 Pandemic measures by using The Kessler-10 scale (K-10) whereas, depression and anxiety measures by Edinburgh Postnatal Depression Scale (EPDS). Data was analyzed by IBM SPSS Statistics version 22. **Results:** Among 552 pregnant women; 64% respondents presented high perception towards COVID-19 Pandemic i.e. thoughts of carrying infection, vertical transmission will harm fetus, vulnerability whereas; 36% respondents showed low perception towards COVID-19 Pandemic. Significant associations were found in socio-demographic factors i.e. women age ($p=0.01$), education ($p<0.001$), occupation ($p<0.000$), monthly income ($p=0.03$) and weeks of pregnancy ($p=0.04$), psychological impact ($p<0.0002$), depression and anxiety ($p<0.01$) and sleep disturbances ($p<0.01$) with perception of pregnant women towards COVID-19 Pandemic. **Conclusion:** Perception of being exposed, more vulnerable, vertical transmission adversely affect mental health of pregnant women, causing psychological distress, depression, anxiety and sleep disturbances among them. Educational programs should be designed that reverse perceptions of pregnant women towards COVID-19 Pandemic and brings good mental health among them.

Keywords: Anxiety, COVID-19, Edinburgh Postnatal Depression Scale, K10 scale, Perinatal depression, Pregnancy, Psychological impact



C3

[12]

QUALITY OF LIFE AMONG ELDERLY DURING THE COVID-19 PANDEMIC CRISIS IN DHAKA, BANGLADESH

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ABSTRACT

The COVID-19 pandemic is impacting the global population in drastic ways, especially older people are facing the most serious challenges, developing physical and mental illness due to physiological changes that come with ageing. To ensure geriatric necessary care and support- their families and caregivers have to support them as a priority with tailoring and accurate information for staying healthy. So, it's essential to know the rate of Quality of life (QOL) for improving their living standard. An online survey was done at Dhaka city (Urban) and Narsingdi (rural) district of Bangladesh. Sample size was 500 calculated (prevalence 8% over 60 years). A new questionnaire - the Stark QOL Questionnaire was used through survey, Data's quality control is done by IBM SPSS software & Statistical- inferential analysis by chi-square, correlation, t-test; descriptive by means, standard deviation, minimum, maximum, proportion and frequencies. Ethical issues are maintained strictly. Respondent's mean age was 67.71 years (standard deviation 5.87). Above two-thirds 372(74.4%) geriatrics were married (having spouse alive). Scoring of QOL profile revealed that 232(46.4%) geriatric had "poor", whereas 53(10.6%) had "good", 192(38.4%) was "neither good nor poor" and 3(0.6%) had "very good" QOL. Scoring of getting support from others revealed, completely support 16(3.2%), a great deal 61(12.2%), moderately 263(52.6%) and not much support is 157(31.4%). Male's QOL was better than females in two different domains. Educated and married (living with spouse) have better mental domain. Study revealed, overall QOL was poor to good. Social characteristics, like education, marital status, gender, play role for the perceived QOL which can be improved by family's collective efforts, by network of geriatric support groups, by increasing awareness with providing Government proper health services.

Keywords: Elderly, quality of life, covid-19, pandemic.

**FACTORS ASSOCIATED WITH PSYCHOLOGICAL DISTRESS AMONG
MYANMAR RESIDENTS DURING COVID-19 PANDEMIC CRISES**

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ABSTRACT

The impacts and events associated with COVID-19 pandemic were associated with adverse psychological impacts among the general public globally. The study aimed to determine the prevalence of psychological distress and to identify predictors associated with psychological distress due to the COVID-19 pandemic among the population in Myanmar. A cross-sectional survey was conducted from March to April 2020 among adults, 18 years old and above, who reside in Myanmar through a structured questionnaire distributed in social media platforms. Univariate and Bivariate analyses were used to estimate the prevalence of COVID-19 Peritraumatic Distress Index (CPDI) symptoms and to test the associations between CPDI and the exposure variables. Logistic Regression Analysis was done to identify significant predictors of distress. Simple and Multiple Logistic Regression Analysis were used. There were 530 participants in this study. 37.4% of them did not have psychological distress, 55.6% experienced mild to moderate psychological distress, and 7% experienced severe psychological distress due to COVID-19 pandemic. Simple and Multiple Logistic Regression Analyses were performed to determine the factors associated with psychological distress due to COVID-19. It was shown that the self-employed group and age group older than 45 years old had more psychological distress than others. However, Buddhists and people from the capital city had less distress than other religions and districts. This study recommends the government to develop better strategies for self-employed groups, elders, and the poor for a support, relief, and resettlement of their ruined status.

Keywords: COVID-19 Pandemic, Psychological Distress, Public Health Emergency



C5

[14]

A NOVEL BIOSAFETY BASED INTEGRATED MULTIFUNCTION PROTECTIVE EQUIPMENT FOR HANDLING COVID-19

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ABSTRACT

In the Covid-19 pandemic, the lack of biosafety for personal protective equipment (PPE) has failed to protect health workers. Health workers are active at the forefront of treating patients infected with Covid-19, but evidence shows that more and more healthcare workers are infected. In addition to the inadequate use and availability of PPE, not all patients present with distinctive clinical symptoms so that the tendency for patients to come to the hospital is not through the Covid-19 emergency room, but to the general emergency room. To overcome the limitations of PPE availability and minimize the risk of infection transmission, a modified patient sorting or triage system is required, where standardized biosafety protective equipment is prepared for physical examination and specimen collection procedure which is integrated into one location. With this modified triage, health workers do not need to use third level disposable PPE, however, health workers can be protected from direct contact and droplets from patients. This study aims to develop integrated biosafety-based personal protective equipment to protect health workers in carrying out covid-19 diagnostic procedures. This study is applied research that produces an integrated biosafety-based protective equipment prototype for a safer physical examination and specimen collection procedure. The prototype was entirely impermeable to prevent infection transmission from patients to health workers. This prototype has been empowered at the Regional General Hospital in West Java Indonesia to handle the Covid-19 patient and registered as Intellectual Property Rights at the Directorate General of Intellectual Property of the Republic of Indonesia.

Keywords: Biosafety, Covid-19, health worker, infection transmission, protective equipment

**A CRITICAL LOOK AT COVID-19 FROM A HEALTHCARE ETHICS AND
HEALTHCARE MARKETING PERSPECTIVE**

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ABSTRACT

The COVID-19 pandemic has been addressed by different nations using different strategies. But, the most overlooked issue seems to be the ethical dimensions of healthcare for COVID patients. In this presentation, the authors will provide a quick overview of various principles of healthcare ethics that are often not covered in academics in most Asian institutions, and then they will discuss how these principles may have been violated or impacted in certain countries. Specific examples and case will be presented from different countries, in particular from the United States, New Zealand, and India, to elaborate the issues and concerns. The strategies used to address the pandemic by some world leaders, including the messages that they conveyed, will be discussed using the concepts of healthcare marketing. Latest global COVID-19 statistics will also be presented and the authors will provide what they perceive the next year may look like from the public health perspective.

Keywords: COVID-19, Principles of Healthcare Ethics, Healthcare Marketing, Beneficence

C7

[16]

IS SUDAN FIGHTING ENOUGH COVID19?

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ABSTRACT

While COVID-19's impact on the world's health systems, including fatalities, continue to rise, the economic and social toll is still unclear as the world faces an unprecedented global recession. There has been an alarming absence of adequate information about the spread of the COVID-19 epidemic in African countries, including Sudan. Insufficient epidemiological data flow in Sudan prevents the development of effective strategies for managing this pandemic, protecting people from the virus, and controlling the negative effects created by COVID-19. Some of the postulated reasons for insufficient data flow are under-reporting, lack of reliable burial records, absence of private sector data, the reluctance of suspected cases to seek medical care, and poor diagnosis. Moreover, Sudan lacks enough and adequately trained health professionals to support the increased demand for health services, intensive care units, infection control materials, drugs and medical supplies to address quickly spreading COVID-19 in all cities across the country. In this paper, the main problems faced in Sudan's health system with COVID-19 and its effects on the country are discussed. Besides, the steps and outcomes that should include an effective pandemic fighting strategy for Sudan are presented. At the end of the paper, some public health policy suggestions are made to develop an epidemiological surveillance system that uses data from similar other African countries to build comparable measures to understand Sudan's actual reality.

Keywords: COVID-19, Sudan, Public Health Policy, Surveillance, Poverty

**PREVALENCE OF DEPRESSION AND ITS ASSOCIATED FACTORS DURING
COVID-19 PANDEMIC IN ADULT POPULATION OF GHAZIABAD,
UTTAR PRADESH**

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ABSTRACT

Background: COVID-19 pandemic started in India on 30th January 2020, a nationwide lockdown was enforced from 24th March onwards. During the lockdown phase, most citizens were confined to their homes causing many psychosocial problems. **Objective** of this study is to find the prevalence of depression and its associated factors during COVID-19 pandemic. **Material and Methods:** A community based cross-sectional study was conducted among the adult population of urban Ghaziabad, Uttar Pradesh, India. Information was collected using a predesigned questionnaire with a sample size of 396 consenting individuals. **Results:** Of the 396 subjects, 99 individuals (25%) had depression, with mild, moderate and severe depression found in 20.45%, 3.53% and 1% individuals, respectively. Females were affected more than males (32.1% vs 18.2%). Prevalence of depression was found to be 50% among individuals living alone, 34.7% among unemployed people, and 30% among individuals whose income was reduced during the lockdown period. People who had been diagnosed with some psychiatric illness in the past, 62.5% of them suffered from depression. Individuals who were quarantined due to COVID-19 infection (positive and suspected cases), 45.5% of them had depression. Individuals who were divorced or separated, had an increased prevalence of depression [OR 9.2, (95% CI 1.2-73.7)]. People who practiced meditation during the lockdown period had lesser prevalence of depression [OR 2.87, (95% CI 1.1- 7.7)] than those who did not. **Conclusion:** The COVID-19 pandemic has had a major psycho-social impact on people. The findings from this study can help identify vulnerable individuals and prevent and/or reduce the morbidity of depression in future, both in India and other parts of the world.

Keywords: Covid-19, Depression



D1

[18]

GLOBAL PERSPECTIVE ON IMMEDIATE IMPACT OF COVID-19 ON MENTAL HEALTH AMONG HEALTHCARE WORKERS

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ABSTRACT

During the COVID-19 pandemic, healthcare workers are at high risk of infection, having physical exhaustion, and a burden on their mental health. This study aimed to investigate the immediate impact of the COVID-19 pandemic on the mental health of healthcare workers in terms of anxiety, depression, associated factors with mental health issues, and their risk perception on COVID-19. A cross-sectional, web-based study was conducted between April to May 2020. We recruited healthcare workers mainly from low- and middle-income countries. The outcome measures were assessed by using (i) Generalized Anxiety Disorder (GAD-7) scale, (ii) Patient Health Questionnaire (PHQ-9), and (iii) the risk perception among healthcare workers. The data was analysed using logistic regression analysis. A total of 2097 participants from 31 countries were included in the analysis. Overall, the prevalence of anxiety was 60%, and depression was 53%. Participants working in the Intensive Care Unit (ICU) were at a higher risk of anxiety (AOR 1.685, 95% CI 1.274-2.228). Participants who continue staying with family (AOR 0.546, 95% CI 0.372-0.800), friend/ colleague (AOR 0.481, 95% CI 0.277-0.836), working in the laboratory (AOR 0.376, 95% CI 0.163-0.867) were



at a lower risk of anxiety. Being single was associated with a higher risk of depression (AOR 1.325, 95% CI 1.035-1.697). Females (AOR 0.708, 95% CI 0.561-0.892), and working experience >10 years (AOR 0.462, 95% CI 0.292-0.733) were at a lower risk of depression. Risk perception was highest among doctors, providing healthcare to COVID-19 cases, unavailable mental health support, reported symptoms of anxiety, and depression ($p < 0.001$). The availability of mental health support at the workplace was inversely associated with the severity of anxiety ($p 0.006$). Mental health support for the healthcare workers should be available and accessible, meanwhile, special attention is needed for those who are staying alone, single, working in ICU, and junior healthcare workers.

Keywords- Mental health, COVID-19, Anxiety, Depression, Healthcare workers

D2

[19]

**IMPACT OF COVID-19 PANDEMIC ON THE ACADEMICS AMONG
ADOLESCENTS: CROSS-SECTIONAL STUDY**

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ABSTRACT

Research question: What is the impact of COVID-19 Pandemic on the academics of Adolescents?
Background: The recent pandemic of COVID-19 caused by novel corona virus has caused countrywide school closures and adoption of online learning platform for adolescents. Children are facing anxiety and uncertainty regarding the future. **Purpose:** To assess the impact of pandemic on the academic behaviour of the adolescents **Methodology:** A cross sectional online survey was conducted among adolescents using snowball sampling technique from 30th April 2020 to 30th May 2020. After informed consent, a questionnaire regarding their demographic characteristics, academic practices and stress associated with that was administered to them. Data management and analysis was done by using Microsoft excel and SPSS version 21.0. **Results:** Out of total 137 adolescents, 73(53.3%) were males and 64 (46.7%) were females. The mean age of participants' was 13.76 ± 2.9 . About 91.2% were attending online classes while 8.8% were doing self- study. Majority of adolescents in the age group of 10-17 years were facing difficulty with online classes as compared to late adolescents. The proportion of older adolescents having screen time of more than 2 hours was more than 80.0%. **Conclusion:** On statistical analysis, it was observed that middle and late age group of adolescents were facing significantly higher difficulty with online classes ($p < 0.001$) and late adolescents were having significantly more screen time ($p < 0.001$).

Keywords: COVID 19, Lockdown, Adolescent, Academics

**STUDY THE EFFECT OF COVID-19 DISEASE ON ANXIETY AND
PSYCHOLOGICAL DISTRESS IN INDIVIDUALS IN IRAN**

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ABSTRACT

Coronavirus is one type of virus amongst a large classification of viruses that can cause respiratory tract infections from the common cold to severe diseases such as MERS and SARS. The outspread of COVID-19 has occurred so rapidly in the world, that WHO has announced it as pandemic disease. Fast spread prevalence and unknown nature of this disease in different magnitudes cause anxiety and confusion in people around the world. Therefore, the anxiety and fear of an unknown nature of the disease decrease the perception of safety, which is stressful. Hence, it will be difficult to differentiate factual information from the fake and unreliable sources of information resulting in the lack of people's ability to cope with the disease properly. A Google based questionnaire was employed in this study. A total of 1480 individuals were attended the research. The interviewees were 31.6 years of age in average where around 50% were employed, 72.5% educated, 70% women and over 30% had an average monthly income of US\$500. Statistical analysis of data showed a significant relationship between variables such as gender, salary, education, and level of anxiety. On the other hand, 51.9% of individuals suffer from severe anxiety.

Therefore, due to the destructive effects of anxiety on various physical, mental, and social health dimensions, a comprehensive study is necessary to prepare an appropriate program to prevent further problems in the community.

Keywords: COVID-19, anxiety, psychological distress, Iran



E1

[21]

SPATIOTEMPORAL ANALYSIS OF MALARIA CASES IN OROMIA REGION, ETHIOPIA

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ABSTRACT

Despite major progress made in the fight against malaria, it remains an acute public health problem in sub-Saharan countries. Malaria is an infectious disease caused by parasites of the genus Plasmodium. This is transmitted to humans and other animals through bites from infected female mosquitoes of the genus Anopheles. The purpose of this study was to identify the variation of malaria cases that can determine the distribution of the cases within time, spatial areas, and zones in the study area. This data used in this study is obtained from Malaria Indicator Survey (MIS) recorded between September 2011 and August 2015. In this study, Poisson, Quasi-Poisson and Negative Binomial regression were used to investigate the effect of covariates. The likelihood method is used for the parameter estimation, while deviance was used for model fitting diagnostic checking. Malaria cases fluctuated during the study period with two epidemic peaks in 2012 and 2013 (88339 cases in East Wellega and 83908 cases in Ilu aba Bora). The lowest number of cases of malaria occurred in Bale zone (995 cases in 2014). Relying on specification diagnostics and measures of fit, the Negative Binomial model was found to be the best model for modeling malaria cases. The results of spatial and spatiotemporal analyses revealed positive spatial and spatiotemporal autocorrelation patterns of malaria prevalence rates in space which explain the geographical variations of malaria prevalence data in the region. The result of model specification and measures of fits shows that the Negative Binomial model was found to be a better fit to the data, and this explains the effect of covariates of malaria cases.

Keywords: Malaria Cases, Clustering, Spatial Autocorrelation, Spatiotemporal, Poisson Regression, Quassi-Poisson, Negative Binomial

EPIDEMIOLOGICAL STUDY OF SWINE FLU (H1N1) IN PUNJAB IN YEAR 2018

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ABSTRACT

Research Question: What are epidemiological correlates of H1N1 in Punjab? **Introduction:** The WHO, on March 11, 2019, launched the Global Influenza Strategy for 2019–2030, aimed at protecting people from influenza. Worldwide, its annual epidemics have resulted in about 3–5 million cases of severe illness and lakhs of respiratory deaths. Punjab has shown a lot of fluctuation in the reported number of H1N1 cases and deaths annually. **Purpose:** To assess the epidemiological determinants of H1N1 in year 2018. **Methodology:** Data were procured from the Directorate of Health and Family Welfare, Punjab and was analyzed. **Results:** Forty-seven cases of H1N1 were reported. The attack rate was 1.55/Lakh population. Higher percentage of cases, 61.7%, was found in urban than in rural areas. The mean age of H1N1 cases was 46.09 ± 16.36 years. A maximum number of cases, 42.6%, were in >50 years, followed by 25.5% in 40–50 years. Sex-wise difference in number of males and females was insignificant. The number of cases was maximum in December and minimum in April. A higher number of cases were found in private hospitals. **Discussion:** AR of H1N1 cases in 2018 in Punjab remained less than in other studies conducted in Punjab and some parts of India. It showed variations in different months of the same year. **Conclusion:** Keeping in view the occurrence of higher number of cases from December to April, more emphasis should be laid on prevention and control measures in these months.

Key words: Attack Rate, H1N1, Integrated Disease Surveillance Programme, influenza-like illness, respiratory illness, real-time-polymerase chain reaction assay, swine flu



E3

[23]

**IMPLEMENTATION CHALLENGES OF DIRECT BENEFIT TRANSFER
SCHEME FOR TUBERCULOSIS PATIENTS TREATED UNDER NATIONAL
TUBERCULOSIS ELIMINATION PROGRAMME IN NORTH INDIA**

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ABSTRACT

Research Question: What are the challenges faced on the part of the providers and the patients in the implementation of Direct Benefit Transfer Scheme under National Tuberculosis Elimination Programme? **Background:** India is a high TB burdened country with coexistence of food insecurity and undernutrition. Taking this into consideration, Government of India launched an Aadhar-linked direct benefit transfer (DBT) scheme from 1st April, 2018. Under this scheme, all notified TB patients would receive Rs 500 per month (~US\$7) throughout the course of their treatment for nutritional support. **Purpose:** To assess the challenges faced by the health providers and patients in the implementation of DBT scheme **Methodology:** This was a mixed method cross-sectional study conducted on all public and private TB patients notified during the year 2019 under NTEP in district Amritsar, Punjab. Quantitative data was obtained from the Nikshay portal after having permission from the District TB Officer. Qualitative data was obtained from the focus group discussion with the involved staff members of Tuberculosis units of Amritsar. Semi-structured in-depth interviews were conducted on patients, 10 each from private sector and the government sector. Data obtained was transcribed and items identified. **Results:** Significant difference was observed between the public and private sector and also between rural and urban areas. Bank account validation from the public sector was 71-78% whereas from private sector it ranges from 1-4% only. Results of qualitative data will be presented at the time of presentation of the study. **Conclusion:** Coverage was low among the urban population and from the private sector. The main challenges for implementation of DBT was lack of awareness among the patients and lack of support from private doctors.

Key words- Tuberculosis, Direct Benefit Transfer, challenges

EFFECTS OF HOUSEHOLD FACTORS, MOSQUITO BREEDING AND CONTROL MEASURES ON DENGUE VECTORS INFESTATION IN NORTHEASTERN THAILAND

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ABSTRACT

Aedes aegypti is the main vector for important infectious disease dengue and widely distributed throughout the world. The variables that influence the abundance of dengue vectors are many and complex. This study aims to identify risk determinants of the prevalence of *Ae. aegypti* population based on the assessment of entomological indices, as well as socio-demographic, household characteristics, mosquito breeding, and control measures. A one-year longitudinal study was conducted in four villages of northeastern Thailand between January-December, 2019. As analytical tools, generalized linear models (GLMs) were fitted to evaluate the effects of socio-demographic, household, mosquito breeding and control related risk factors on the presence of each population of dengue vectors (female adult and immature *Ae. aegypti*). The fitted GLM showed the abundance of female adult *Ae. aegypti* is significantly associated with the education level and monthly income of the household respondents, household crowding index (HCI), premise condition index (PCI), location of bathroom/toilet, the presence of eave gaps or other openings in the house, windows screened with netting and use of adult control ($P < 0.05$). The presence of immature *Ae. aegypti* is significantly associated with education level and occupation as commercial of the household respondents, PCI, types of the wall of the home, windows screened with netting, and the number of the wet container in the house ($P < 0.05$).

The study findings can be used for the critical first step toward developing routine entomological surveillance, vector control activities, effective dengue prevention and control including other mosquito-borne diseases at the household and community levels in the region and similar dengue-endemic countries.

Keywords: Dengue, *Aedes aegypti*, *Aedes albopictus*, Vector indices, Vector Control

F1

[25]

FACTORS ASSOCIATED WITH TREATMENT ADHERENCE IN HYPERTENSION PATIENTS IN RURAL AREAS

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*Universitas Islam Bandung, Indonesia****ABSTRACT***

Catastrophic event because of complications of hypertension such as stroke or heart attack are challenging to deal with in rural communities due to the lack of health facilities. For this reason, treatment adherence in hypertensive patients is needed to prevent long-term complications event. This study aims to analyze the various factors associated with treatment adherence in rural patients. We conducted a cross-sectional study using consecutive data collection at one of the rural health centres in Bandung Regency with the highest hypertension cases. Type of adherence including determinants consisted of demographic characteristics, complication knowledge and family support were analyzed by Chi Square's test. During one week of data collecting we had 73 hypertension patients but none of them consumed the medicines routinely, they quitted the drugs when complains disappeared. As many as 86% (95% CI 76; 92%) subjects came to control their disease when they had complaint such as headache or neck stiffness. Only demographic characteristics such as monthly income, level of education, and availability of transportation have significant association ($P < 0.05$) with routine examination where better characteristics lead to a better compliance. We suggest that hypertension must be treated not only as a disease, but also as a community problem that need economic intervention.

Keywords: complications, demographic factors, economic factor, hypertension

IMPACT OF HEALTH-CARE SERVICE QUALITY ON PATIENT SATISFACTION

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ABSTRACT

BACKGROUND: Patient satisfaction is a comprehensive measurement of patients' happiness with the level of health care delivered to them both inside and outside the physician's office. It is commonly used as an indicator to assess the health-care quality and affects a wide range of components related to the provision of health services such as ease of access, medical malpractice, and clinical outcomes. The study aimed to analyze patients' satisfaction with the quality of health care they received at the outpatient department of Klinik Kesihatan Maharani Muar Healthcare Facility (KMMHF), Johor.

METHODOLOGY: This cross-sectional study was conducted between August and December 2019 period. Demographic information and information on patients' feelings about their physicians, treatment, and health facilities provided were collected from 407 consented patients in a simple random sampling survey using a researcher-made, an adapted Medical Interview Satisfaction, questionnaire which was pilot tested before administration to the patients. Data were analyzed with SPSS version 23. Descriptive statistics and correlational and group comparison analyses were utilized.

RESULTS: Of the 407 patients studied for physician-patient satisfaction, the overall mean of all the respondents responding was 4.089 ± 0.5 , which was ranked the highest among the three objectives. The effectiveness of treatment came as the second highest with the overall mean of 4.088 ± 0.5 . Finally, the overall health-care facilities had the lowest overall mean of 4.077 ± 0.5 among the three.

CONCLUSION: Most patients who visited KMMHF were mostly satisfied with the outcomes of physician-patient interaction in the clinic.

Keywords: Effective treatment, health-care facilities, health-care service, patient satisfaction, physician-patient interaction, service quality

F3

[27]

A BRIEF INSIGHT ON KNOWLEDGE ABOUT VIRAL HEPATITIS IN PREGNANCY AMONG CLINICIANS

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ABSTRACT

Viral Hepatitis is one of the most serious infections during pregnancy which not only causes complications for the mother but can also be transmitted from mother to child during pregnancy. Owing to limited studies on the related subject, under the present study authors aims to assess the current knowledge about viral hepatitis in pregnancy among clinicians. A cross-sectional study was conducted among physicians who attended National Seminar for Physicians on Viral Hepatitis in Pregnancy organized by PRAKASH (Programmed Approach to Knowledge and Sensitization on Hepatitis), Institute of Liver and Biliary Sciences, New Delhi on the occasion of viral hepatitis day. An online link to 25-item questionnaire was shared with all the registered participants to assess the knowledge about viral hepatitis in pregnancy. The data was analysed using IBM-SPSS version-21. Independent samples t-test was used to assess the mean knowledge score across various demographic factors. The statistical significance was considered to be 0.05. A total of 64 physicians with mean age of 33.73 ± 10.57 and 42.2% being females, were included in the study. Mean knowledge score was found to be 15.41 ± 3.47 , out of total score of 25. A total of 38 (59.3%) participants had poor-to-moderate knowledge. A total of 61.6% physicians responded correctly to the knowledge questions. No variations in knowledge was observed with respect to their demographic factors ($p=0.971$). The study suggests poor-to-moderate knowledge about viral hepatitis in pregnancy among physicians. Thus an immediate action is to be taken to initiate training about diagnosing and managing viral hepatitis in pregnancy among treating physicians.

Keywords: Viral Hepatitis, Pregnancy, Obstetrics and Gynecology, Mother-to-child-transmission, Hepatitis B vaccine, Knowledge assessment.

G1

[28]

**ASSESSING THE LEVEL OF READINESS FOR SELF-DIRECTED LEARNING
AMONG ASIA METROPOLITAN UNIVERSITY STUDENTS IN JOHOR BAHRU,
MALAYSIA**

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ABSTRACT

Background: Self-directed learning (SDL) is one of the important components of adult learning especially for all individuals to further develop their education and upgrading their learning skills themselves. SDL can have far reaching implication of student's life-long learning skills and in particular SDL readiness (SDLR) will help in the development of student-centered curriculum of AMU. **Objective:** The general objective is to assess the level of readiness for Self-Directed Learning among undergraduate students of Asia Metropolitan University. **Materials and Method:** The descriptive cross-sectional study was utilized. This study surveyed the level of SDLR scale by Fisher et al consisting of 40 questions. We conducted convenience sampling of total 320 undergraduate students who were from MBBS, Nursing, Foundation in Science, Diploma in Health Care Management and Business program of AMU. **Result:** The total mean scores for SDLR is 157.9 ± 20.5 while mean scores of self-managements, desire for learning and self-control were 57.6 ± 7.9 , 48.5 ± 6.4 , and 51.9 ± 7.8 respectively. About two-third of both age group (≤ 20 & > 20) and female were found to be ready for SDL methods. Although there is no statistically significant difference between different age group, genders and programs, logistic regressions reveals that female of > 20 years of age group were more receptive and ready for SDL. **Conclusion:** The majority of AMU undergraduate students are ready for SDL with female and older age groups are more receptive and ready for SDL. This reflects that SDL is directly related to the maturity and also influenced by the gender although it can't be proven to be statistically significant.

Keywords: Readiness of self-directed learning, curriculum development, modern method of learning



G2

[29]

INTERPROFESSIONAL EDUCATION, PRACTICE AND CARE: EMERGING INNOVATIVE TREND TO HEAL AS ONE

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ABSTRACT

BACKGROUND: Interprofessional education (IPE) occurs when health professionals from diverse disciplines learn with, from and about each other. Thus, the interprofessional and collaborative practices are important approaches that must be immediately determined in all medical and health science disciplines. Students should be prepared with new learning experience of IPE in timely fashion. **AIMS:** To determine the readiness for IPE in two consecutive original studies, eight months apart by author. First study in medical undergraduates at (one) private and (one) public university in Malaysia. Second study among students from three Faculties of health sciences at (one) private university. **METHODOLOGY:** Both studies each, are cross sectional. Convenience sampling was done in both, using Readiness for interprofessional learning scale (RIPLS). Descriptive and inferential statistics were used to analyze data. **RESULTS:** In the first study, all (361) medical students in public (231, with respondent rate of 100%) and private university (130, with respondent rate of 99.2%) were IPE ready with total mean score of (80.58) Private and (81.19) Public respectively. Similarly, in the second study the students were a total of 158, with respondent rate 100%. There was no statistically significant mean score differences among the students from three Faculties using ANOVA, indicating an equal level of readiness for IPE with RIPLS scores ranging from 83.4 to 84.56. **CONCLUSION:** IPE readiness, helps to facilitate integration of IPE into current curricula. The University's Top Management & Academic Board need considerations to include IPE curricula as a University Policy in order to facilitate the acquisition of interprofessional knowledge and skills in new generations of health professionals. In other words, let ALL of us health professionals, join hands to HEAL AS ONE!

Keywords: Collaborative practices, Innovative, Interprofessional education (IPE), Readiness Interprofessional Learning Scale (RIPLS), Quality patient centered Care

FACILITATING COMPLEX LEARNING: USE OF 4C/ID MODEL IN AN OCCUPATIONAL MEDICINE COURSE DESIGN

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ABSTRACT

This article describes a theoretically based micro-curriculum design using the four-component instructional design (4C/ID), a relatively newer-approach model to create an educational lesson and work plan for complex learning. Clinical rotation in the workplace or community-based setting is a complex learning experience for a medical student. The author used the 4C/ID model to design a course on occupational medicine in an undergraduate medical school's public health rotation. The authors describe the 4C/ID model principles and briefly describe its practical application in designing the occupational medicine course. In this model, learning tasks serve as the course's backbone, with meet the expert session and other supportive information organized around them. The authors proposed a model of a one-week schedule of an occupational medicine rotation in community and hospital-based settings. The differences between the 4C/ID model from conventional models are the existing part-task assignments. The 4C/ID model's use to develop the educational intervention moves the paradigm from lectures or rigid-cognitive overload clinical rotation scheme to a well-designed learning task to better prepare learners for real practice in the future. Further class action research should be performed to prove the effectiveness of the proposed model.

Keywords: curriculum, design, 4C/ID, occupational medicine, public health



G4

[31]

A CROSS SECTIONAL ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS PREVENTION AND MANAGEMENT OF ALCOHOL RELATED LIVER DISEASES AMONG INDIAN NURSES

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ABSTRACT

Excessive alcohol consumption is increasing over the years, with alcohol being the most common cause of liver-related deaths in India. Compared to its burden, Alcohol-related Liver Disease (ALD) receives less than requisite attention and often patients suffer from stigmatisation by the health care workers (HCW) which hampers the management of the patient. This indicates HCWs to have sufficient knowledge, positive attitude (KAP) and should follow good practices while managing ALD patients. In view of same, Institute of Liver and Biliary Sciences (ILBS) under project Liver Education and counselling in Alcohol-related liver Disease (LEAD) assessed the KAP related to diagnosis and management of ALD among HCWs. A cross-sectional study was conducted by administering a thirty-seven-item-questionnaire with twenty-seven knowledge, five attitude and five practice related questions to nursing professionals working in any type of healthcare settings across India, from August 27, 2020- October 31, 2020. Maximum score of knowledge section was 27, attitude section was 25 and practice section was six. The questionnaire was filled by sharing an online link with nursing professionals already linked with Project ILBS-ECHO. The data was analysed using IBM-SPSS software v-21. A total of 796 nursing professionals across 25 states participated in the KAP assessment with mean age 31.6 ± 7.5 and majority being females (80.5%). Mean knowledge, attitudes and practice scores were found to be 13.1 ± 3.9 (out of 27), 17.1 ± 3.3 (out of 25), 3.8 ± 1.2 (out of 6) respectively. Knowledge was significantly correlated with attitude ($r=0.137$) and practice ($r=0.214$) whereas practice and attitude were also found to be positively correlated ($r=0.189$). The study indicates need for training healthcare professionals in multiple aspects of ALD for better prevention of complication and management of ALD patients.

Keywords: Alcohol-related liver diseases, Nurses, Counselling, hepatitis, Capacity building

H1

[32]

DETERMINANTS OF PATIENTS PREFERRING COMPLEMENTARY AND ALTERNATIVE MEDICINE BEFORE COMING TO DIFFERENT PUBLIC HOSPITALS OF LAHORE, PAKISTAN

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ABSTRACT

The cross-sectional study was carried out to find out the frequency and determinants of patients preferring complementary and alternative medicine over authorized medical doctors before coming to public hospitals. The cross-sectional study was conducted among patients in different public hospitals of Lahore, Pakistan. Pretested Self-administered questionnaire was used to collect data. Frequency and percentage distribution tables were generated and chi-square was used to evaluate the correlation between variables. P value of 0.05% was taken as significant. A total of 385 questionnaires were filled (Response rate= 100%). 200 (51.9%) patients had experienced with at least one of the CAM healer in their life. 166 (83%) of them verified the positive outcome of CAM therapies. Cost effectiveness (n=227; 59%), better understanding(n=99; 25.7%) and guidance (n=131;34%) about disease by CAM healers, harmless therapies (n=198; 51.4%), natural ingredients of medicines (n=198;51.4%) accessibility (n=154; 40%), psychological satisfaction (n=161;41.8%) fewer appointments(n=221; 57.4%), diagnosis without laboratory tests(n=222; 57.7%), family influence(n=131;34%), surgical fears (n=52;13.5%) faith in spiritual exercises(n=101; 26.2%), addiction to CAM products (n=63; 16.4%), better communication (n=122; 31.7%) and sparing more time for consultation (n=183; 47.5%) were the beliefs and determinants due to which patients preferred CAM over professional doctors. There are different health belief models prevailing throughout the world. Complementary and Alternative medicine is always being a critical and objectionable but competent and predominant part of health care system in Pakistan. This study sorted out the beliefs and reasons due to which patients were intended to consult CAM providers.

Keywords: Complementary and Alternative Medicine, Patient's Preferences, Health Beliefs Models.



H2

[33]

AN EPIDEMIOLOGICAL PROFILE OF PEOPLE LIVING IN THE VICINITY OF COAL BASED THERMAL POWER PLANT AT GANDHINAGAR WITH SPECIAL REFERENCE TO RESPIRATORY ILLNESSES, A COMPARATIVE STUDY

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ABSTRACT

Objective: To study the lung impairment of people living in the vicinity of the coal based thermal power plant.

Study Design: Community based cross-sectional comparative study focused on the community living in the vicinity of the coal based thermal power plant (CBTTP) of Gandhinagar, Gujarat. Study population was drawn from the area within 0.5- 5 kilometres from the thermal power station and 236 from control area living more than 100 km away from the power plant, together 469 participants were selected randomly. Physical examination and Pulmonary Function Tests (PFT) were performed for each participant and data was recorded on proforma.

Result: Difference in FEV1, FVC & PEF, Chronic respiratory conditions like recurrent attacks of cough and cold, bronchial asthma & pulmonary TB are more in people living in the vicinity of the CBTTP. It found statistically significant.

Conclusion: Found worst FEV1 & PEF values particularly in young age & in non-smokers staying in the vicinity of CBTTP. Periodic screening of people for early diagnosis of lung function impairment to prevent respiratory illnesses and their complications.

Keywords: Lung Impairment, Coal based thermal power plant, Spiro metric values.

**EFFECT OF SOCIO-ECONOMIC STATUS ON AWARENESS OF STROKE RISK
AMONG THE DOMINANT MALAY POPULATION IN KELANTAN**

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ABSTRACT

Background: Stroke considered as top leading cause of mortality and most common cause of adult disability worldwide. Awareness of stroke risk factors are important key points in improving the prevention and control of cardiovascular risk factors. This study was performed to assess the awareness of stroke risk factors and to determine the socio-economic factors related to the event among the Malay population. Methods: A cross-sectional study was conducted in Kelantan, Malaysia involving the total 295 respondents. They were assessed using 'Attitudes and Beliefs about Cardiovascular Disease (ABCD) Risk Questionnaire' which consisted domain of knowledge, perception to the risk and benefits and intention to change the behaviour. The total score represented the awareness of stroke risk and association to the socio-economic factors were assessed using the multiple regression analysis adjusted to the potential confounder. Results: Mean age of the respondents was 34.9(SD 11.6) and 61.0% were women. Majority of respondents were married (71.2%), 46.1% were attending tertiary educational and 76.9% were in below-40 group. The mean score of awareness was 62.0% (SD 12.3) with the lowest mean score in domain of perceived to the risk, 46.82% (SD 19.59) while the other domains ranged from 66.4% to 77.9%. There were significant predictors of age ($\beta = 0.167$, p-value = 0.007), marital status ($\beta = 3.26$, p-value = 0.004) and educational level ($\beta = 4.05$, p-value = 0.003) to the awareness of stroke risk among the targeted population. Conclusion: Age, marital status and educational level were independent factors to predict the level of awareness of stroke risk in Malay dominant population. Therefore, raising public awareness of stroke risk among the specified middle age population will improve the incidence of stroke and eventually reduce the mortality and morbidity related to the stroke event

Keywords: stroke, awareness, risk factor, socio-economic, adult population



H4

[35]

**GESTATIONAL WEIGHT GAIN (GWG) AMONG PREGNANT WOMEN
ATTENDING ANTENATAL CARE IN SELANGOR, MALAYSIA: WHAT ARE
THE DETERMINANTS?**

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ABSTRACT

Suboptimal gestational weight gain (GWG) is associated with adverse maternal and fetal outcomes including risk of chronic disease in later life. To date, there is very limited literature on determinants of GWG in Malaysia, specifically in Selangor. This study aimed to determine the proportion, and associated factors of suboptimal GWG among pregnant women in Selangor. A cross-sectional study was conducted among 475 pregnant women aged ≥ 18 years, from 18 selected health clinics in Selangor between January to March 2020. All pregnant women with first trimester booking ≤ 12 weeks gestation that fulfilled the inclusion and exclusion criteria were included in the study. A stratified multistage sampling was performed. Interview guided questionnaires consisting sociodemographic, obstetric characteristics, validated Malay version 6-items Household Food Security Survey Module (6-item HFSSM) questionnaires, pregnancy physical activity questionnaires (PPAQ), and diet diversity questionnaires were used. Data on obstetrical characteristics were extracted from the antenatal books. Cut-off values of GWG adequacy were based on Institute of Medicine (2009) recommendations. Findings showed that 224 (47.2%) pregnant women were having inadequate GWG, 142 (29.9%) adequate GWG, and 109 (22.9%) excessive GWG. Multinomial logistic regression showed that having diabetes mellitus (AOR 2.24, 95% CI: 1.31, 3.83, $p=0.003$); middle (M40) monthly total household income (AOR 2.33, 95% CI: 1.09, 4.96, $p=0.029$), low (B40) monthly total household income (AOR 2.22, 95% CI: 1.07, 4.72, $p=0.039$), and pre-pregnancy BMI obese (AOR 2.77, 95% CI: 1.43, 5.35, $p=0.002$) were significantly associated with inadequate GWG. Pre-pregnancy BMI overweight (AOR 5.18, 95% CI: 2.52, 10.62 $p<0.001$) and obese (AOR 17.95, 95% CI: 8.13, 36.95, $p<0.001$) were significantly associated with excessive GWG. The identification the determinants of suboptimal GWG, particularly the modifiable determinants are important for targeted intervention to prevent maternal and fetal morbidity and mortality.

Keywords: Suboptimal GWG, income, diabetes mellitus, Malaysia

NCD SCREENING USING WHO STEPS AMONG UNDERGRADUATE MEDICAL STUDENTS OF RIMS, RANCHI

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ABSTRACT

Introduction: Non-communicable diseases (NCDs), according to EURO symposium, 1957, It can be defined as “an impairment of bodily structure and/or function that necessitates modification of the patient’s normal life, and has persisted over an extended period of time”. Main categories of NCDs are Cardiovascular diseases (like heart attacks and Stroke), Cancers, Chronic Respiratory diseases (such as Chronic Obstructive Pulmonary Disease or COPD and Asthma), and Diabetes. The leading cause of NCD deaths in the world in 2016 were: Cardiovascular diseases (17.9 million/ 44%), Cancers (9 million/ 16%), Respiratory diseases (3.8 million/ 9%), and Diabetes (1.6 million/ 4%). India being a populous country of about 1.3 billion, contributes to more than 2/3rd of the total deaths due to NCDs in the South-East Asia Region (SEAR) of WHO. In Jharkhand the leading causes of DALYs (Disability Adjusted Life Years) in 2016 included Ischaemic Heart Diseases (6.6%), COPD (3.3%), Stroke (2.7%), Diabetes (1.8%).

Objective: To identify different risk factors of NCDs which can be present among the UG medical students. To assess the general trend of lifestyle of UG medical students in present scenario.

Methods: Cross sectional descriptive Study.

Conclusion: This study highlights that there is huge scope to curb the modifiable risk factors among our future doctors by encouraging the students to modify their behaviour related life styles, where their friends who are not having these risky behaviours can also play a major role.

Keywords: NCD, WHO, UG Medical Student.



J1

[37]

**BENS-APP (BENSON'S RELAXATION APPLICATION) REDUCING SIDE
EFFECTS OF CHEMOTHERAPY IN BREAST CANCER PATIENTS:
DEVELOPMENT AND USABILITY STUDY**

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ABSTRACT

Chemotherapy's effects decrease quality of life in breast cancer patients. Smartphone apps are readily to deliver Benson's relaxation program. This study aimed to develop and assess the usefulness of the "Bens-App (Benson's relaxation application)" for breast cancer patients. Methods: the study included 28 breast cancer patients in Baladhika Husada Hospital in Jember. Indonesia. The application was developed in several stages (1) literature review to determine the content (2) the application feasibility test carried out by 2 experts in the fields of medical surgical nursing and oncology. Usability tests was performed after the patient had used Bens-App for 7 days. The mHealth App Usability Questionnaire (MAUQ) was used to measure usability. Results: Bens-App contains 6 features (1) health information about breast cancer, Benson's relaxation and fatigue (2) Benson's relaxation guide using audio (3) "reminder" reminds patients to perform Benson relaxation at twice/day (4) self-monitoring which in graphical form on the home page, (5) documentation via web to observe patient activity with the Bens-App. Usability tests results show there are 3 items get the highest average MAUQ score, "I will use this application again" (6.5/7), "Applications that are useful for health and me" (6.5 / 7), "Applications improve my access to health services" (6.5/7) and the lowest average score on the item "I can use the application when the internet network is poor or unavailable" (5.28/7). Conclusion; Bens-App can be received well, although there are some items that still need improvement. Further research in larger populations is required.

Keywords: Chemotherapy, breast cancer, mobile app, benson's relaxation

CARDIOVASCULAR DISEASE MANAGEMENT BY OMEGA-3 FATTY ACID

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ABSTRACT

The omega-3 fatty acids (FAs) found in fish and fish oils (eicosapentaenoic and docosahexaenoic acids, EPA and DHA) have been reported to have a variety of beneficial effects in cardiovascular diseases. Ecological and prospective cohort studies as well as randomized, controlled trials have supported the view that the effects of these FAs are clinically-relevant. They operate via several mechanisms, all beginning with the incorporation of EPA and DHA into cell membranes. From here, these omega-3 FAs alter membrane physical characteristics and the activity of membrane-bound proteins, and once released by intracellular phospholipases, can interact with ion channels, be converted into a wide variety of bioactive eicosanoids, and serve as ligands for several nuclear transcription factors thereby altering gene expression. In as much as blood levels are a strong reflection of dietary intake, it is proposed that an omega-3 FA biomarker, the omega-3 index (erythrocyte EPA+DHA) be considered at least a marker, if not a risk factor, for coronary heart disease, especially sudden cardiac death. The omega-3 index fulfils many of the requirements for a risk factor including consistent epidemiological evidence, a plausible mechanism of action, a reproducible assay, and independence from classical risk factors, modifiability, and most importantly, the demonstration that raising tissue levels will reduce risk for cardiac events. For these and a number of other reasons, the omega-3 index compares favourably with other risk factors for sudden cardiac death.

Keywords: Eicosapentaenoic acid, docosahexaenoic acid, biomarkers, risk factors, cardiovascular disease.

J3

[39]

TRAUMATIC BRAIN INJURIES: A BURDEN ON SOCIETY. A CROSS-SECTIONAL STUDY OF TRAUMATIC BRAIN INJURIES AND PRE-HOSPITAL TREATMENT AT A TERTIARY CARE TRAUMA CENTRE IN SOUTH PUNJAB, PAKISTAN

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ABSTRACT

Introduction: TBIs or Traumatic Brain injuries are one of the most common reasons for young adult death and disability. Little epidemiological data currently exists for the Southern Punjab region of Pakistan and this paper sought to examine the case mix, and the incidence of disease by examining the admissions and A&E attendances following head injury at Nishtar Hospital, one of the region's two tertiary care centres that cares for a population of around 32 million people.

Methods: standard form in English was created based on data collected by other similar studies conducted in other countries, which was then circulated to members of the A&E department, and neurosurgical department for a 3-week period in July 2016.

Results: 450 patients (379, 84.2% Male and 71, 15.2% Female) were recorded as admissions or attendances with a mean age 28.9 years. 420 people (93.2%) had suffered a TBI following an RTA with 356 people (79.1%) suffering these injuries having not worn a helmet. 226 (53.2%) people arrived by private transport though within the city limits of Multan, '1122' ambulance services were the most common mode of arrival at the hospital with 85.2% (150 patients) of this cohort showing good penetration of this service in the city. Mean distance of travel for those suffering TBIs within the city was 9.2km versus 81.0km on average outside.

Discussion: Recommendations included training all pre-hospital staff in ATLS protocols and widening the 1122 ambulance services beyond city limits. Deep analysis revealed that where significant delay was present, road networks were the leading cause of delay and so local government should strive to improve road quality which will reduce time to presentation.

Keywords: Traumatic Brain Injuries, Motorcycle, Pre-hospital care, Pakistan, Emergency admissions

POTENCY BIOMARKER EFFECT OF ENDOTHELIAL MICROPARTICLES (EMPs) AS PREDICTING CARDIOVASCULAR RISK ON SHIFT WORKER

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ABSTRACT

Shift work results in changes related to worker's behaviour, food, and sleep patterns cycle. These changes cause the circadian rhythm disturbance which is one of cardiovascular risk. Until now biomarker effect on shift worker for cardiovascular risk is still not developed. The purpose of this study was initial study for cardiovascular risk by measuring flow cytometry detection of endothelial micro particles (EMPs) using CD31+. This was an initial longitudinal study using comparative three shift workers and one non shift worker who met the inclusion criteria (consist of 27 samples). The results showed that among non-shift worker, CD31+ did not drastically increase and it was below 200/ul, whether among shift worker, CD31+ drastically increased especially on the fourth and the seventh day by following one shift working days. There was increased on micro particles using CD31+ on shift worker compared to non-shift worker which is detection of activation of endothelial cell. There was increased of microparticles as CD 31+ on shift worker.

Keywords: Cardiovascular risk, CD31+ Micro particles, Shift work.



RECURRENT MYOCARDIAL INFARCTION REQUIRING SUBSEQUENT PERCUTANEOUS CORONARY INTERVENTIONS: A CASE PRESENTATION

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ABSTRACT

ST-segment elevation myocardial infarction (STEMI) causes significant myocardial damage and requires immediate intervention. We present a case of complicated STEMI requiring successive percutaneous coronary interventions (PCI) over a single hospital stay. A 62-year-old hypertensive and diabetic male was diagnosed with acute anterior STEMI. His PCI showed triple vessel disease. Using multiple risk assessment tools we evaluated his condition and prognosis: he was Killip Class II, his TIMI risk score was 4, his GRACE scores 1.0 and 2.0 were 157 and 120 respectively, and his SYNTAX scores I and II for PCI were 24.5 and 34.3 respectively. These scores put the patient in the high-risk category for mortality. We installed a single stent in his left circumflex artery (LAD) restoring the flow from TIMI 0 to TIMI 1 – 2. Four days after initial PCI, his severe chest pain recurred due to stent thrombosis in the LAD. Reperfusion was achieved by percutaneous transluminal coronary angioplasty resulting in a TIMI 3 flow. Postoperative follow-up demonstrated improvement in the chest pain and EKG. The use of multiple risk assessment tools helped us predict a recurrent myocardial infarction in this patient during hospital stay and guided our prompt treatment. Therefore, we recommend utilizing these tools to develop treatment plans and to improve prognosis in STEMI patients.

Keywords: coronary artery disease (CAD), ST-segment elevation myocardial infarction (STEMI), percutaneous coronary intervention (PCI), multiple risk assessment tools

K1

[42]

**ENVIRONMENTAL NUISANCE AND QUALITY OF LIFE OF RESIDENTS OF
RIVERS STATE, NIGERIA**

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ABSTRACT

Human activities with devastating impacts have affected the physical environment in many ways which have triggered changes that have constituted nuisance and are affecting our quality of life. This study examined some environmental irritants and how they affect quality of life of residents in Rivers State, Nigeria. In course of the study, three research questions and three hypotheses were set. Also the study adopted the correlational research design and 520 residents were selected from a population of approximately 5.2 million adult residents that made up the study population. To select the study sample, the simple random sampling technique was used. Two instruments were used for data collection, which were the Environmental Nuisance Questionnaire (ENQ) and Quality of Life Scale (QLS). The instruments were validated by two community health experts in the Department of Community Medicine, College of Medical Sciences, Rivers State University, Port Harcourt. The test-re-test method was used to establish a reliability coefficient of 0.70 and 0.75 were obtained for ENQ and QLS respectively after the application of the instruments on 30 respondents who were not part of the study sample. Data generated were analyzed using the Pearson Product Moment Correlation. Major finding revealed that the quality of health of residents had strong but inverse relationship with environmental nuisance. Based on the finding, it was recommended among other things that human activities on the environment that affect human health be regulated.

Key words: Environment, Environmental nuisance, Quality of life, Health



K2

[43]

GASTRONOT, A PILOT PROJECT FOR PROMOTING SUSTAINABLE DIET AND HEALTHY EATING HABIT

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ABSTRACT

Gastronomy is essentially the practice or art of choosing, cooking, and eating good food. It usually is seen as an elite, upper-middle-class movement. Eating good food, meanwhile, is (or should be) a human right. Everyone, including low-income consumers, should be able to enjoy a healthy and tasty meal and have the power to decide how. Is it possible? This project is a pilot project supported by Hivos to test the possibility of bringing people from the middle-income class to join the gastronomy movement, especially in a sustainable diet and healthy eating habits. The game-based learning approach used in this project. A board game developed with the core gameplay designed to cater to elementary school students' primary target audience. The game uses two main campaign messages Piramida Gizi Seimbang and Isi Piringku, as the main message and content. Players' main goal is to collect foods and arrange them to fulfil the nutritional needs (based on the suggested composition and proportion in Piramida Gizi Seimbang and Isi Piringku). The game was designed to be played by up to 8 players, divided into two groups (Gastroteam). The team with the highest score at the end of the game will win. The pre and post-test results showed that participants enjoy the game while also improving their nutrition knowledge. While some improvement still needed, boardgame Gastronot showed an excellent chance to be a candidate for a learning tool to increase sustainable diet and healthy eating habits among elementary school children.

Keywords: Gastronot, Game-based Learning, Sustainable diet, and Healthy eating habits

**MULTILEVEL ANALYSIS OF FACTORS ASSOCIATED WITH UNDERWEIGHT
AMONG UNDER-FIVE CHILDREN IN ETHIOPIA**

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ABSTRACT

Almost half of under-five children were determined to be underweight. Gender inequality, socio-economic and cultural backgrounds, number of child-births, and inadequate knowledge of the parents had a greater impact on children's nutritional status. This is study's core aims were to identify socioeconomic and demographic factors and variations of the severity of being underweight among under-five children in Ethiopia. Nine thousand thirteen children under-five age were included for the study. Cross sectional variables were collected from respondents. The study data has level-2 hierarchical data with 9013 under-five children. The study revealed that about 25.3% of under-five children in Ethiopia were under-weight (low weight for age z-score). The Random intercept and fixed-effect model were found to be better models than the empty model and, random coefficient (slope). Variations of under-five children who were underweight among the regions of Ethiopia was non-zero and predicting variation of under-five children underweight among regions in Ethiopia. Sex, place of residence, the educational levels of mothers, and her husband, diagnosis of diarrhea in the last two weeks, the employment status of mothers, the age-group of child in months, if the child has a twin, birth order, the status of breastfeeding, size at birth, place of delivery, and the status of fortified baby food had significant effects on being underweight among under-five children at 5% significance level. There exist significant variations in the prevalence under-five children being of underweight among the regions in Ethiopia.

Keywords: underweight, under-five children, random intercept and fixed effect model

K4

[45]

CONDOM USE IN COMMERCIAL SEX TRANSACTIONS: A REVIEW IN INDONESIA CASE

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ABSTRACT

Consistent condoms use on commercial sex transactions is beneficial to prevent transmission of HIV and STIs. In brothel based Female Sex Worker (FSW), it was low as 40%, while their HIV prevalence, number of client, and risky sexual behavior continues to increase. Large-scale brothels closures have caused FSW monitoring difficulties. This review aims to get an overview of risk responsive roles and policies, the implementation of condom use' health promotion, and overview of condom use by FSW and clients. The review was done in 2018 and used Round Table Discussions with cross sectors decision makers in Jakarta and in Tangerang, Surabaya, and Timika, then field confirmation with FSW, outreachers, male clients, and health officers. The observation found many FSW albeit their unsettled locations. Low estimation resulted in distribution and access problems to free condoms. The origins problems of prostitution have not been tackled thoroughly, while new ones emerge. Gaps in the enforcement of commercial sex laws as it is more to FSW than to pimps and clients. Condoms are used as evidence of violations to Public Order and Peace of Society Local Regulation. Dialogues among decision makers to obtain preeminent solutions needed. Prostitution needs to be stopped through long term and comprehensively program, based on positioning FSW as victims. Reproductive Health education need to be provided to all at-risk populations, beside including information on protecting themselves and families, comprising using condoms when having risky sex in addition to family planning. National and Regional AIDS Commissions need to be institutionalized. In conclusion, Regional risk-responsive regulations and implementation of HIV-STI prevention need to be updated and enriched to accommodate current issues of risk behaviors and circumstances.

Keywords: condom, commercial sex transaction, HIV prevention, policy, risk-responsive

POSTER PRESENTATIONS

P1

[46]

**EFFECTS OF SMARTPHONE USAGE ON PSYCHOLOGICAL WELLBEING OF
SCHOOL GOING CHILDREN IN LAHORE, PAKISTAN**

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ABSTRACT

Objective: To analyse the effects of smartphone usage on the psychological wellbeing of school going children.

Methods: The descriptive cross-sectional community household survey was conducted from January to May 2017 in all the 10 towns of Lahore, Pakistan and comprised school-going smartphone users. A self-administered structured questionnaire was used for data collection. Children who used smartphones for up to 2 hours a day were considered short-term users while children who used smartphones for more than 2 hours a day were considered long-term users. SPSS 21 was used for data analysis.

Results: Of the 2889 subjects, 1993(69%) were short-term users and 896(31%) were long-term users. Long-term smartphone usage was significantly associated with behavioral problems ($p < 0.05$)

Conclusion: Long-term smartphone usage was found significantly associated with behavioral and psychological problems among school-going children.

Keywords: Household survey, School-going children, Short-term smartphone usage, Long-term smartphone usage, Psychological problems. (JPMA 69: 955; 2019)

**OVERWEIGHT AND OBESITY AMONG 25-60 YEARS WOMEN IN LAHORE,
PAKISTAN**

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ABSTRACT

Objective: To observe association of factors such as nutritional factors, physical activities and systemic factors with overweight and obesity among 25 to 60 years old women.

Study Design: A quantitative household survey. Place and duration: The survey was carried out in all ten towns of Lahore, Pakistan from 4 th January 2016 to 4 th May 2016.

Methodology: The research investigated 3239 women (25 to 60 years of age) through multistage sampling technique; from which two neighboring localities were randomly selected; found 1106 women were overweight and 449 were obese whereas, 1684 females were normal weights who were excluded from the research study.

Results: Factors were found significantly associated with overweight and obesity. Among nutritional factors such as fast food and snacks have p-value 0.000, whereas, daily food intakes have p-value 0.001. Physical activities such as housework activities have p-value 0.000; whereas, both regular exercise and time spent on TV/ Computer per day have p-values 0.001. Systemic factors such as systemic diseases have pvalue 0.001 whereas family history of overweight and obesity and women using medications both have p-value 0.000.

Conclusion: The study concluded that overweight and obesity was positively associated with nutritional factors, physical activities and factors such as genetics, use of medications and systemic diseases among women 25-60 years.

Keywords: Overweight, Obesity, Nutritional Factors, Physical Activities, Systemic Factors, Household Survey.

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P3

[48]

CAREGIVER'S SATISFACTION REGARDING IMMUNISATION SERVICES IN A TERTIARY CARE INSTITUTE, PUNJAB, INDIA

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ABSTRACT

Research question: What is the level of satisfaction among caregivers of children regarding immunisation services being provided at immunisation clinic? **Background:** Childhood immunizations have been claimed to be the most appropriate and effective technology for child survival. For measurement of success of the services being provided in the hospitals patient satisfaction is one of the important yardstick. Determination of the degree of care giver's satisfaction towards immunization will provide evidence as to whether or not the right immunization services are being provided. **Purpose:** To assess the satisfaction of caregiver regarding immunisation services. **Methodology:** A cross sectional study was conducted in the immunization clinic attached to tertiary care institute. Care giver's (Mother, or accompanying person) of children aged up to 5 years visiting immunization clinic were included in the study. Data was collected by using standard proforma from the guide for conducting an Expanded Programme on Immunisation (EPI) Review. Proforma contained details of socio- demographic profile of care giver and satisfaction of care giver towards immunization services received at immunization clinic. By adopting convenient sampling technique, total of 75 responses of caregiver's were recorded. The data collected was compiled and statistical analysis was done using SPSS 20. **Results:** The study revealed that maximum mother's (57.3%) accompanied children as caregiver's for immunization in the clinic. Majority of caregiver's belonged to rural area. Further findings of analysis will be presented at the time of presentation of study. **Conclusion:** Majority of the caregiver's were satisfied with immunization services provided at the immunization clinic.

Keywords: Immunization, Satisfaction, Caregiver

**A STUDY OF KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING
BIOMEDICAL WASTE MANAGEMENT AMONG HEALTH CARE WORKERS IN
TERTIARY CARE INSTITUTION**

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ABSTRACT

Research Question: What are the knowledge, attitude and practices among healthcare providers regarding bio medical waste management? **Background:** Hospital waste is hazardous as well as very infectious and the problem is growing with an ever increasing medical field. Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar (SGRDIMSAR) is a tertiary health care institution. SGRDIMSAR has been selected by **UNIDO** (United Nations Industrial Development Organisation) for technical assistance, training and provision of free infrastructure. **Purpose:** To assess the knowledge, attitude and practices of health care providers about biomedical waste management in a tertiary care institution. **Methodology:** A cross sectional study was carried out in SGRDIMSAR on health care providers. Expecting that 50% of the study population had precise knowledge about the rules of biomedical waste management, with an allowable error of 10%, at 95% confidence interval, a minimum sample size of 426 was included. The monthly trainings regarding bio medical waste management are being conducted in institution. Pre-designed, pretested, structured questionnaire were administered and data was collected and analyzed by using SPSS-23. **Results:** Out of the total, more than half (67.3%) of study participants were females. Most of them were housekeeping staff. Majority were educated up to senior secondary. Nursing staff and lab technicians had significantly more knowledge ($p < 0.05$) than housekeeping staff regarding bio-medical waste rules. Practices regarding bio-medical waste management was relatively poor among housekeeping staff. **Conclusions:** Nursing staff and lab technicians had good knowledge, positive attitude and good practices regarding bio medical waste management as compared to housekeeping staff. Therefore, additional training are required for housekeeping staff.

Keywords: Bio-medical waste management, knowledge, attitude, practices, health care providers.



**STUDY ON THE QUALITY OF LIFE AMONG CANCER SURVIVORS
ATTENDING A TERTIARY CARE CANCER HOSPITAL IN MALAYSIA**

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ABSTRACT

Introduction: Cancer is a major public health problem in developed and developing countries. According to the Malaysian National Cancer Registry Report (MNCR), between 2007 and 2011, cancer incidence in Malaysia involving males was 86.9 cases per 100,000 people, compared to 99.3 cases involving females. **Objective:** We conducted this study to assess the quality of life (QoL) among cancer patients. **Materials and Methods:** A cross-sectional study conducted from October - November 2019 was to examine the QoL among cancer patients in the oncology department of Malaysian hospitals. The Malaysian people between 18 to 100 years who had been diagnosed with any type of cancer irrespective of their treatment status and prognosis were involved in this survey using questionnaire among 70 cancer patients in a convenient sampling technique. Data was collected from cancer patients by interview technique using a structured and validated interviewed schedule. **Results:** Of the 70 cancer patients, 29 (41.43%) were males and 41 (58.57%) were females. The most affected socio-demographic factors were marital status and occupation (employment). It was found that there were 55 (78.57%) married patients and 49 (70%) employed patients. QoL of most of the patients was influenced by the education level and treatment. It is known that 35 (50%) of them had low QoL scores. **Conclusion:** There is a need to develop measures of education on cancer for the community as well as to increase the awareness of the need of treatment to improve the QoL. The need to use strategies that will empower the patients to have a better sense of control over their illness and treatment is essential.

Keywords: cancer, quality of life, patients

**THE RELATIONSHIP BETWEEN SOCIAL MEDIA USE AND CYBERBULLYING
AMONG HIGH SCHOOL STUDENTS**

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ABSTRACT

The increasing use of social media among adolescents has become popular which could result in increased exposure to an on-line form of aggression. In this study, we identify the use of social media of high school students in an urban area and explore the relationship between social media use and cyber-bullying. A total of 231 students aged 15-18 years from Hanoi, Vietnam completed an online survey using a respondent-driven sampling method. The modified Patchin and Hinduja's scale was applied to evaluate the experience of being cyber-bullied. Findings show that all students have been using social media. One-fifth of respondents used 1-3 social media platforms while two-thirds of respondents used 4-5 types of social media. Almost half of the students (46.8%) have ever experienced cyber-bullying. Students who spent more time on the internet and students who used more types of social media are more likely to be cyber-bullying. One-third of students using 1-3 types of social media have experienced cyber-bullying while half of the students using 4-5 types of social media have experienced cyber-bullying. 30% of students spending less than 2 hours using the internet per day have experienced cyber-bullying while almost half of the students spending more than 2 hours on social media per day have experienced this. The popular use of social media among adolescents has resulted in the negative effects of cyber-bullying. This requires the attention of parents, teachers, and caretakers to have appropriate guidance and monitoring. Online interventions to increase awareness of students and the public as well as to provide support for students is needed.

Keywords: cyberbully, social media use, adolescents



CHALLENGES FACED BY PUBLIC HEALTH SUPERVISOR II: EXPERIENCES FROM RURAL MYANMAR

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ABSTRACT

Myanmar has been implementing a primary healthcare approach to ensure comprehensive healthcare. Basic health staff is the key health care personnel in the rural area. Among different categories of basic health staff, Public Health Supervisor Grade-II (PHS-II) is taking care of disease control activities and environmental sanitation, while midwives are taking care of maternal and child healthcare. Health Assistance (HA), the in-charge of Rural Health Centre, is taking the supervisory role of both midwives and PHS-II. This study aimed to explore the challenges met by PHS-II at their worksites in two randomly selected areas. Qualitative research was conducted in Shan State and Magway Division, which were randomly selected out of 14 States and Divisions in Myanmar. Focus Group Discussions (FGD) on PHS-II were done to explore their work experiences. FGD on HA were done to explore their impression on the performance of PHS-II. The data were analyzed with thematic analysis. Although the documented job description of midwives and PHS-II is very clear, role conflict of them was seen in practice. Some HA did not realize the job description for PHS-II working under their supervision. The PHS-II had to perform tasks beyond their job description whenever the situation demanded. The reporting system made the roles of PHS-II unobservable, and PHS-II felt that their works were not appreciated. PHS-II gets less recognition as health personnel by the community compare to midwives. This study gives insight into the challenges faced by PHS-II and factors link to their difficulties at work. The findings were valuable for health sector reform and curriculum revision for PHS-II training.

Keywords- Public Health Supervisor, PHS II, Challenges, Rural, Myanmar

**ACUTE SCREENING FOR PTSD AMONG CHILD EARTHQUAKE SURVIVORS IN
PALU, SULAWESI, INDONESIA**

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ABSTRACT

Post-traumatic stress disorder (PTSD) is one of the most common neuropsychiatric disorders that may develop following traumatic life events (Chiba, 2019). This study is an acute screening for Post-Traumatic Symptoms among children who survived the 2018 earthquake and subsequent tsunami and soil liquefaction in Palu, Sulawesi, Indonesia. These events were notable, as they were among the worst disasters in the world and caused massive deaths and destruction in the region. Objectives: The objective of this study was to determine whether child earthquake survivors in Palu are affected by PTSD. This study also specifically focused on the age, gender, and ethnic group of the children earthquake survivors in the different areas of Kayumalue and Jono Oge to determine if any relationship exists with post-traumatic symptoms. A cross-sectional survey was conducted in the affected areas in Kayumalue and Jono Oge. Data were collected from 69 children who were affected by the earthquake. The PTSS-10 scale, which is a structured questionnaire consisting of 10 close-ended questions, was used for this study. Correlation of the post-traumatic symptoms scores with age, gender, and the ethnic tribe was also analyzed. A total of 69 children (26 boys and 43 girls) with a mean age of 10.2 years and are from different ethnic tribes in Kayumalue and Jono Oge participated in this study. The majority (81.2%) showed no obvious post-traumatic symptoms. Some of the children (11.6%) showed borderline post-traumatic symptoms, while a few (7.2%) displayed significant post-traumatic symptoms. Among the two areas the researchers studied, the child survivors in Kayumalue did not exhibit obvious signs of PTSD, while the children survivors in Jono Oge showed significant effects of PTSD (significant up to $p < 0.05$). Conclusions: PTSD may develop following exposure to traumatic events. Children, adolescents, those from certain ethnic minorities, and those who experienced a more severe traumatic event have an increased risk of developing PTSD. However, more studies are needed in order to establish the full extent of the problem and determine how best to intervene.

Keywords: PTSD, earthquake survivors



P10

[54]

ROLE OF ARTERIAL BLOOD GAS (ABG) AS A VALUABLE ASSESSMENT TOOL OF DISEASE SEVERITY IN SARS-COV-2 PATIENTS

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ABSTRACT

Research Question: Though ABG analysis provides information regarding patient oxygenation, ventilation adequacy and acid base levels, the main purpose of this research was to see that which parameter among ABG analysis can play an independent role and to what extent.

Background: COVID-19 is caused by a novel coronavirus, named severe acute respiratory syndrome coronavirus2 (SARS-CoV-2). The foremost predominant complication of SARS-CoV-2 is arterial hypoxemia thereby disturbing lung compliance, requiring mechanical ventilation. **Purpose:** The aim of the current research study is to analyze role of ABG as a valuable assessment tool of disease severity in SARS-CoV-2 patients. **Methodology:** 92 arterial blood samples were collected from patients admitted in Intensive Care Unit (ICU) of Sri Guru Ram Das Charitable Hospital, Amritsar. They were analyzed for arterial blood gas using ABG analyzer. Parameters of ABG such as pH, pCO₂, HCO₃, O₂ saturation, ionized calcium and calculated ionized calcium (at pH 7.4) was calculated for all the samples. **Results:** Mean \pm SD were calculated for all the said parameters. Analysis of arterial blood gas revealed significant negative correlation ($p < 0.05$) between pH and pCO₂ and significant positive correlation ($p < 0.05$) between pH and HCO₃. Low levels (96.7%) of ionized calcium were observed while monitoring the ABG findings though insignificant correlation ($p > 0.05$) was observed between pH and ionized calcium. **Conclusion:** Logistic regression analysis revealed that pCO₂, HCO₃ and ionized calcium were independently correlated with disease severity in SARS-CoV-2 patients

Keywords: SARS-CoV-2, pCO₂, HCO₃, ionized calcium

**INVESTING IN WOMEN'S HEALTH IN PAKISTAN- ROLE OF MASS MEDIA:
POSITIVE OR NEGATIVE?**

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ABSTRACT

Objective: Investing in women's health is still an island in this huge sea of knowledge. Hence, this research intends to focus on role of mass media on Pakistani women's wellbeing.

Methodology: The systematic review synthesized data from PubMed and Google scholar databases reaped 27 eligible studies, of which 5 studies were on family planning/ contraception use and 5 studies on STD's prevention, 6 studies on breast cancer and its screening, 7 studies on cervical cancer and its screening and 4 studies on social media exploitation among Pakistani women.

Results: Findings revealed that reliability and active participation in mass media has fetched many educational programs in improvement women psychological and physical health awareness. But at the same time excessive use of media caused troubles and negative impact on youth's perception and attitude regarding women reproductive and sexual health resulting in obscenity leading to sexually transmitted diseases, unplanned pregnancy and miscarriages; which has inevitably affected women's health.

Conclusion: The study concluded that mass media aims to capitalize women health on contraception use, family planning, STD's prevention, breast and cervical cancer screening. To enable women combating grave unavoidable diseases and promote healthy environment, cybercrime must be checked in developing countries like Pakistan; as well as parents continual monitoring on their children networking websites will help community to refrain from occurrence of various adverse health consequences as well as from unwanted sexual and risky behaviors.

Keywords: Mass Media, Breast and Cervical cancer, Contraception use, Social exploitation



P12

[56]

A STUDY TO EVALUATE THE IMPROVEMENT IN KNOWLEDGE OF NURSING STAFF WORKING IN THE CANCER DEPARTMENT OF A NORTH-INDIAN TERTIARY CARE HOSPITAL ON ICN CODE OF ETHICS 2012 AFTER A HALF DAY WORKSHOP: AN INTERVENTIONAL STUDY

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ABSTRACT

Introduction: Nursing care is essential for ensuring quality treatment of patients. These days nursing care is given much more importance and is measured using the patient-satisfaction tools. Nursing care is more important especially in the field of treatment of cancer patients or end-care patients. The current study was designed to evaluate the perception of nursing staff working in the cancer department towards patient treatment. It is followed by a detailed session on ethics and a post-session questionnaire.

Material and Methods: The current research article included a pre-validated pre-session questionnaire for participants who were enrolled after taking informed consent. These participants were later given detailed presentation on bioethics in nursing care and its importance. It was followed by a pre-validated post-session questionnaire and evaluating the knowledge gained through the session using the earlier pre-session questionnaire.

Results and Discussion: The study highlighted the fact that all the participating nursing staff was well aware regarding the basic requirements for the patient care. But they did not have much idea regarding bioethics. The detailed presentation threw some light on this important topic and it was effective as observed by the improvement in the post-session and the earlier used pre-session questionnaire.

Conclusion: Bioethics is considered essential for improving nursing care in treatment of patients. Though it is not given much importance in the current curriculum, but the nursing staff members often shows interest in learning this concept for improving patient care. This can be ensured by giving detailed presentations regarding bioethics to all the new entrants of the nursing course

THE DOUBLE BURDEN OF MALNUTRITION AMONG MOTHER AND CHILD IN TENGGER SOCIETY

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ABSTRACT

The problem of double burden malnutrition arises and becomes a public health problem. Characteristics of double burden malnutrition problems include the presence of undernutrition along with over nutrition both in individuals, families, and populations at all stages of life. In Tengger society there are also double burden malnutrition problems in mother and child. The purpose of this study was to analyze the double burden malnutrition problems among mothers and children in Tengger society. This analytic observational study was designed with a cross sectional study. The study population were the mother and her under five y.o children in Wonokitri Village, Tosari District, Pasuruan Regency, East Java, which is one of the Tengger tribal settlements. The sample was taken by simple random sampling. The sample size obtained 100 mothers and under five y.o children. The variables included the characteristics of family, mother and children; eating habit; breastfeeding, and nutritional status of mothers (BMI and MUAC) and children (W/A, H/A and W/H index). Data were analyzed by chi-square test and Pearson test. BMI of mothers mostly were normal category (38%), but the tendency for obesity was also quite high. MUAC of mothers were predominantly overweight (41%). The nutritional status of under five children mostly normal, but there was stunted and severe stunted children (41%) and wasted children (22%). There was no relationship between BMI and MUAC of mothers with W/A, H/A and W/H children ($p>0.05$), but there was a tendency for mothers who are over nutrition to have children with undernutrition.

Keywords: Double burden malnutrition, Nutritional status, Tengger Society

P14

[58]

**BANGTAN SONYEONDAN (BTS): HOW THEY BRIGHTEN UP
THE FACE OF ADOLESCENT MENTAL HEALTH?**

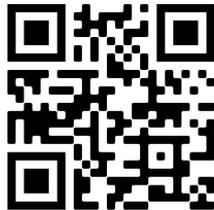
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ABSTRACT

In 2017, UNICEF collaborated with a South Korean boyband, Bangtan Sonyeondan (BTS) to launch the Love Myself and #ENDViolence campaign as anti-violence prevention effort for children and adolescents. BTS were chosen as the ambassador because they are considered to have a big positive influence on young people. BTS's involvement in mental health promotion was not only limited to the campaign. This research was conducted to explore and describe the efforts that have been made by BTS regarding adolescent mental health. This research was a qualitative study using case study research design. Tools that were used in this research were documents from popular articles, scientific articles and YouTube videos. Data analysis was performed using NVivo 12.0 for Mac. The result showed that there are three major themes, namely antecedents, strategies and impacts. The antecedents are divided into 4, namely the philosophy behind their famous name, role models, campaigns and messengers. Strategies are divided into being inspirational, representing the possible, behavioral models, donations, UN Speech, partnerships, power of lyric and music, and the use of digital communication technology. The impacts for their fans are increasing motivation and self-esteem, peer support, mood boosters and stimulate fans to be agents of social change. The conclusion from this study shows that celebrity diplomacy can be used to improve adolescent mental health. Next step is to conduct quantitative research focus on depression and anxiety on adolescent.

Keywords: Adolescent, BTS, Love Myself Campaign, mental health



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