ePOSTER • ENVIRONMENTAL, NUTRITION AND POPULATION HEALTH

[P P E 1]

KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING THE USE OF FACE MASKS AMONG THE COMMUNITY IN A MALAYSIAN TOWN DURING THE COVID-19 PANDEMIC

Husna Amni Jalaluddin[1], Regina Phei Chern Yew[1], Xiao Thoong Loh[1], Quintina Guey Juan Tan[1], Navinea Nathan[1], Aqil Mohamed Daher[2], Ismail Burud[3]

[1]Medical Student, School of Medicine, International Medical University, Clinical Campus, 70300 Seremban, Negeri Sembilan, Malaysia

[2]Associate Professor in Community Medicine, Department of Community Medicine, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

[3]Senior Lecturer in Surgery, Department of Surgery, International Medical University, Clinical Campus, 70300 Seremban, Negeri Sembilan, Malaysia

We aimed to compare the attitudes and behaviours of final year undergraduate dental students at a UK institution towards managing deep caries (tooth decay) to currently accepted best practice.

Dental caries is reportedly the most prevalent disease globally affecting over 2.4 billion people. Unmanaged, carious lesions can progress rapidly into deeper layers of the tooth ultimately leading to pulpal necrosis indicating complex and costly endodontic treatment or extraction. Pulpitis, a common sequela of caries, can have a significant deleterious effect on quality of life.

Among vital measures to effectively curb the incidence of COVID-19 is the use of face masks. The public's awareness of the knowledge, attitude, and practice of face masks is important in reducing the transmission of COVID-19. There is still little known about what people know as well as how they perceive and use face masks. This study aimed to determine the community's knowledge, attitude and practices on the correct usage of face masks, mask management, the awareness of the risk of air-borne infections, and the effective ways of using face masks in preventing them.

A cross-sectional study was carried out in Seremban 2, Malaysia from September to November 2020. A self-administered questionnaire adapted and modified from 2 validated questionnaires of previous studies was distributed face-to-face. IBM SPSS statistics software was used to analyse the results.

Of the 392 respondents, 382 (97.4%) demonstrated satisfactory knowledge regarding face masks. Satisfactory attitude was seen in 349 (89%) respondents while 326 (83.2%) showed satisfactory practice. A small percentage of participants (44.1%) demonstrated careless and incorrect disposal of face masks. Demographic variables of female gender (p=0.009) and participants with college or university education (p=0.005) were significantly associated with better practice (p<0.05). A significant but weak correlation between knowledge, attitude and practices was observed.

In conclusion, public health interventions surrounding the use of face masks have proven to be effective in increasing the community's knowledge. However, this effort would require more emphasis on the appropriate attitude and practices when using face masks to ensure the effectiveness in curbing the spread of infection. Further intervention plans on community health education targeted towards practical advice may prove to be more useful in the future.

[PPE2]

PREVALENCE OF DEPRESSION AND ANXIETY AMONG IIUM PRE-CLINICAL MEDICAL STUDENTS DURING COVID-19 PANDEMIC

Nur Alia Iman Shaik Mohd Nizam, Amalia Izzati Razman, Muhammad Haikal Abdullah,
Muhammad Ikmal Arif Ahmad Ashhar, Ahmad Zhareff Emir Ahmad Haridan,
Nur Khairunnisa Nor Azlan, Mohammad Muaz Mohamad, Shahida Athirah Shahrir,
Muhammad Ashraf Fithri Anuar, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli,
Muhammad Razin Zamani, Muhammad Adam Mohd Azani, Hazulin Mohd Radzuan,
Nour El Huda Abd Rahim, Shahida Saharudin, Wan Fatein Nabeila Wan Omar

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia (IIUM),
Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

Given the tough nature of studying medicine, medical students are at a higher risk of developing mental health-related issues such as depression and anxiety than the general public. The worries about what the future holds, lack of social interactions due to shifting towards online learning and being confined inside the house for a long period of time due to government-imposed lockdown, might negatively affect medical students' state of mind. This study was done to determine the prevalence of depression and anxiety among International Islamic University Malaysia (IIUM) pre-clinical medical students during COVID-19.

A cross sectional study involving Year 1 (n=77) and Year 2 (n=81) medical students of IIUM was conducted from July till August 2020, and they were recruited to answer a self-administered online survey. This study was done in accordance with terms stipulated by the institutional ethical committee (Research ID: 735). The Generalized Anxiety Disorders Scale (GAD-7) and Well Being Index (WHO-5) scores were used to assess the level of anxiety and depression among the students respectively. The data were analysed using IBM SPSS Statistics 26 (IBM, New York).

From 158 respondents, 27.8% of the students experienced depression, while 86.7% of students flagged symptoms of anxiety. In accordance with this outcome, the concern about their physical well-being, social relationship and effectiveness of online learning during this pandemic crisis are among the factors that might contribute to the increase of depression and anxiety among the students.

This study has concluded that IIUM medical students showed an increased risk of suffering from depression and anxiety during the COVID-19 era. It is highly suggested that proper interventions such as university support group online gathering, interactive online learning and gamification, and promotion of online counselling be administered in order to preserve good mental health of medical students during this pandemic.

[PPE3]

ASSOCIATION OF BARRIERS OF LEARNING DURING COVID-19 PANDEMIC WITH MENTAL HEALTH

Muhammad Haikal Abdullah, Amalia Izzati Razman, Nur Alia Iman Shaik Mohd Nizam, Muhammad Ikmal Arif Ahmad Ashhar, Ahmad Zhareff Emir Ahmad Haridan, Nur Khairunnisa Nor Azlan, Mohammad Muaz Mohamad, Shahida Athirah Shahrir, Muhammad Ashraf Fithri Anuar, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli, Muhammad Razin Zamani, Muhammad Adam Mohd Azani, Hazulin Mohd Radzuan, Nour El Huda Abd Rahim, Shahida Saharudin, Wan Fatein Nabeila Wan Omar

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia (IIUM), Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

On March 11, 2020, the World Health Organization (WHO) declared that COVID-19 has become a pandemic. Therefore, online learning (OL) has replaced face-to-face teaching and learning sessions in many schools and colleges. This has forced the students to adapt to a new environment and overcome some barriers during the OL. However, the increase in suicidal rate among students is a disturbing phenomenon due to mental vulnerability experienced during the current worldwide situation. This study was done to investigate the association between barriers of learning during Covid-19 with mental well-being among International Islamic University Malaysia (IIUM) pre-clinical medical students.

A cross-sectional study was conducted among the Year 1 (n=77) and Year 2 (n=81) medical students of IIUM, from July until August 2021. They were recruited to answer self-administered online questionnaires based on 5 remote learning barriers (inadequate interaction with classmates and teachers, lack of peer support and confidence to handle online tasks, and difficulty in applying taught concepts). The survey includes Generalised Anxiety Disorder (GAD-5) and Well Being Index (WHO-5) to assess mental well-being and was approved by the institutional ethical committee (Research ID: 735). The results were analysed using IBM SPSS Statistics 26 (IBM, New York).

The prevalence of depression and anxiety among medical students were 27.8% and 86.7% respectively. More than half of the respondents agreed with all learning barriers listed. However, the difficulty in applying taught concepts is the only significant barrier associated with depression ($p<0.05$).

In conclusion, although only one item was identified as significant, it was an undeniable factor. Corrective measures must be taken to minimise it as continuous exposure may deteriorate mental health among medical students. Careful evaluation is required in order to ensure that the quality of education remains upheld to its highest standards without jeopardising the students' psychological well-being.

[PPE4]

ASSOCIATION BETWEEN SLEEP QUALITY AND MENTAL HEALTH AMONG IIUM MEDICAL STUDENTS DURING COVID-19

Muhammad Ikmal Arif Ahmad Ashhar, Amalia Izzati Razman, Muhammad Ashraf Fithri Anuar, Muhammad Haikal Abdullah, Ahmad Zhareff Emir Ahmad Haridan, Nur Khairunnisa Nor Azlan, Mohammad Muaz Mohamad, Shahida Athirah Shahrir, Nur Alia Iman Shaik Mohd Nizam, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli, Muhammad Razin Zamani, Muhammad Adam Mohd Azani, Hazulin Mohd Radzuan, Shahida Saharudin, Wan Fatein Nabeila Wan Omar, Nour El Huda Abd Rahim

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

Medical students usually sacrifice their sleep to adjust to their workloads. It is worth noting the importance of a good night's sleep to ensure the body and mind's optimum performance. However, depriving oneself of much-needed sleep in exchange for productivity has been shown to have deleterious consequences on the students' physical health and their state of mind. The objective of this study was to investigate the association between sleep quality and mental health among International Islamic University Malaysia (IIUM) medical students in the COVID-19 era.

A cross-sectional study was conducted from July 2021 until August 2021 in IIUM and all year 1 and year 2 medical students were invited to participate. A total of 158 students responded, consisting of 77 first-year and 81 second-year medical students. The survey was distributed to assess the sleep quality using Pittsburgh Sleep Quality Index (PSQI), while the mental health status was measured using WHO-Five Well Being Index (WHO-5) for the depression level, and the General Anxiety Disorder-7 (GAD-7) for the anxiety level. The association between sleep quality and mental health was tested using Pearson's chi-square test and Fisher's Exact test.

The findings showed a significant association between sleep quality and the mental health of medical students. A higher proportion of participants (86.4%) with depressive symptoms had poor sleep quality. Similarly, 81.8% of participants with anxiety symptoms had poor sleep quality. There was significant association between sleep quality and depression and/or anxiety ($p<0.001$).

This study has shown a significant association between sleep quality and mental health status among IIUM medical students. It is highly recommended that the university provide interventions including advertising good sleep hygiene and coping mechanisms to support students' mental health in this COVID-19 era.

[PPE5]

SAFETY PERCEPTION OF HOME-BASED FOOD PRODUCTS

Norfatin Nabila Mohd Azmi[1], Hermy Bin Mohd Yeet[2], Ibrahim Bin Abu Bakar[1]

[1]*Department of Nutrition Sciences, International Islamic University Malaysia, Bandar Indera Mahkota Campus
Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia*

[2]*International Institute of Halal Research, International Islamic University Malaysia,
Jalan Gombak, 53100 Selangor, Malaysia*

The emergence of home-based food business is quite significant after the Covid-19 pandemic started in Malaysia. This might be due to a lot of people being affected financially. Operating a food business from home seems easy. However, there are many bad consequences that could occur if the safety and hygiene aspects are not prioritized by the home-based food merchants. Therefore, this study aimed to evaluate the consumers' perception on food safety of the food that was bought online from home-based food entrepreneurs.

A questionnaire was distributed through various online platforms. Malaysians aged ranging between 18 to 70 years old were eligible to participate in this study. A total of 402 respondents answered all the questions which consisted of five parts. Data were analysed using SPSS 21.0 for descriptive statistics.

Majority (94%) of the respondents have experience purchasing food online and (54.5%) of the respondents were confident with the safety level of the food they purchased. This study found that there are still a number of people who did not care or did not perceive the safety of food purchased from home-based food merchants as one of the important aspects before purchasing any food product. Further research may be beneficial in understanding more about the future of online food and consumer perception towards the safety level of the food. There are many other possible factors that can be included in this research area because people's perceptions are infinite.

[PPE6]

THE EVALUATION OF KNOWLEDGE AND PERCEPTION HOME ABOUT KITCHEN CLEANLINESS FOR PREPARATION OF COMMERCIAL FOODS

Nor Syamimi Mohd Shahizi[1], Hermy Bin Mohd Yeet[2], Ibrahim Bin Abu Bakar[1]

[1]*Department of Nutrition Sciences, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Bandar Indera Mahkota, Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia*

[2]*International Institute of Halal Research, International Islamic University Malaysia, Jalan Gombak, 53100 Selangor, Malaysia*

Home food business is allowed by the health authority since the COVID-19 pandemic started in Malaysia. Many people take the opportunity to sustain their life by selling food through online platforms. This study was conducted to evaluate the knowledge and perception of Malaysians on the cleanliness of home kitchen for the preparation of commercial foods.

A total of 439 respondents from all states in Malaysia were conveniently recruited to take part in this study. They were required to answer a set of questionnaires which consisted of three sections: sociodemographic, level of knowledge regarding home kitchen cleanliness and perception regarding home-based food business. For the level of knowledge regarding home kitchen cleanliness, a scoring system was used and each has a score ranging from 1 to 6 with total score as 178. The maximum score was divided by total score and changed to a percentage value. The score which is less than 50% indicated poor knowledge, 51-70% shows average level of knowledge, 71% - 85% indicates good knowledge and above 86% shows excellent level of knowledge regarding home kitchen cleanliness. For the section of perception towards home-based food business, the questions consisted of three choices of answer which were agree, partially agree and disagree.

More than half of participants had an excellent knowledge regarding home kitchen cleanliness. There was a significant difference (p-value < 0.05) between the level of knowledge according to marital status, size of the kitchen and practicing home-based food business while no significant difference (p-value > 0.05) was found in gender, race, and educational level. Furthermore, more than 70% of respondents agreed that preparation of commercial food can be done at home. This research showed that people started to accept home-based food business nowadays.

ePOSTER • ENVIRONMENTAL, NUTRITION AND POPULATION HEALTH

[PPE7]

SLEEP QUALITY, QUALITY OF LIFE AND PSYCHOLOGICAL STATUS OF USM PHARMACY UNDERGRADUATES DURING ONLINE LEARNING PERIOD IN COVID-19 PANDEMIC

Divyashini A/P Vickneswaran, Guat See Ooi, Nur Aizati Athirah Daud

Department of Clinical Pharmacy, School of Pharmaceutical Sciences, University Sains Malaysia, 11800 Gelugor, Penang, Malaysia

University students had to face the consequences of COVID-19 pandemic, such as the changes in learning method, particularly the conversion from conventional to online learning. Subsequently, this may have led students to suffer sleeping problems, psychological distress and poor quality of life (QoL). Therefore, this study aimed to investigate the sleep quality, quality of life and psychological status of the USM pharmacy undergraduates during the online learning period following the COVID-19 pandemic and its associated factors. Thus, a cross sectional online survey was conducted from 3rd November 2020 till 2nd December 2020. A questionnaire was distributed via Google Form to all the USM pharmacy undergraduates. This questionnaire comprised of 4 sections such as background information, sleep quality (PSQI), quality of life (SF-36) and psychological status (DASS-21). Chi-square test was used to compare the categorical variable, whereas independent t-test was used to compare the continuous variable. A p-value of less than 0.05 was accepted as a significant value in this study. 214 participants have completed the questionnaire and majority (n=154, 71.8%) of the respondents were poor sleepers. The overall mean score for the QoL was 63.2 ± 17.1. A significant correlation was found between poor sleepers and all the SF-36 domains ($p<0.05$). Moreover, internet capacity was found to be significantly associated with depressive and anxiety symptoms with a significant value of $p=0.027$ and $p=0.020$, respectively. Findings revealed the need of an appropriate intervention among USM pharmacy undergraduates to improve their sleep quality, quality of life and psychological status.

[PPE9]

ASSOCIATION OF CLINICOPATHOLOGICAL CHARACTERISTICS OF COLORECTAL CANCER AND DIABETES MELLITUS: A RETROSPECTIVE HOSPITAL-BASED DESCRIPTIVE STUDY

Mathangi Devindran[1], Saint Nway Aye[2], Purushotham Krishnappa[2], Thin Thin Win[2]

[1]*Department of Medical Sciences, Biomedical Science Programme, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[2]*Department of Pathology, School of Medicine, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

Colorectal cancer (CRC) and diabetes mellitus are common non-communicable diseases in Malaysia with shared risk factors such as sedentary lifestyle, obesity and high caloric diets. Studies have found diabetes to increase the risk of CRC and vice versa due to hyperinsulinemia, the increase in insulin-like growth factor-1 and hyperglycaemia. The mortality rates of CRC patients with diabetes were also higher than those without diabetes.

A retrospective descriptive study was carried out at the tertiary hospital in Seremban, Hospital Tuanku Jaafar (HTJ), where pathological and medical records of 940 cases of CRC, from January 2014 to December 2019, were collected for clinicopathological characteristics such as age, sex, ethnic group, site, histopathological type, staging, grading, presence of adenoma and diabetes status of the patient. Chi-square and Fisher's Exact Test were used to analyse the association between the characteristics of CRC and status of diabetes mellitus.

It was found that most diabetic patients were diagnosed with CRC in the 60-69 age group while non-diabetic patients were found among the 50-80 age range. There was no statistical significance found between diabetes and the other clinicopathological characteristics of colorectal cancer.

The findings are attributable to only one tertiary hospital in the country and is not representative of Malaysia. Further studies should be carried out in multiple tertiary hospitals across all states for more meaningful statistical output. Nevertheless, this study provides a steppingstone for larger community-based studies in Malaysia.

[PPE10]

MEDICAL STUDENTS' MENTAL HEALTH STATUS AND COPING STRATEGIES IN THEIR QUARANTINE PERIOD DURING COVID-19 PANDEMIC IN UNIVERSITI PUTRA MALAYSIA

Shyeanne Gunn Shian Yen[1], Siti Aisyah Mohd Jalani[1], Muhammad Aliff Aiman Rushlan[1], Razif Abas[2]

[1]Medical Students, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Serdang, 43400 Selangor, Malaysia

[2]Department of Human Anatomy, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Serdang, 43400 Selangor, Malaysia

The Movement Control Order (MCO) was enforced by the Malaysian government on 18th March 2020 due to the sudden increase in the cumulative number of COVID-19 cases. University students, including medical students, are among the group of the population which were significantly affected. This study was conducted among medical students in Universiti Putra Malaysia (UPM) to compare the mental health status and its coping strategies, between gender and phase of the clinical study with their quarantine status between 18th March 2020 to 9th June 2020.

This was a cross-sectional study involving the undergraduate medical students in UPM in the 2019/2020 academic years during the MCO. A stratified random sampling method was used and a total of 173 respondents which included Year 1, Year 2, Year 3, Year 4 and Year 5 participated. The study was conducted after five months since the first day of MCO, for 1 week period of data collection. The mental health status was assessed using DASS-21. Four points Likert scale were scored to determine the degree of severity. The coping strategies using Brief-COPE introduced four points Likert scale as well and the total marks were grouped into four coping strategies.

This study found higher scores of DASS-21 in the non-quarantined group and "approach" was considered as a favourable coping strategy in both groups. In the quarantined group, female and clinical students showed higher scores of DASS-21. In the non-quarantined group, clinical students showed a significantly higher score of stress while male students significantly used their humour as coping strategies.

[PPE11]

THE USE OF VIDEOS FOR DIABETES PATIENT EDUCATION: A SYSTEMATIC REVIEW

Cosette Hoe, Badariah Ahmad, Jessica Watterson

Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia, Jalan Lagoon Selatan, Bandar Sunway, 47500 Subang Jaya, Selangor, Malaysia

Diabetes cases are rising in numbers, and this calls for public health concern in both developed and developing nations. Self-care is an important component in reducing the incidence of complications. The current popularity of online videos raises the question of whether educational videos could be effective in disseminating high-quality, useful information for people with diabetes.

Electronic databases, including Ovid (Medline, Embase, EmCare), PsycINFO, CINAHL, Web of Science and Scopus, were searched for studies using educational videos for people with diabetes. Studies were screened against the inclusion criteria, data was extracted and narrative synthesis was conducted.

A total of 36 studies met the inclusion criteria. The studies reported outcomes including biological (i.e. HbA1C, weight, BMI), non-biological (health literacy, self-efficacy) and subjective feedback (i.e. acceptability, cultural appropriateness) from study participants. Median length of video was ≤10 minutes. Online dissemination was the most common method of video distribution. A statistically significant decrease (ranging from -0.1 to -2.1%) in HbA1C was noted in most studies. Standardised methods of measuring non-biological outcomes are needed so a more concrete conclusion can be drawn. Study duration also needs to be longer to examine the longevity of beneficial effects of videos. Subjective feedback from participants were generally positive, with cultural appropriateness and representation mentioned as significant factors.

ePOSTER • ENVIRONMENTAL, NUTRITION AND POPULATION HEALTH

[PPE12]

IMPACT OF COVID-19 LOCKDOWN ON BACK PAIN PREVALENCE, INTENSITY AND ASSOCIATED RISK FACTORS AMONG ADULTS IN MALAYSIA

Le Hui Foong[1], Tsai Yuan Teong[1], Chian Ying Chun[1], Zhi Leng Chan[1], Huma Shahzad[2], Brinnell Annette Caszo[2], Mona Mohamed Ibrahim Abdalla[2]

[1]School of Health Sciences, International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

[2]School of Medicine, International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

Back pain is a common musculoskeletal disorder that has been a major public health concern. In Malaysia, the implementation of the Movement Control Order (MCO) had negatively impacted individuals in many aspects, including inappropriate posture due to inconducive work/study space at home, decreased physical activity due to restrictions of movement as well as increased psychological stress due to social isolation, which all may lead to musculoskeletal problems. The main purpose of the study was to assess the back pain prevalence and intensity among adults in Malaysia during COVID-19 lockdown. Also, to identify the association between demographic, physical and psychological risk factors and back pain.

A total of 623 adults (185 male and 438 female) aged between 18 and 60 years in Malaysia participated in this cross-sectional study. A questionnaire was used to collect data regarding their socio-demographic profile, occupational-related aspects, physical activity, psychological aspects, lifestyle and pain-related aspects. Statistical analysis was then performed with SPSS and Chi-square test was used to identify the significant risk factors.

The back pain prevalence before lockdown was 64.4% and increased to 83.5% during the lockdown and the back pain intensity significantly increased during the lockdown. The neck and shoulder were reported to be the most common musculoskeletal pain area. Furthermore, the results indicated that the following factors were associated with back pain during lockdown: gender, duration of sitting, duration of computer use per day, type of chair used, ergonomics practices and stress level.

The COVID-19 lockdown resulted in a significant increase in back pain prevalence and intensity. Thus, early detection of the back pain associated risk factors will help to prevent back pain progression to a chronic disease state, thereby enhancing a person's quality of life.

ePOSTER • ENVIRONMENTAL, NUTRITION AND POPULATION HEALTH

[PPE13]

PREVALENCE OF SHOULDER INJURIES AMONG VOLLEYBALL PLAYERS AT THE INTERNATIONAL MEDICAL UNIVERSITY

Lei Szee Sia, Sheng Hui Kioh

Department of Chiropractic, Centre of Complementary and Alternative Medicine (CCAM), International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

Volleyball is a worldwide sport played by different age groups at competition level. Published studies have found that the injury prevalence rate among athletes is three times higher than the general population due to high training volume among volleyball players. Therefore, the objective of this study was to identify the prevalence of shoulder injuries among volleyball players at the International Medical University.

This is a cross-sectional study involving 45 volleyball players from the volleyball club in the International Medical University. Information on participant's age, gender, time spent practising volleyball, volleyball experiences in the IMU, prevalence of shoulder injuries and awareness of shoulder injuries at the IMU was obtained while symptoms related to their shoulder problem was measured by the Western Ontario Shoulder Instability (WOSI) questionnaire. Descriptive statistics were used to describe the prevalence of shoulder injuries.

Data on shoulder injuries was available for 45 participants. Majority of the participants were aged between 21 to 26 years old (73%) and female (62%). Of the 45 participants, 14 (31%) of participants were having shoulder injuries when playing volleyball. In conclusion, the prevalence of shoulder injuries experienced by volleyball players in the IMU was similar with other studies conducted in the Western countries. While our study needs to be verified with a larger sample size, the results of the study can be the baseline data to consider interventions among volleyball players for shoulder injuries.

While our study findings need to be verified with a larger sample size, the results of this study can be the baseline data to consider interventions among volleyball players for shoulder injuries.

[PPE14]

EFFECTS OF COVID-19 LOCKDOWN ON MUSCULOSKELETAL DISORDERS AMONG UNIVERSITY STUDENTS IN KLANG VALLEY, MALAYSIA

Bryan Jin Yie Chong, Sheng Hui Kioh

Department of Chiropractic, Centre of Complementary and Alternative Medicine (CCAM), International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

The COVID-19 pandemic has affected many countries. To reduce the spread of the disease, many countries implemented lockdowns and social distancing including Malaysia. With COVID-19 lockdown, white collar groups have started working from home and all teaching and learning have been converted into online system. Published studies have found significant increase in prevalence of musculoskeletal disorders (MSDs) post COVID-19 lockdown yet, limited studies have been conducted among students. Therefore, the objective of this study was to examine the effects of COVID-19 lockdown on musculoskeletal disorders among university students in Klang Valley, Malaysia.

This is a cross-sectional study involving 383 undergraduate students studying in both public and private universities within Selangor and Klang Valley region. This study involved an online questionnaire to obtain information on participant's demographics, and prevalence of musculoskeletal disorders using the Nordic Musculoskeletal Questionnaire (NMQ). Descriptive statistics such as T-test and Chi Square were used to describe participants' characteristics while the McNemar Chi Square test was used to examine the effects of COVID-19 lockdown on various musculoskeletal disorders.

Data on prevalence of musculoskeletal disorders was available for 383 participants. The age group of participants was 21 to 24 years old (65.3%) with majority female. The highest musculoskeletal disorder was within the neck region (45.2% and 59%), followed by lower back region (36.6% and 49.9%) before and during lockdown respectively. Significant increase in neck and low back pain during lockdown period as compared to before the lockdown period was observed (p-value <0.001).

In conclusion, significant effect of COVID-19 lockdown on musculoskeletal disorders among university students have been found. However, future studies should be performed to identify the risk factors of musculoskeletal disorder among university students to increase the awareness among university students on the risk factors of increased musculoskeletal disorders while studying at home.

ePOSTER • ENVIRONMENTAL, NUTRITION AND POPULATION HEALTH

[PPE15]

THE ASSOCIATION BETWEEN COVID-19 LOCKDOWN AND PHYSICAL ACTIVITY LEVEL AMONG UNIVERSITY STUDENTS IN MALAYSIA

Christopher Zhi Keat Chan, Sheng Hui Kioh

Department of Chiropractic, Centre of Complementary and Alternative Medicine (CCAM), International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

The national lockdown in Malaysia has caused closures of schools, recreational parks, and sports complexes. Some studies found that such transition led to decline in physical activity (PA) level, yet there are conflicting findings found on the effects of COVID-19 lockdown on PA level. Hence, the aim of this study was to investigate the effects of COVID-19 lockdown on PA level among university students in Malaysia.

This is a cross-sectional study conducted among 383 university students studying within Selangor and Klang Valley region. An online survey was carried out via Microsoft forms link to obtain information on participants' characteristics and International Physical activity questionnaire-short form (IPAQ-SF) scores to gather the amount of PA before and during COVID-19 lockdown. Descriptive statistics were conducted using T-test and Chi square while the effects of COVID-19 lockdown on PA was analysed via paired T-test.

Data was available for 383 participants. According to the scoring protocol of the IPAQ-SF, there is an increase in 26.3% in category 1 and a 27.2% decrease in category 3 among males during lockdown compared to before the lockdown. Among females, there is an increase in 33% in category 1 and a 17.3% decrease in category 3 during lockdown compared to before the lockdown. Significant changes on the total MET-min/week before and during COVID-19 were found, -1359.38 (1064 - 1540) MET-min/week.

Category 1: <600MET-min/week
Category 2: 600-2999MET-min/week
Category 3: >3000MET-min/week

Significant reduction in self-report PA and energy expenditure levels were observed among university students in Malaysia during the COVID-19 lockdown period. Therefore, relevant efforts should be supported and strengthened to get youths to physically move again.

[PPE16]

THE EFFECT OF COVID-19 LOCKDOWN ON MENTAL HEALTH OF UNIVERSITY STUDENTS IN KLANG VALLEY

Aun Quin Lim, Sheng Hui Kioh

Department of Chiropractic, Centre of Complementary and Alternative Medicine (CCAM), International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

In February 2020, the first case of COVID-19 was detected in Malaysia and a national lockdown was implemented to curb the spread of the virus. Inevitably, the lockdown has affected the public both physically and mentally. There are several studies that have recently been done to identify the effects of COVID-19 lockdown on mental health, yet not many studies have been conducted among students. Therefore, the aim of this study was to examine the effect of COVID-19 lockdown on the mental health of university students in Malaysia.

This is a cross sectional study conducted among 383 undergraduate students from 10 selected universities within Selangor and Kuala Lumpur. Sociodemographic questions such as age, gender, ethnicity, level of studies, household income, living arrangement during lockdown, and the Depression Anxiety Stress Scale-21 Items (DASS-21) were obtained via the online questionnaires. Descriptive analysis and paired T-test were utilised to examine the effect of COVID-19 lockdown on mental health.

Data was available for 383 participants. Most of the participants were female (66.3%), aged 21 to 24 years old (65.3%), of Chinese ethnicity (76.8%) and were studying in a private university (84.3%). According to DASS-21, before the lockdown 34.3% of participants had depression, 38.9% anxiety and 22.2% had stress from mild to extremely severe. However, during lockdown, 52.2% of participants had depression, 50.1% anxiety and 38.6% had stress from mild to extremely severe. The results showed significant differences in DASS-21 scores among participants during COVID-19 lockdown as compared to before COVID-19 lockdown.

Significant effect has been found on the mental health status during COVID-19 lockdown indicating mental health awareness should be implemented, and psychological support must be made accessible to all individuals during this ongoing pandemic. However, further longitudinal studies should be performed to verify the results.

[PPE17]

THE ASSOCIATION OF DIETARY INTAKE AND ACNE VULGARIS: A NATUROPATHIC PERSPECTIVE

Wan Nur Adlina Wan Anuar, Zatul-'Iffah Abu Hasan, Nadeeya 'Ayn Umaisara, Mohamad Nor
Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia

Acne or medically named acne vulgaris is a chronic skin disorder that affects over 90% of males and 80% of females in the population aged 11 to 30 years old. Even though acne is perceived as a trivial, self-limiting and cosmetic disorder, it is not a petty problem that can be ignored as social isolation, depression and suicidal ideation are frequent comorbidities observed with this disease. Various forms of acne therapies exist and have their own benefits, but they also come with unintended side effects. Hence, comprehensive knowledge on type of diet that can influence exacerbation of acne is essential as an alternative for acne intervention and prevention. This study was conducted to review and determine the association between several dietary variables (dairy product, glycemic load, chocolate and fatty acids) and acne.

PUBMED-MEDLINE database and Google Scholar were used for a thorough literature search for articles published over 5 years (2017-2021) using the following keywords: "acne vulgaris", "dietary influences", "glycemic index", "dairy product" and "fatty acid".

This study presents the current evidence on the potential impact of diet on the pathogenesis of acne. Convincing evidence shows that dairy products and high glycemic index diets are conclusively associated with acne vulgaris phenomenon as they lead to an increase in sebum production which plays a vital role in acne development. However, the relationship between chocolate and acne remains unclear and inconclusive as the vagueness may be associated with the chocolate type, ingredients and preservatives. Meanwhile, omega-3 fatty acids have been proved to have a protective role against acne development.

Diet-acne hypotheses were predominantly based on observation and speculation. Even though the influence of diet on acne vulgaris remains controversial, it cannot be overlooked as it may be one of the preventive measures that can be advised to the patients apart from the other acne therapies.

[PPE18]

KHANDSARI SUGAR: A PROMISING ALTERNATIVE FIXATIVE TO FORMALIN IN HISTOCHEMICAL STAINING

Rachel E Sung Ting[1], Phyu Synn Oo[2], Cheoh Jia Shen[3], Cindy Yeoh Shin Ly[3], Wee Hong Zhuang[3], Saint Nway Aye[2], Purushotham Krishnappa[2]

[1]*Medical Programme, School of Medicine, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[2]*Pathology Department, School of Medicine, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[3]*Biomedical Science Programme, School of Health Sciences, IInternational Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

Formalin is a 'gold standard' fixative widely used in various laboratories for histopathological purposes due to its multiple advantages. However, it is a biohazard to the laboratory personnel and gives a deleterious effect on the nucleic acid. Therefore, discovering alternative fixatives to formalin is necessary for daily clinical practice. This study aimed to prove the superiority of alternative fixatives over formalin.

Liver and muscle tissue samples from six BALB/c mice were fixed in 10% buffered formalin, Khandsari sugar (30%, 50% and 70%), Zinc-Formalin fixative (ZFF) and Zinc-based fixative (ZBF) for 24 hours. After tissue processing, the specimens were stained with Haematoxylin and Eosin (H&E) and Methyl Green Pyronin Y (MGPY) stain. The slides were examined under an ordinary light microscope.

Formalin-fixed tissue samples were used as control, and the other three alternative fixatives were compared. Khandsari fixation in liver and muscle samples showed colour changes and slight tissue shrinkage. Among three different concentrations of Khandsari, 30% Khandsari gave a foul-smell after 24 hours fixation suggesting poor fixative ability. Microscopically, 30% Khandsari-fixed tissue samples showed cytoplasmic vacuolation suggestive of autolysis in most cells. Overall staining scores were 53.3% for 30% Khandsari and 74.1% for 50% Khandsari compared to formalin-fixed tissues. 70% Khandsari, ZBF and ZFF showed similar results with formalin-fixed tissues. The overall staining score for muscles showed similar results with formalin-fixed tissues. MGPY staining also revealed promising quality in 50% and 70% Khandsari, ZBF and ZFF compared to formalin-fixed tissues.

Our study revealed that 70% Khandsari showed promising morphological preservation of liver and muscle tissues. Our study was done for small-sized samples for 24 hours fixation. To implement the clinical practice, fixing of bigger tissues and more prolonged duration should also be done in further studies.

[PPE19]

SUGAR TAX IN MALAYSIA: FOOD INDUSTRY'S RESPONSE AND ADOLESCENTS' KNOWLEDGE AND ATTITUDE TOWARDS THIS TAX

Ng Ying Yun[1], Shyam S[1,2], Don R[1], Hakim S L[3,4]

*[1]Division of Nutrition and Dietetics, School of Health Sciences, International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

*[2]Centre for Translational Research, Institute for Research, Development and Innovation (IRDI), International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*
*[3]Institute for Research, Development and Innovation (IRDI), International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

*[4]Department of Community Medicine, School of Medicine, International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

High sugar-sweetened beverage (SSB) consumption is implicated in the development of obesity and related disorders, especially among adolescents. Thirty seven percent of Malaysian adolescents consume SSB daily. The success of Malaysian Sweetened Beverage Excise Duty (SBED) introduced as a tool to tackle this public health concern on July 1, 2019, is dependent on industry and consumer response to it. Therefore, we aimed to evaluate: (i) food industry's response to SBED and (ii) Malaysian adolescent's knowledge and attitude regarding this tax. We evaluated the actions taken by food industry by comparing before (June 2018) and after SBED (August 2019) changes in (i) price, (ii) sugar content and (iii) available packaging sizes. The list of taxable SSB products (n= 251) was obtained from the Ministry of Health (MOH) Malaysia. SBED knowledge and attitude of adolescents was assessed in a cross-sectional survey of 156 adolescents (aged 16 to 19 years) enrolled in pre-university programmes at the International Medical University (IMU), Kuala Lumpur. Overall, significant decreases in mean (SD) SSB sugar content (1.85 ± 3.05 g/100 ml) and increases in price (RM0.07 ± 0.11/100 ml) were observed one-year post introduction of SBED. Only 14 SSBs (8%) had smaller packaging size available post-SBED. Among the respondents surveyed, only 28% were aware of SBED and the level of knowledge of SSB-disease link was moderate (average score= 67%). Fifty six percent of the respondents viewed the tax positively. To summarise, food industries have responded to the SBED in Malaysia by increasing the price of SSBs and have reformulated the SSBs to be healthier by decreasing the sugar content with minimal reductions in SSB packaging size. Adolescents in this study supported SBED as a public health initiative, but awareness that SBED was implemented in Malaysia was low. Campaigns to improve awareness on SSBs health effects and SBED implementation will be useful among Malaysian adolescents who are major SSB consumers.

[PPE20]

COMPARISON BETWEEN MECHANISM OF UV RADIATION AND BLUE LIGHT TO INDUCE PHOTOAGING: A SCOPING REVIEW

Nurul Hafizah Mahat, Suhana Mamat

*Department of Biomedical Science, International Islamic University Malaysia,
Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia*

This study aimed to compile and review the scientific evidence that supported the potential of UV and blue light radiation to induce photoaging and find out the best strategies for the prevention against photoaging. The method used was scoping review using the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) framework with specific inclusion and exclusion criteria for data search. The databases used to search for relevant articles were Scopus, Wiley Online Library, and JSTOR. The keywords used were photoaging, UV radiation, blue light, human skin cells, and anti-photoaging by applying Boolean operators using the words 'AND', 'OR', and 'NOT'. For the results, 21 experimental studies were included in this review. The major mechanism that leads to photoaging due to UV and blue light irradiation is the formation of free radicals which causes the accumulation of reactive oxygen species (ROS). The accumulation of ROS will cause cellular protein damage, degradation of collagen and elastin, and increase the expression of pro-inflammatory cytokines in the skin cells. Other mechanisms activated from UV and blue light irradiation were melanogenesis that causes hyperpigmentation of the skin. However, the mechanisms such as autophagy, dimers formation, and telomere shortening are only found in the study of UV radiation and not on blue light. The preventive strategies against both UV and blue light included using botanical extract and chemical compounds which target different mechanisms to inhibit photoaging from both UV and blue light irradiation. In conclusion, there are some similarities and differences in terms of how UV and blue light irradiation affected human skin cells and also several preventive strategies for the protection against UV and blue light-induced photoaging.

ePOSTER • ENVIRONMENTAL, NUTRITION AND POPULATION HEALTH

[PPE21]

ERGONOMICS RISK ASSESSMENT AND PREVALENCE OF MUSCULOSKELETAL PAIN AMONGST UNIVERSITY STUDENTS DURING COVID-19

Timothy Yann Shung Chew, Sheng Hui Kioh

Chiropractic Department, Centre of Complementary and Alternative Medicine (CCAM), International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

The COVID-19 pandemic has truly been a novel event, forcing countries including Malaysia into implementing measures such as lockdowns and physical distancing. Published studies have found significant increase in musculoskeletal (MSK) disorders during COVID-19 lockdown as compared to before lockdown. Some suggested that possible increase in MSK disorders could be explained by the sudden change to working from home leading to changes in ergonomics and reduced comfort. Therefore, the purpose of this study was to examine the ergonomics risk and prevalence of MSK disorders among university students during COVID-19 lockdown.

This is a cross-sectional study involving online questionnaire among 383 university students studying in Selangor and Klang Valley. The Nordic Musculoskeletal Questionnaire (NMQ) and Display Screen Equipment (DSE) were used to identify the prevalence of musculoskeletal pain and their home workstation ergonomics with risks they are exposed to. Descriptive Statistics was used to describe participants' characteristics and their ergonomics risk.

The prevalence of neck pain among our participants was 59% followed by low back pain (49.9%), shoulder pain (47%), upper back pain (42.6%), wrist pain (24%), hip pain (16.4%), knee pain (15%) and feet pain (14%). The mean cumulative DSE scores among both men and women was 27 out of 31. Significant association was also found between MSK pain with tracking device ergonomics and furniture component of DSE (p-value<0.01)

In conclusion, the highest MSK pain prevalence among university students was reported in the cervical region, followed by the low back pain region which may be explained by improper ergonomics and decrease in furniture comfort. Therefore, these results could increase awareness on the importance of proper home environment and ergonomics while working from home to reduce prevalence of MSK pain.

[PPE22]

DEVELOPMENT AND SENSORY EVALUATION OF EGG CUSTARD PUDDING MADE WITH ISOMALTULOSE

Chi Yin Chang, Seok Shin Tan, Sangeetha Shyam, Hueh Zan Chong

Division of Nutrition and Dietetics, International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

High consumption of sugar is associated with positive energy balance which leads to obesity, a risk factor of diabetes. High demand for sugar intake has brought concern on sucrose substitution. Therefore, replacing sucrose with isomaltulose (IM) in dessert seems feasible due to its low glycaemic index and non-cariogenic properties. This study aimed to determine the sensory attributes and overall acceptability of egg custard pudding made with IM. A total of 40 Chinese Malaysian adults aged 18 to 50 years old were recruited from Klang Valley. The egg custard pudding was prepared in three variations which are 100% sucrose (reference sample), 100% IM and 50% sucrose: 50% IM for participants to complete sensory evaluation. Sensory attributes and overall acceptability were evaluated by the 5-point hedonic scale while sweetness was assessed using Just-About-Right scale. Duo-trio test was carried out to identify the variation close to the reference (100% sucrose). Under affective test, appearance (p=0.001) and sweetness (p<0.001) were significantly different between the three pudding groups while aroma (p=0.768), taste (p=0.136), texture (p=0.502) and overall acceptability (p=0.549) had no significant difference. Among the three pudding variations, appearance (3.95±0.75) and aroma (3.53±0.85) of the 50% sucrose:50% IM pudding, texture (3.95±0.88) of 100% sucrose pudding, taste (4.03±0.86) and overall acceptability (3.85±0.86) of 100% IM pudding obtained the highest score. Sweetness (2.90±0.59) of 100% IM pudding was the nearest to just-about-right (score = 3). In duo-trio test, 33 participants (82.5%) chose 50% sucrose:50% IM while seven (17.5%) chose 100% IM as the similar sample to reference. The present study suggested the incorporation of IM to substitute sucrose is applicable in egg custard pudding and 100% IM pudding was the most accepted by the subjects with the highest score obtained in taste and overall acceptability.

[PPE23]

PERCEPTIONS OF THE ONLINE LEARNING EXPERIENCE AMONG MEDICAL STUDENTS DURING COVID-19

Shahida Athirah Shahrir, Amalia Izzati Razman, Muhammad Ashraf Fithri Anuar,
Muhammad Haikal Abdullah, Muhammad Ikmal Arif Ahmad Ashhar,
Ahmad Zhareff Emir Ahmad Haridan, Nur Khairunnisa Nor Azlan, Mohammad Muaz Mohamad,
Nur Alia Iman Shaik Mohd Nizam, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli,
Muhammad Razin Zamani, Muhammad Adam Mohd Azani, Hazulin Mohd Radzuan,
Nour El Huda Abd Rahim, Shahida Saharudin, Wan Fatein Nabeila Wan Omar

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia,
Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

Social gatherings have been limited during the COVID-19 pandemic to reduce the transmission of viruses. Many academic institutions have shifted their classes from traditional methods to online remote teaching and learning sessions. Since neither the students nor lecturers were familiar with this setting, the delivery of medical education has been undoubtedly impacted as the lectures, clinical placements and key examinations were discontinued. Many adjustments need to be made to ensure that the online teaching is conducted properly. This study was conducted to investigate the perceptions of online learning experience among medical students during the pandemic.

An online survey was distributed to 158 medical students from Year 1 and Year 2 of International Islamic University Malaysia (IIUM) from July 2021 till August 2021. The Learning Community Scale and Student Support Scale based on Course Experience Questionnaire (CEQ), were applied to measure the participants' perceptions. The data were analysed using Statistical Package for the Social Sciences (SPSS) version 26.

Based on the Learning Community scale, higher response values signified better feelings towards the learning community. The average scores of all five questions were high level (3.68-4.36 on 5-Likert scale), suggesting that the participants were feeling well towards their learning community. Likewise, higher response values in the Student Support scale indicated that better student support is perceived. The average scores of all five questions were also high (3.11-4.31 on 5-Likert scale), indicating that the respondents perceived an adequate amount of student support.

In conclusion, the study conjectured positive perceptions towards their learning experience during the COVID-19 pandemic among the students despite the sudden shift from physical to online teaching and learning sessions. However, broader ethnic groups and larger sample sizes might be useful for more precise and reliable future results.

[PPE24]

PREVALENCE AND ASSOCIATED CAUSES OF UPPER BODY QUADRANT PAIN AMONG E-HAILING DRIVERS IN KUALA LUMPUR

Yan Shan Koh[1], Zia Ul Mustafa Rehman D C[2]

[1]*Department of Chiropractic, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[2]*Department of Chiropractic, Centre for Complementary and Alternative Medicine, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

E-hailing service is one of the major transportation sectors in Malaysia. Work-related musculoskeletal disorders are still a growing and significant health problem in society. Almost 25% of occupational diseases cases are related to musculoskeletal disorders. However, there is insufficient number of research papers on e-hailing drivers but this is growing. This study was to estimate the prevalence of upper body quadrant pain among e-hailing drivers in Kuala Lumpur. The study aimed to identify the prevalence of associated causes to upper body quadrant pain and to determine the existence of a correlation between the associated factors and upper body quadrant pain among e-hailing drivers in Kuala Lumpur. This was a cross-sectional study. A total of 160 e-hailing drivers completed the survey which included demographic data, ergonomic factors, occupational factors, chiropractic management and Nordic Musculoskeletal Questionnaire. Among 160 e-hailing drivers, the prevalence of the upper body quadrant pain according to anatomical region was neck (n=85, 53.1%) followed by shoulder (n=82, 51.2%), upper back (n=60, 37.5%), wrist (n=48, 30.0%) and elbow (n=30, 18.8%). There were 65 respondents who had incorrect neck position while driving which makes it the most prevalent associated factor causing neck pain to e-hailing drivers. There was no correlation between the associated factors and neck pain. Results revealed that it is important to raise the awareness of the importance of chiropractic care among e-hailing drivers and chiropractors can understand more about the causes of the pain in the upper region, thus they can provide proper treatment. The most prevalent upper body quadrant pain according to the anatomical region is the neck. The most prevalent associated factor that causes pain to the neck is ergonomics while driving. There is no association between factors and the upper body quadrant pain.

[PPE25]

THE FOOT HEALTH QUALITY OF LIFE AND ASSOCIATION BETWEEN PES PLANUS AND HALLUX VALGUS AMONG BALLET DANCERS

Siti Sarah Nawawi[1], Min Jahyeon[2], Yi Kai Wong[2]

[1]Centre for Complementary and Alternative Medicine, International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

[2]Lecturer, Chiropractic Department, Centre for Complementary and Alternative Medicine, International Medical University,
126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

Ballet is one of the dance genres that is known for its high intensity of training which leads to high overall injury rates, especially in the lower extremity. Painful hallux valgus is classified as one of the injuries and it seems to be significantly correlated with planus foot type. Due to the high number of injuries, female ballet dancers are reported to have a poorer quality of life related to foot health as compared to non-dancers. As the severity of hallux valgus increased, there was an increase in the navicular drop score and a reduction in quality of life. However, this relationship has only been found in females with hallux valgus but yet to be assessed among ballet dancers. Thus, this study aimed to focus on the foot health quality of life and association between pes planus and hallux valgus among ballet dancers by exploring the relationship between the foot type, the severity of hallux angle at the first metatarsophalangeal joint and the quality of life related to foot health. A total of 26 ballet dancers in advanced grade from the Federal Academy of Ballet was included in this study. A self-developed questionnaire and the Foot Health Status Questionnaire (FHSQ) were distributed. All the participants chose normal foot arch. Thus, the association between pes planus and hallux valgus could not be determined in this study. Based on the FHSQ, the highest mean score was for foot function and the lowest mean score was vigour. FHSQ score comparisons with various degrees of hallux valgus showed significant differences only for general health, social capacity and vigour on the right foot. No statistical differences were found for other domains. Generally, there was a reduction in the foot health quality of life among ballet dancers.

[PPE26]

PREVALENCE AND ASSOCIATED CAUSES OF LOWER LIMB MUSCULOSKELETAL PROBLEMS AMONG E-HAILING DRIVERS IN KUALA LUMPUR

Tanushre Ananthan[1], Zia ul-Mustafa Rehman[2]

[1]Fourth Year Chiropractic Student, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

[2]Senior Lecturer, Chiropractic Department, Centre for Complementary and Alternative Medicine (CCAM), International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

This is a questionnaire based descriptive study. A modified Nordic Questionnaire was adapted from Abledu et, al.'s research on Occupational and personal Determinants of Musculoskeletal Disorders among Urban Taxi Drivers in Ghana. The questionnaire was administered through Google Forms distributed to E-hailing drivers around Kuala Lumpur via social media. The study aimed to determine the prevalence of lower limb musculoskeletal problems specifically for E-hailing drivers and to study the prevalence of associated causes according to the prevalence of lower limb MSK problems among E-hailing drivers. Recent studies found that Grab provides better services than taxi and respondents residing in Kuala Lumpur have chosen Grab over taxi in terms of safety of rides, value for money and comfort. The perception of people choosing Grab calls for further research regarding other E-hailing companies that have emerged. Meanwhile, E-hailing drivers are also one of the occupational drivers who are at high risk of MSD's. Hence, lower limb MSK problems were investigated in terms of region of lower limb and the associated factors. Out of 370 number of sample size, only 160 E-hailing drivers participated in the study. The prevalence of the lower limb MSK problems according to anatomical region was lower back pain (47.5%), one or both knees pain (36.9%), one or both hip/thigh (35.6%) and one or both ankle/ feet pain (29.4%). Out of 160 participants, 41.3% had incorrect lower back position while driving which makes it the most prevalent associated factor causing lower back MSK pain to E-hailing drivers. The most prevalent lower limb MSK problem according to anatomical region is the lower back. The most prevalent associated factor that causes prevalence to the lower back is ergonomics while driving.

[PPE27]

QUALITY OF LIFE AMONG MEDICAL STUDENTS DURING COVID-19 PANDEMIC

Amalia Izzati Razman, Nur Khairunnisa Nor Azlan, Nur Alia Iman Shaik Mohd Nizam, Muhammad Ashraf Fithri Anuar, Muhammad Haikal Abdullah, Muhammad Ikmal Arif Ahmad Ashhar, Mohammad Muaz Mohamad, Shahida Athirah Shahrir, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli, Muhammad Razin Zamani, Muhammad Adam Azani, Ahmad Zhareff Emir Ahmad Haridan, Hazulin Mohd Radzuan, Nour El Huda Abd Rahim, Shahida Saharudin, Wan Fatein Nabeila Wan Omar

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

Medicine has a well-known reputation for being among the toughest courses to enrol in once a student steps into college or university. Given the mounting pressure to excel in a high-stake learning environment, undeniably their quality of life could be affected. With the added challenge of navigating online learning during a pandemic, the students' well-being has become an issue of great concern. Therefore, this study aimed to evaluate the quality of life among preclinical medical students of the International Islamic University Malaysia during COVID-19.

We conducted an observational cross-sectional study involving 77 Year 1 and 81 Year 2 IIUM medical students to answer a self-administered online survey. We used the Abbreviated World Health Organisation Quality of Life (WHOQOL-BREF) questionnaire to assess the students' quality of life. We analysed the data using IBM SPSS Statistics 26 (IBM, New York). This study lasted from July till August 2021 under the approval of the institutional research committee (Research ID: 735).

From this study, the mean score for overall quality of life was 14.58 (3.23), with no significant difference between Year 1 and Year 2 students (p=0.216). The average score across all four domains ranged between 12.19 (2.53) and 15.3 (2.43), indicating that they had a positive outlook on their well-being. Psychological health scored the lowest whereas environmental health was the highest. Looking into the individual items, the ability to concentrate scored the lowest [10.68 (2.73)].

We concluded that the IIUM medical students reported good quality of life even at the height of the pandemic. This finding is likely due to the practice of adequate coping skills among the students to survive learning under lockdown. Nevertheless, we should pay due attention to some parameters, especially their psychological health i.e., focus and concentration, and intervene early to prevent further decline in quality of life.

[PPE28]

SATISFACTION OF IIUM MEDICAL STUDENTS TOWARDS ONLINE LEARNING AND ITS FACILITATING FACTORS

Muhammad Razin Zamani, Amalia Izzati Razman, Nur Alia Iman Shaik Mohd Nizam,
Muhammad Ikmal Arif Ahmad Ashhar, Ahmad Zhareff Emir Ahmad Haridan,
Nur Khairunnisa Nor Azlan, Mohammad Muaz Mohamad, Shahida Athirah Shahrir,
Muhammad Ashraf Fithri Anuar, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli,
Muhammad Haikal Abdullah, Muhammad Adam Mohd Azani, Hazulin Mohd Radzuan,
Nour El Huda Abd Rahim, Shahida Saharudin, Wan Fatein Nabeila Wan Omar

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia (IIUM),
Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

The declaration of COVID-19 as a pandemic on 11th March 2020 has left a significant mark on the global education ecosystem. The transition from conventional to online learning is challenging for the administrators, teachers and students. The purpose of this study was to determine the satisfaction towards online learning and its facilitating factors among medical students in the International Islamic University Malaysia (IIUM).

A cross-sectional study among first- and second-year medical students in IIUM from July to August 2021 was conducted. The study protocol had been approved by the institutional research committee (Research ID 735). Participants were asked to complete a web-based self-administered Online Learning Experience Questionnaire (OLEQ) and rated the items using the 4 and 5-Likert scales. IBM SPSS Statistics 26 (IBM, New York) was used to describe and analyse the data.

Fifty percent (n=77) and 59% (n=80) responses were received from first- and second-year medical students, respectively. In general, the satisfaction of the students towards online learning was positive (mean 2.84-3.87 out of 4). In both cohorts, access to information and learning material scored the highest satisfaction followed by interaction with teachers. Meanwhile, the topmost factor facilitating online learning was being encouraged to take responsibility for their learning [4.11 (0.82) out of 5] followed by electronic communication with the teacher [3.92 (0.91)]. There was a positive association between the satisfaction score towards online learning and the facilitating factors score (r=0.635, p<0.001).

In conclusion, the IIUM medical students' satisfaction towards online learning was positive and this could be attributed to the facilitating factors. This finding could be useful for policy-makers and administrators in education to focus on these factors to keep the system relevant in this current pandemic situation.

[PPE29]

EATING DISORDERS AMONG MEDICAL STUDENTS IN AN EAST COAST INSTITUITION

Murad Elmaryami, Nor Faiza Mohd Tohit

*Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan Campus,
Bandar Indera Mahkota, 25200 Kuantan, Pahang, Malaysia*

In this present world, the idea of having a lean body is greatly on the rise due to the influence from western countries. In a study carried out among 112 medical students in Ipoh, Perak in 2017, the prevalence of eating disorder was found to be high with the proportion of 42.7% (Najwa Et al., 2017). Hence, the same study was adopted to observe at the level of eating disorder among IIUM medical students to determine whether it has gotten worse or is still in a controlled state. In addition, we were also interested to compare the level of eating disorders between male and female medical students. This study aimed to describe the background characteristics of IIUM students by assessing a sample of 147 respondents as well as to measure the level of eating disorders among the students by classifying them into four subscales: restraint, weight concern, eating concern and shape concern. In addition, this study aimed to compare the level of eating disorders between male and female medical students of IIUM to determine which gender is prone to eating disorders.

A cross sectional study was conducted among 147 IIUM Kuantan medical students of session 2017/2018 of both genders using a self-administered questionnaire through an online website which is Google form between 9th July till 13th July 2018. The tool used was a validated Malay version EDE-Q questionnaire. Data gathered were analysed by using SSPS for windows version 25. P-value less than 0.05 was considered significant and 95% confidence level was assumed for this study.

A total of 147 respondents which consisted of 25.9% (n=38) males and 74.1% (n=109) females were included in the study. The variables "age", "household's income" and "year of study" also contributed in the eating disorders. Based on this study, the overall mean for female students is higher than male students for all the four subscales. For restraint, it was observed that there was no significant difference between both the genders with the p-value of 0.351. Next, with the p-value of 0.035, it was shown that the mean for female is significantly higher than male for eating concern. The mean for both of the shape and weight concern for female was significantly higher compared to male with the p-value of 0.08 and 0.048, respectively. The participant's mean global EDE-Q score was 1.68±0.96 and subscales mean were as follows: 1.27±0.11 for restraint, 1.07±0.83 for eating concern, 2.43±0.13 for shape concern and 1.95±0.12 for weight concern. Among the subscales, weight and shape concern scored the highest mean compared to restraint and eating concern.

Among IIUM medical students, females had a higher level of eating disorder than males. Two main factors contributing to eating disorder are shape concern and weight concern.

[PPE30]

POOR SLEEP QUALITY AMONG IIUM MEDICAL STUDENTS: A CROSS-SECTIONAL STUDY

Muhammad Ashraf Fithri Anuar, Amalia Izzati Razman, Muhammad Haikal Abdullah, Muhammad Ikmal Arif Ahmad Ashhar, Ahmad Zhareff Emir Ahmad Haridan, Nur Khairunnisa Nor Azlan, Mohammad Muaz Mohamad, Shahida Athirah Shahrir, Nur Alia Iman Shaik Mohd Nizam, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli, Muhammad Razin Zamani, Muhammad Adam Mohd Azani, Hazulin Mohd Radzuan, Nour El Huda Abd Rahim, Shahida Saharudin, Wan Fatein Nabeila Wan Omar

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

Good quality sleep plays an integral role to ensure optimal physical, as well as mental health, especially among medical students. Given the surge in COVID-19 cases, with the closure of universities around the globe, students are obliged to adapt to online learning which poses new sets of challenges that may negatively impact their quality of sleep. This study aimed to evaluate sleep quality among preclinical medical students of the International Islamic University Malaysia (IIUM) during the COVID-19 pandemic.

We conducted an observational, cross-sectional study involving 158 Year 1 and Year 2 medical students of IIUM. The study protocol was approved by the institution research committee (Research ID: 735). We assessed their sleep quality over the past one month using an online self-administered Pittsburgh Sleep Quality Index (PSQI) questionnaire. We analysed the data using IBM SPSS Statistics 26 (IBM, New York).

In general, the average global PSQI score was 8.08 (3.59). Almost three-quarters of the subjects (*n*=117) experienced poor sleep quality (PSQI global score >5). Amongst all PSQI components, sleep latency scored the highest mean of 2.37 (1.99). Additionally, there was no significant difference in sleep quality between Year 1 and Year 2 medical students (*p*=0.273). Subjects with poor sleep are prone to negative psychological effects that are related to the lockdown restriction during the pandemic. Further decline in sleep quality can lead to unhealthy practices such as unhealthy diet and nutrition and sedentary lifestyle.

Based on our study, there was a significant proportion of IIUM preclinical medical students with poor sleep quality during the COVID-19 pandemic. It is crucial to further investigate the factors contributing to their poor sleep quality and introduce measures to rectify the problem. Especially, as future healthcare providers should advocate on healthy lifestyles, inclusive of good sleep quality.

[PPE32]

CONCERNS OF FALLS IN ELDERLY RHEUMATOID ARTHRITIS PATIENTS

Yi Xuan Lee[1], Anusha A/P Munusamy[1], Wei Heng Chew[1],
Muhammad Shafiq Bin Abd Rahman[1], Mohd Shahrir Bin Mohamed Said[2]

[1]Faculty of Medicine, Universiti Kebangsaan Malaysia,
Jalan Yaacob Latif, Bandar Tun Razak, Cheras, 56000 Kuala Lumpur, Malaysia

[2]Department of Internal Medicine, Hospital Canselor Tuanku Muhriz, Universiti Kebangsaan Malaysia,
Jalan Yaacob Latif, Bandar Tun Razak, Cheras, 56000 Kuala Lumpur, Malaysia

Falls is a common event in both elderly and rheumatoid arthritis (RA) patients. In addition to ageing, elderly RA patients have disease-specific factors which might further increase their fall risks. This study was conducted to explore and analyse the concerns of falls in elderly RA patients.

This phenomenological study included RA patients aged ≥65 years old, follow up at Rheumatology Clinic, Hospital Canselor Tuanku Muhriz (HCTM). Purposive sampling was employed and the sample size was based on theoretical saturation. Participants were interviewed via telephone using a semi-structured interview guide containing 5 domains: illness, treatment, comorbidity, socio-economic, and disease outcome. All interviews were audio-recorded, verbatim transcribed, and line-by-line coded to generate a codebook inductively. Codes were thematically analysed, revised, and refined to generate the final themes and subthemes.

Data saturation point arrived at the 10th participant. A total of 9 themes and 21 subthemes were generated. The 9 themes are: 1) RA & fall perceptions, 2) impacts of RA, 3) fall & actions, 4) medication, 5) comorbidities, 6) interpersonal relationships, 7) living conditions, 8) health behaviours, 9) future expectations. Participants described their understanding of RA and falls, as well as their experience of living with RA and other comorbidities. Their concerns of falls and possible determinants were identified which include social support, housing environment and personal behaviour such as exercise and diet.

This study provides deep insights into patients' concerns of falls from different aspects of life. Items derived from this study can be used to develop an instrument for assessing patients' fall concerns, particularly in the elderly with multiple falls risk factors. A better understanding of patients' concerns enables healthcare providers to deliver more comprehensive care.

[PPE33]

FASTING INTERFERENCE ON LIPID PROFILE: A SYSTEMATIC REVIEW

Ruen Wai[1], Wai Yew Yang[2], May Lay Khim Goh[3], Mun Hon Goh[4], Chooi Ling Lim[1]

[1]*Division of Applied Biomedical Science and Biotechnology, School of Health Sciences, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[2]*Division of Nutrition and Dietetics, School of Health Sciences, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[3]*Clinical Skills & Simulation Centre, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[4]*Laboratory and Blood Services Department, National Heart Institute, 145, Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia*

Pre-analytical errors such as stress, physical exercise, and fasting status may give rise to inaccurate laboratory results, leading to inconvenience and even harm to the patients. Moreover, the impact may contribute to rising healthcare costs and waste of laboratory resources. There has been conflicting evidence on the recommendations for patients' fasting status before lipid profile testing. Therefore, this study aimed to critically evaluate, through a systematic review of scientific literature, whether there are significant differences in lipid profile levels in fasting and non-fasting serum or plasma samples. Studies that were originally published in English and indexed from 2017 to 2021 with specific inclusion and exclusion criteria were examined following the 2020 PRISMA guidelines. The databases used were Google Scholar and PubMed. Two independent reviewers were tasked to appraise the selected studies using a critical appraisal checklist for analytical cross-sectional studies. The scope of this review scope included 11 papers that presumably satisfied the inclusion and exclusion criteria. Total cholesterol, high density lipoproteins (HDL), low density lipoproteins (LDL), and triglycerides were measured in fasting and non-fasting states in the studies evaluated. Although the study is still ongoing, preliminary findings indicate the premise of recent global guidelines and consensus on the fact that fasting is not required for the lipid profile, given the lack of significant differences between fasting and non-fasting analyte levels. Even for the parameters that did show some divergence, clinically significant changes were not implied.

[PPE34]

FASTING INTERFERENCE IN COMPLETE BLOOD COUNT PARAMETERS: A SYSTEMATIC REVIEW

Jia Yee Goh[1], Wai Yew Yang[2], Lay-Khim Goh[3], Mun Hon Goh[4], Chooi Ling Lim[1]

[1]*Division of Applied Biomedical Science and Biotechnology, School of Health Sciences, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[2]*Division of Nutrition and Dietetics, School of Health Sciences, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[3]*Division of Nursing, School of Health Sciences, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

[4]*Laboratory and Blood Services Department, National Heart Institute, 145, Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia*

Fasting status is a significant source of pre-analytical variability that interferes and alters a measured analyte's concentration and activity in routine clinical biochemistry and haematological tests. The complete blood count (CBC) with differential is the most performed test in the clinical haematology laboratory. However, there is a lack of standardisation in fasting recommendations as fasting protocols are reliant on the individual healthcare facilities protocols. Therefore, this study aimed to critically evaluate, through a systematic review of scientific literature, whether there are significant differences in CBC parameters in fasting and post-prandial samples. A systematic search was performed on August 2021 using online databases including EBSCO Discovery Services (EDS), PubMed and Ovid Medline with an English language restriction and no date restriction. The methodology quality of selected studies was evaluated by two independent reviewers using a critical appraisal tool. The scope of this review included 26 studies that presumably met the selection criteria. Although the study is still ongoing, preliminary findings indicate that erythrocyte count (RBC), haemoglobin (HB), and haematocrit (HCT) showed a statistically significant decrease in most studies from 2 hours until 4 hours post-prandially. Leucocyte count (WBC) changes in post-prandial sample corresponded to the significant increase observed in neutrophil count (NEU), which increased from 45 minutes to 6 hours after meal. Lymphocyte count (LYM) was significantly decreased until 3 hours after meal then increases at 4 hours until 10 hours. Monocyte counts (MONO) decreased at 1 hour to 5 hours in both meal and water studies, indicating changes due to circadian rhythm. Platelet count (PLT) increases in post-prandial samples which peaked at 2 hours and maintained until 6 hours. There were no significant differences in fasted and non-fasting levels of MCV, RDW, MCH, Eosinophil count and Basophil count. Although statistically significant changes were observed in fasted and non-fasting samples, the changes were not clinically significant.

[PPE35]

INVESTIGATION OF THE ANTIBACTERIAL PROPERTY OF TITANIUM DIOXIDE NANOPARTICLE COATED FILM IN MINIMISING DISEASE TRANSMISSION AT HIGH/COMMONLY TOUCH SURFACE AREAS

Sulaiman Oozeer[1], Shew Fung Wong[1,2], Lokman Hakim Bin Sulaiman[2], Yun Khoon Liew[3]

[1]*School of Medicine, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*
[2]*IRDI, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*
[3]*School of Pharmacy, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia*

Commonly touched surfaces are sources of disease transmission in both community and clinical settings, therefore effective methods of disinfection are of great importance to minimise transmission via inanimate objects. The feasibility of using Titanium dioxide (TiO_2) nanoparticle (NP) coated film at the commonly touched surfaces is limited and inconclusive. Hence, this study aimed to assess and compare the antibacterial activity of TiO_2 NP coated film and non-coated film, *in vitro* and for environmental testing at a university; and to investigate the effects of light intensity on its antibacterial properties. *In vitro* testing was performed with different concentrations of *Staphylococcus aureus* and *Klebsiella pneumoniae* (10^2, 10^3 and 10^4 colony forming units [CFU]) at different timepoints (0.5 - 24 hours). Additionally, the films were applied with 10^4 CFU of both bacteria and exposed to three different light intensities (30, 500, 1000 lux) for 0.5 and 2 hours, respectively. Both coated and non-coated films were placed at different locations within a university, after which microbial sampling was carried out twice per week for 12 weeks. Then, the viable microbial count was carried out via pour plate method.

TiO_2 NP coated film had significant antibacterial effects against *K. pneumoniae* and *S. aureus*, showing better efficiency in reducing the growth of the former. The tested light intensity did not have significant influence on the antibacterial performance of these films. Environmental testing demonstrated that the NP coated film was ineffective in decreasing the viability of microbes colonised on the commonly touched surfaces. In conclusion, TiO_2 NP coated film had antibacterial properties, but its effect varies with different bacterial strains at different highly touched localities. Future research should focus on improving the durability and reliability of the antibacterial activity of TiO_2 NP and enhancing its practicality of use in the real-world setting.

[PPE36]

ASSOCIATION OF MENTAL HEALTH STATUS WITH QUALITY OF LIFE AMONG MEDICAL STUDENTS IN IIUM DURING COVID-19

Mohammad Muaz Mohamad, Muhammad Luqman 'Afif Johari, Ahmad Najmi Abid Zulkifli,
Muhammad Haikal Abdullah, Amalia Izzati Razman, Nur Alia Iman Shaik Mohd Nizam,
Muhammad Ikmal Arif Ahmad Ashhar, Ahmad Zhareff Emir Ahmad Haridan,
Nur Khairunnisa Nor Azlan, Shahida Athirah Shahrir, Muhammad Ashraf Fithri Anuar,
Muhammad Razin Zamani, Muhammad Adam Mohd Azani, Hazulin Mohd Radzuan,
Nour El Huda Abd Rahim, Shahida Saharudin, Wan Fatein Nabeila Wan Omar

Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia,
Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang, Malaysia

The existence of COVID-19 has significantly changed human's daily life in this world. The new norm of living in this pandemic has also led to a different approach on managing quality of life. With the current method of online teaching and learning, medical students may encounter a variety of stressors such as heavy workload, stressful examination and also inadequate learning environment which may influence their mental health. This study was conducted to investigate the association of mental health status with quality of life among medical students in International Islamic University Malaysia (IIUM) during the pandemic.

A cross-sectional study was conducted online among 158 medical students of Year 1 and Year 2 between July and August 2021. This survey used validated questionnaires to assess depression (WHO-5), anxiety (GAD5) and Quality of Life-BREF (WHOQOL-BREF). WHOQOL-BREF measures five domains: overall quality of life (QOL), physical health, psychological health, social relationships, and environmental quality of life. The result was analysed using Statistical Package for the Social Sciences (SPSS) version 26.

The prevalence rates of anxiety and depression-related symptoms were 27.8% and 86.7% respectively with more students developing anxiety as compared to depression. The proportion of students with anxiety was higher than depression in both Year 1 (n=67) and Year 2 (n=70) students. Students with anxiety and depression symptoms had a significantly poorer overall QOL score (p<0.001) compared to students without mental health problems. Both categories of students were associated with lower physical, psychological and environmental domain scores (p< 0.05).

In conclusion, the quality of life of medical students are significantly affected by the presence of anxiety and depression. Progressive strategies need to be implemented to maintain good mental health care among medical students in IIUM as it will improve their quality of life during Covid-19.

[PPE37]

NUTRITIONAL STATUS AMONG ELDERLY RESIDING IN LONGHOUSES AT KUCHING, SARAWAK

Jia Hui Tan, Woan Ching Chang

Nursing Division, School of Health Sciences, International Medical University, 126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia

Maintaining a good nutrition status is one of the major aspects in health. Malnutrition may affect elderly, in particular, during the aging process. This study aims to investigate the nutritional status and its association with demographic factors among elderly in longhouses at Kuching, Sarawak. This is a cross-sectional quantitative survey using convenience sampling method. A total of 109 Malaysian elderly residents participated in the study. The MNA®-SF questionnaire was adopted to determine the nutritional status among elderly. The findings of the study show that elderly at longhouses are at risk for malnutrition (M=10.15, SD=2.289). There is a statistically significant relationship between variables of age and alcohol consumption, and malnutrition (p<.05). The study provides useful data on the nutritional status among elderly residing in longhouses at Kuching and Serian divisions. The findings highlighted the nutritional needs of the elderly population. It is imperative for the local public health authorities to plan further in improving the nutritional status of the older population in Sarawak.