Empowering Primary Care 
Towards Universal Health 
1st - 4th August 2018 
Ipoh Convention Center, Perak
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Oral Abstracts

Oral Abstract 1
A cross sectional study on patient satisfaction and its associated factors at the University Malaya Medical Centre Primary Care Clinic

Leow HT1, Liew SM1
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Introduction: Patient satisfaction is an important determinant of patient compliance, utilization of medical services, and continuity of care. This study aimed.

Methods: An observational cross-sectional study was conducted in a primary care clinic from 18th July to 5th August 2016. Information on the experience of time spent in clinic, sociodemographic data, and personal health information of the participants were collected. The 18-items Patient Satisfaction Questionnaire (PSQ-18) was used to determine patient satisfaction. Univariate and multivariate analyses were employed to identify the factors associated with patient satisfaction.

Results: There were 327 participants recruited with 50.46% of them were satisfied. The communication domain recorded the highest satisfaction (80.80% of the maximum score) with the lowest score in the accessibility and convenience domain (66.40%). The only significant positive correlation with total patient satisfaction score was the difference between perceived and expected length of consultation.

Conclusion: The proportion of satisfied patients was low. As the only independently associated factor was the difference between perceived and expected length of consultation, changing how time is spent in consultation may prove more useful in strategies to improve patient satisfaction.

Oral Abstract 2
Uncovering the meaning of “Happiness” among troubled adolescents: Experiences of using expressive art therapy

Siti Umi F1, Salmah N1, Ruziaton H1, Siti Aisyah M2, Maimunah M3, Nurzeiti Y3, Sajaratulnisah O5
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Introduction: Communication with adolescent may be challenging. Adolescents often need innovative ways to express themselves rather than verbally. Expressive art therapy (EAT) is one of the approaches to allow adolescents to communicate thoughts and feelings via artistic medium.

Objectives: This presentation aims at exploring a group of family medicine specialists (FMS) experiences using expressive art therapy as a preventive and rehabilitative work for troubled adolescents.

Methods: Seven FMS conducted expressive art therapy with 64 troubled adolescents at two separate settings; a shelter for girls and a secondary school in Klang Valley. With the theme ‘happiness’ and a supply of various art materials, each adolescent creatively came up with an art work that translate what the term ‘happiness’ meant for them. Volunteers then shared with the rest of their art work by describing their art work.

Result: For each EAT process, a reflection was done by the FMS on the following: i) adolescents’ communication and behaviors during the session; ii) adolescents’ descriptions of their art work, and iii) lesson learnt from conducting EAT with adolescents.

Conclusion: Challenges faced during the art therapy process and recommendations for future implementation of EAT will be discussed in detail. With proper approach EAT can be adopted as a modality to communicate with troubled adolescents.

Oral Abstract 3
Does professional training make a difference in knowledge, awareness and practice regarding familial hypercholesterolaemia among primary care physicians in Malaysia?

Ahmad Baihaqi A1, Anis Safura R1,2, Zaliha F1, Suraya AR1, Noor Alicezah MK1, Norshia A2, Hapizah N2, Gerald F Watts6
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Introduction: This study aimed to determine knowledge, awareness and practice (KAP) regarding familial hypercholesterolaemia (FH) among Malaysian primary care physicians (PCP), and to compare KAP between PCP with postgraduate qualification (PCP-PG-Qual) and PCP without PG qualification (PCP-noPG-Qual).

Methods: This was a cross-sectional study involving PCP with ≥1-year working experience in the Malaysian primary care settings. An adapted and validated 25-item FH-KAP questionnaire was disseminated during primary care courses. Total score for each domain was calculated by summing-up the correct responses and converted into percentage scores. Normality distribution was examined and comparisons of mean/median percentage scores were made between the two groups of PCP.

Results: A total of 372 PCP completed the questionnaire. Regarding knowledge, 77.7% correctly defined FH. However, only 8.3% correctly identified coronary artery disease risk in untreated FH. The mean percentage knowledge score was significantly higher in PCP-PG-Qual compared to PCP-noPG-Qual (48.9, SD±13.92 vs. 35.2, SD±14.13), t (370) =8.66, p<0.001. Regarding awareness, 39% were aware of NICE FH guideline and only 27.2% were aware of FH diagnostic criteria. The median percentage awareness score was significantly higher in PCP-PG-Qual compared to PCP-noPG-Qual (15.4, IqR±23.08 vs. 7.7, IqR±11.54), p=0.013. Regarding practice, only 19.1% stratified FH patients as high risk irrespective of other risk factors. The mean percentage practice score was significantly higher in PCP-PG-Qual compared to PCP-noPG-Qual (52.4, SD±12.92 vs. 42.7, SD±16.63), t (370) =9.65, p<0.001.

Conclusion: Substantial gaps in FH-KAP among Malaysian PCP were identified, with PCP-PG-Qual having better knowledge, awareness and practice than PCP-noPG-Qual, emphasising the importance of professional training and certification.
Oral Abstract 4
What is the diabetes knowledge and its associated factors in primary care patients with type 2 diabetes?: A cross sectional study

Adina A1, Subashini A2, Paranthaman V1, Liew SM1, Ng CJ1
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Introduction: Type 2 diabetes mellitus (T2DM) is a major health burden in Malaysia. Studies show better patients' diabetes knowledge leads to better treatment adherence and reduce complications. Our study aims to measure general diabetes knowledge and its associated factors in primary care patients with T2DM.

Methods: A cross-sectional study was conducted in four primary care clinics in Ipoh, Perak. Participants were adults with T2DM, attending follow-up from January to March 2018. Patients who could not read English, Malay or Chinese or deemed too ill were excluded. Consentent participants answered a questionnaire including the Michigan Diabetes Knowledge Test (MDKT). Diabetes knowledge is presented as total MDKT score (ranges from 0 to 14), and in three categories which are poor knowledge (score < 7); average knowledge (score 7–11) and good knowledge (score > 11). The SPSS 21 software was used for statistical analysis.

Results: Four hundred and twenty-nine patients were included. The mean total knowledge score was 7.7 (SD 2.308) and most have average knowledge (n=267, 62%). Klinik Kesihatan Buntong had the highest percentage of good knowledge (n=15, 13.8%). Six sociodemographic factors (clinic type, age, ethnicity, education level, monthly income and health insurance cover) were found significant by univariate analysis. In the final model, only patient's education level was a significant predictor of diabetes knowledge (p<0.001). Attendance to clinic diabetes education session did not significantly predict diabetes knowledge (p=0.77)

Conclusion: Most primary care patients with T2DM in Ipoh, Perak have average knowledge of diabetes knowledge. Diabetes knowledge is significantly predicted by patient's education level and not attendance to clinic diabetes education sessions.

Oral Abstract 5
Exploring doctors’ view and experiences of language barrier in primary care clinic consultation

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Introduction: Studies have shown that language barrier causes negative impact to health care. However, little is known about this issue in Malaysia.

Objectives: This study aimed to explore primary care doctors' experiences on language barrier in their consultation, the impact on patient care and strategies to overcome it.

Methods: Five focus group discussions (FGD) involving 18 primary care doctors were conducted in a hospital-based primary care clinic using a semi-structured interview guide developed based on the construct of Communicative Competence Theory. All FGDs were audio-recorded and transcribed verbatim. Transcripts were analyzed using thematic approach.

Results: Four key themes were identified: 1. Language barrier-why does it happen? 2. Language barrier affects patient care. 3. Language barrier-how primary care doctors overcome in their consultation? 4. Language barrier-possible strategies to improve. It is unique that language barrier also existed among locals besides foreigners. Patient care was affected due to diagnostic difficulty, increased use of clinic resources and less practice of family medicine principles. The strategies used to overcome language barriers include human interpreters, online translator, drawings, hand gestures and learning new language. Other suggestions include hiring professional interpreters, training bilingual clinic staff, foreigners to learn Malay or English prior to obtaining work or stay permit, developing translation booklet and allocating doctors according to language proficiency.

Conclusion: This study highlighted that language barrier affects patient care in primary care consultation in Malaysia. It gives an insight of strategies to overcome for future practice.

Oral Abstract 6
Adherence to recommendations on management of suspected urinary tract infection in urban tropical primary care

Alison Ashe J1, Pauline Lai SM1, Nadia A2, Siti Nurakilla R1, Tun Firzara AM1, Fadzilah Hanum MM1, Haireen AH1, Aqtab Mazhar A1, Sajaratulnisha O1
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Introduction: Diagnosis and management of urinary tract infection (UTI) is complex, and does not always follow guidelines. Therefore, the aim of this study was to determine adherence to the 2014 Malaysian Ministry of Health guidelines in managing suspected UTI in a Malaysian primary care setting.

Methods: We retrospectively reviewed computerized medical records of adults with suspected UTI between July-December 2016. Excluded were consultations misclassified by the search engine, duplicated records of the same patient, consultations for follow-up of suspected UTI, patients who were pregnant, catheterized, or who had a renal transplant. Records were reviewed by two primary care physicians and a microbiologist.

Results: From 852 records, 366 consultations were a fresh episode of possible UTI. Most subjects were female (78.2%), with median age of 61.5 years. The major co-morbidities were hypertension (37.1%), prostatic enlargement in males (35.5%) and impaired renal function (31.3%). Symptoms were reported in 349/366(95.4%) consultations. Antibiotics were prescribed in 307/366 consultations, which was appropriate in 227/307(73.9%) consultations, where the subject had at least one symptom, and leucocytes were raised in urine full examination and microscopic examination (UFEME). In 73(23.8%) consultations, antibiotics were prescribed inappropriately, as the subjects were asymptomatic (14.4.6%), urine was clear (17.5.5%), or UFEME did not show raised leucocytes (42.13.7%). In 7(2.3%) consultations appropriateness of antibiotics could not be determined as UFEME was not available.

Conclusion: Adherence to guidelines in the diagnosis and management of suspected UTI was suboptimal. One reason could be the complexity of managing suspected UTI in older subjects with multiple co-morbidities. 
Oral Abstract 7
Impact of health education on knowledge and postpartum family planning practice

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Introduction: It was postulated that health education will increase knowledge and practice of health behaviors. Little is known whether health education conducted among women with caesarean delivery managed to increase their practice of postpartum family planning (PPFP) and knowledge.

Objectives: This study aimed to determine the association between health education and knowledge besides PPFP practice among women one year after caesarean delivery in Kelantan.

Methods: A cross-sectional study was conducted using a structured questionnaire among women at one-year after caesarean delivery in all tertiary hospitals in Kelantan from January until April 2018. Health education refers to self-reported of having received health education. Knowledge was assessed through 19 items in the questionnaire which assessed contraceptive and reproductive health knowledge. Independent t-test was used to determine the mean knowledge score according to health education received and chi-square was used to determine the PPFP practice according to health education.

Results: Out of 281 women, 256 (91.1%) had ever received health education and most health education was received during their hospital admission (60.9%). Only 12.8% received health education throughout all their visits to healthcare facilities. Antenatal health education was found to significantly increase contraceptive knowledge (p=0.003, 95% CI (-2.36, -0.50)). Individual health education was found to significantly affect postpartum family planning practice (p=0.045).

Conclusion: It is important to strengthen health education delivery in primary care during antenatal visits by conducting personalized counselling in view of their significance in increasing knowledge and postpartum family planning practice among women.

Oral Abstract 8
Inappropriate attitude towards antibiotic usage among patients attending a primary care clinic and its associated factors

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Introduction: Attitude associated with antibiotic usage has been studied worldwide. Nevertheless, no local studies have been conducted within our local primary care setting. This study aims to explore the attitude appropriateness on antibiotic usage among patients attending a primary care clinic and the associated factors.

Methods: A cross-sectional study using a validated and translated questionnaire was conducted between June and August 2017. The self-administered questionnaire was distributed to 300 patients attending a UiTM Primary Care Clinic. Patients aged 18 years and above, able to recognize the term antibiotic and understand Malay and English language were recruited. Medical personnel and patients with known contraindications to antibiotics were excluded.

Results: A total of 256 completed questionnaires were collected. The mean attitude score towards antibiotic usage was 29.5 ± 4.19. 50% of respondents had inappropriate attitude indicated by a score less than 30. The highest inappropriate attitude response was expecting antibiotic from their doctors for symptoms of common colds (76%). This is followed by taking antibiotics to recover more quickly (55%) and stopping antibiotics once they start feeling better (48%). Moreover, 13% admitted to using leftover antibiotic, 9.4% kept antibiotic stocks at home, 9% shared their own antibiotic with sick family members, 9.8% failed to check expiry date and 6.3% did not take antibiotics according to instruction. Low educational level and poor antibiotic knowledge were significantly associated with inappropriate attitude towards antibiotic usage.

Conclusion: Inappropriate attitude towards antibiotic usage within this community is a major concern and this should be addressed to improve the antibiotic usage among the community.

Oral Abstract 9
Parents’ vaccine knowledge, awareness and hesitancy in relation to childhood immunization status in Sandakan, Sabah

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Introduction: Vaccination is one of the most successful and cost-effective public health interventions available in the worldwide. With the increasing trend of emergence of vaccine-preventable diseases in Malaysia, parents as the main caregiver of their children play major roles in determining children’s vaccination. The purpose of this study was aimed to investigate the effect of parents’ vaccine knowledge, awareness and hesitancy towards their children’s immunization status.

Methods: Using convenience sampling method, cross-sectional validated questionnaires adapted from two studies were distributed to 450 consented parents that brought their children’s immunization booklets to Sandakan health clinics from February to April 2018.

Results: 405 valid questionnaires were retrieved (response rate = 90%). For the total vaccine knowledge and awareness scores (ranged from 0-10), the median ± IQR were 7.00±3.00 and 8.00±4.00 respectively. The higher the scores, the better vaccine knowledge and awareness the parents had. Besides, the median ± IQR of total vaccine hesitancy scores (ranged from 0-100) were 16.67±20.00. Only 27 (6.8%) parents were vaccine hesitant (scores>50). Majority of the children (n=376, 92.8%) was immunized. There was a significant difference in total vaccine knowledge scores of the parents between children’s immunization status groups (up-to-date and not up-to-date) (p=0.005). However, no significant difference was found in parents’ total vaccine awareness and hesitancy scores between immunization statuses of their children.
Conclusion: Parents’ vaccine knowledge has impact on their children’s immunization status where parents with higher vaccine knowledge would most likely to ensure their children to have up-to-date immunization status.

Oral Abstract 10
Community engagement through a community-based project towards betterment of elderly health in Kepala Batas, Pulau Pinang

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Introduction: As Malaysia continues its developmental progress as a nation, population pattern is changing to reflect changes in lifestyle of its population. The aged population is expected to increase of 210% in 2020. The proportion of the aged is associated with an increase in the prevalence of ill health. The elderly health program is one of the initiatives of university-community partnership, being taken to empower ageing population in Kepala Batas. Thus the aims of this project were to transfer knowledge on identified local health issues and train the communities on activities and skills to maintain good healthy behavior practices.

Methods: All eligible adult community members residing in Kepala Batas, who were available during the study period were selected as participants for this project. This community engagement project was conducted from Oct 2017 until March 2018. Knowledge and skills transfer projects were carried out based on the modules in Kompleks Darul Hanan, Kepala Batas. Fifty-six staffs and twenty students were assigned to selected activities in six serial projects.

Results: There were significant improvements in health knowledge in selected health issue (p< 0.05, paired t-test). Improvements in the quality of life scores have been sustained.

Conclusion: Darul Hanan-AMDI sub-committees and supporting groups were created to ensure sustainability. This engagement has contributed to satisfactory impacts in the community and facilitated students' professional development. The success of this programme has improved overall quality of life, contributed to the development of human capital of the community through the university.

Oral Abstract 11
Evaluation of a colorectal carcinoma screening program in primary health care clinics of Klang district, Malaysia

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Introduction: In Malaysia, colorectal cancer (CRC) is the second most common cancer. According to the Malaysian National Cancer Registry Report 2008 to 2013, the overall incidence rate for CRC was 21.3 cases per 100,000 populations. The objective of the study was to evaluate the CRC screening program in primary care in the Klang district.

Methods: A cross sectional study was conducted using secondary data of CRC screening program involving asymptomatic patients across 6 primary health care clinics under Klang district in 2017. Analysis of the detection rates of immunochemical fecal occult blood test (iFOBT), colonoscopy findings and CRC were done. The iFOBT and colonoscopy detection rates were also compared to the demographic data.

Results: Among the 453 asymptomatic patients tested with the iFOBT, 62 patients (13.7%) had positive iFOBT. Of these, only 40 patients (64.5%) were compliant with colonoscopy and 22 patients (35.5%) defaulted the colonoscopy procedure. Elderly age group and male patients had a significantly higher chance of a positive colonoscopy result compared to their counterpart. The most common finding from colonoscopy was colonic polyp (57.1%), followed by adenocarcinoma (21.6%) and hemorrhoids (7.1%). The prevalence rate of diagnosing a CRC through iFOBT screening was 7 in 1000 patients.

Conclusion: Based on this study, the colonoscopy positive detection rates were higher in the elderly and men. Hence, the older generation and men’s awareness of CRC should be increased at the primary care level so that the CRC detection rates can be increased in high risk population.

Oral Abstract 12
Preconception care and its association with early antenatal booking among women with high risk pregnancy in Kinta district, Perak

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Introduction: This study aims to determine factors associated with early antenatal booking among women with high risk pregnancy in Kinta District, Perak.

Methods: This is a cross-sectional study, conducted from March 2016 to December 2016 in all government health clinics with maternal and child health services in Kinta District, Perak. Antenatal women who came for the first booking visit and identified as high risk pregnancy were selected through stratified random sampling. A validated Malay language Preconception Health Knowledge and Practice Questionnaire was used, consisting of 21 items on knowledge and 16 items on practice of preconception health. Simple and multiple logistic regression analysis were conducted to determine the association between preconception health knowledge, practice and other factors with early antenatal booking.

Results: A total of 490 women participated, with the mean age of 29.92 (SD 5.56) years old. Only 23.9% of the respondents had attended preconception care prior to the current pregnancy. Less than half of them had good knowledge on preconception health, while 76.7% had good preconception health practice. The proportion of early antenatal booking was 74.3%. There were significant associations between attended preconception care, planned pregnancy and preconception health practice with early antenatal booking. Women who attended preconception care, planned their pregnancy, and had a good preconception health practice had higher odds to come for early antenatal booking.
Conclusion: Strategies to promote preconception care and health need to be strengthened. Subsequently, it may help women to come for early antenatal booking once they are pregnant.

Oral Abstract 13
Cyberbullying (victims) among adolescents in Kuala Lumpur: Its prevalence and association with pattern of internet use and psychological problem

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Introduction: Cyberbullying has been recognised as a new form of bullying in the past decade and may have significant impact. Study on cyberbullying among adolescents in Malaysia however is still new and not well explored. We assess the prevalence of cyberbullying and its association with pattern of internet use and psychological problem among adolescence in Kuala Lumpur.

Methods: This cross-sectional study was conducted among 390 adolescents (14 years old) attending selected national secondary school in Kuala Lumpur. All participants completed self-administered questionnaires which consisted of personal background, pattern of internet use, cyberbullying victimization and Depression Anxiety and Stress Scale (DASS-21). Data was analysed using multiple logistic regression to determine factors associated with cyberbullying victims.

Results: Prevalence of cyberbullying victims among adolescence were 15.4% (n=60). The commonest method of cyberbullying were receiving mean comments (53.3%), spreading of rumours (33.3%) and being threatened online (25%). Chatrooms (48.3%), Instagram (40%) and social networking sites other than Facebook (35%) were the commonest online environment where cyberbullying occurred. Factors that were independently associated with cyberbullying victims were depression (OR:2.491, p= 0.031), adolescents with pre-existing medical illness (OR: 2.575, p=0.025), and the usage of smartphone internet data (OR: 2.214, p=0.032).

Conclusion: Our study demonstrates the existence of cyberbullying among adolescents in Kuala Lumpur schools and the prevalence is comparable with other studies. Significant association with depression is worrying, thus awareness of cyberbullying and its effects should be advocated to the education and healthcare providers to prevent negative consequences to our young generation.

Oral Abstract 14
Perspectives on e-cigarette among young e-cigarette smokers and the intention to switch to cigarette smoking: A qualitative study

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Introduction: The uprising popularity of e-cigarette smoking among young adults, and the risk of switching to tobacco smoking from e-cigarette use, could dampen efforts towards smoke free generation by 2045. This study aimed to explore reasons for e-cigarette smoking and intention to switch to cigarette smoking among young Malaysian adults who smoke e-cigarette.

Methods: Fourteen in-depth interviews (IDIs) were conducted from 1st April until 15th July 2017 using semi structured interview guide based on Theory of Planned Behavior. Current e-cigarette smokers aged between 18 and 30 years were recruited via purposive and snowball sampling through three e-cigarette shops in Shah Alam, Glenmarie and Sungai Buloh. Interviews were transcribed verbatim and data were analyzed using thematic analysis via Nvivo 11 software.

Results: Four themes emerged such as ‘harmless, flavoursome and handy’; desirability’; endorsement’ and futile regulations’. Young adults perceived e-cigarette smoking as safe and non-addictive. Their social circle including family members approved e-cigarette smoking and influenced the uptake of e-cigarette smoking. E-cigarette smoking is perceived to be under regulated, and becomes a facilitator for e-cigarette smoking among our participants. None of our participants had the intention to switch to cigarette smoking either because cigarette smoking is harmful or for having the intention to quit e-cigarette smoking completely.

Conclusion: E-cigarette smoking is perceived as safe and non-addictive. This warrant effective dissemination of accurate information on e-cigarette smoking to young adults. Under regulation of e-cigarette advertising, selling; and labelling of e-liquid highlight the importance of regulations on e-cigarette smoking across sectors.

Oral Abstract 15
Prevalence of alcohol consumption and alcohol use disorders among adult outpatient attendees in the urban primary care clinics in Miri, Sarawak, Malaysia

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Introduction: The harmful use of alcohol is a worldwide problem resulting in approximately 3.3 million deaths annually and 5.1% of the global burden of diseases attributable to alcohol use. In Malaysia, based on the National Health Morbidity Survey (NHMS) 2015, the prevalence of alcohol consumption among age 18 years and above was 8.4%. The aim of this study was to determine the prevalence of alcohol consumption and alcohol use disorder and its associated factors among the adult outpatient attendees in the urban primary care clinics in Miri, Sarawak, East Malaysia.

Methods: This was a cross sectional study conducted in two urban primary care clinics in Miri from 1st April until 15th May 2017. Simple random sampling was used to select the study subjects. A sample size of 404 was calculated. The inclusion criteria were male and female of age 18 years and above and Malaysian citizens. Pregnant ladies were excluded from the study. Data was collected for each subject via investigator aided questionnaire. The validated AUDIT-10 questionnaire in Malay and English was used to determine alcohol consumption, the level of alcohol hazardous use, dependence level and harmful use.
Results: A total of 404 subjects were selected into the study. 187/404 (46.3%) were current alcohol drinkers. Among the 404 subjects, 364/404 (90.1%) were low risk (AUDIT-10 score 0-7), 37/404 (9.2%) were hazardous drinker (AUDIT-10 score 8-15) and 3/404 (0.7%) were harmful drinker (AUDIT-10 score 16-19). There was a statistically significant association between alcohol consumption and male gender [OR 3.10 (1.65-5.81), p<0.001], Iban race [OR 7.19 (1.71-30.11), p<0.05], Christianity [OR 4.92 (1.59-15.21), p<0.05], Buddhism [OR 4.47 (1.08-18.56), p<0.05] and secondary school education level [OR 3.00 (1.22-7.42), p<0.05]. Hazardous and harmful drinking were significantly associated with age group between 18 to 39 years [OR 3.66 (1.42-9.42), p<0.05], male gender [OR 4.95 (1.67-14.68), p<0.05] and Iban race [OR 3.05 (1.24-7.49), p<0.05].

Conclusion: The prevalence of alcohol consumption among adult outpatient attendees in the urban primary care clinics in Miri is five times higher than the NHMS 2015 prevalence. Less than one percent of the adult outpatient attendees was categorised as alcohol use disorder. Male gender, Iban, Christianity, Buddhism and secondary school education level were factors associated with alcohol consumption. Age group between 18 to 39 years, male gender and Iban race were factors associated with hazardous and harmful drinking pattern.

Oral Abstract 16
Elderly nursing home in Yamagata Japan-A window if experience

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Introduction: Japan is a super aging society. The country has mandated an Elderly Welfare Act in 1963 making formal age care to become a common place. Parallel to this Malaysia is approaching to develop into an aged nation by 2030. Nursing homes and formal aged care will be an important issue in the years to come. It is important to learn from Japan how they support the elderly in this area of care.

Methods: A group of Family Medicine Specialists (FMS) visited Higashi Zawa Roujin Home in the Provincial District of Yamagata, Japan on 4th April 2018. The group consisted of five FMSes and one translator. There was a face to face interview between the group members and representatives of the home followed with a tour of the home.

Results: The home is a private organization. There were a total of 50 elderly in this area of care. It is important to learn from Japan how they support the elderly patients to receive the best care that they could get to ensure continuity of care. The home service provides short term and long term care services involving multidisciplinary approach by visiting geriatrician, nurses, occupational therapist, physiotherapist, nutritionist, and trained personnel.

Conclusions: Adequate support by multidisciplinary team is important in the aged care system and this could be the secret of longevity among Japanese elderly especially in the aged care.
Objectives: To assess the BSE techniques among health clinic attenders in urban areas in Terengganu.

Methods: Three health clinics were selected from the district of Kuala Terengganu and Kuala Nerus. There were 347 women aged 20 to 60 years offered to be assessed on BSE techniques using a breast dummy jacket. A validated BSE checklist was used. It has eight components. Each component has options of ‘not done’, ‘moderate’ and ‘good’ based on their technique. It was scored as ‘1’, ‘2’ and ‘3’ marks respectively. The components were: 1. Stand in front of mirror with hands at sides, 2. Observation of breast, 3. Palpation using fingers, 4. Palpation in circular/vertical movement, 5. Palpation over the nipples, 6. Squeezing the nipples, 7. Palpation of axillae and 8. Repeat on the other side.

Results: The mean (SD) age of the participants was 35.70 (10.21) years. About 78% were married. The mean (SD) score for each component were: 1.49 (0.64), 1.78 (0.88), 2.16 (0.74), 2.20 (0.76), 1.63 (0.84), 1.65 (0.86), 2.02 (0.90) and 2.40 (0.83). About 61% of them did not palpate and squeeze the nipples. About 40% did not palpate the axillae.

Conclusion: The BSE techniques among health clinic attenders are poor. Correct BSE techniques should be taught regularly through health promotion either in the clinics or in other places.

Poster Abstract 3
Knowledge and attitude on colorectal cancer and screening among primary care providers in west Malaysia

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Introduction: In Malaysia, colorectal cancer (CRC) is the second most common cancer after breast cancer. However, CRC preventive activities among primary care providers are still poor. Good knowledge is associated with recommendation on CRC screening.

Objectives: To determine the knowledge and attitude on colorectal cancer and its screening among primary care providers in Malaysia.

Methods: A cross sectional study was done on 132 primary care providers from 44 Primary Care clinics in West Malaysia. Stratified multistage random sampling was applied and a validated questionnaire with Cronbach’s alpha of 0.82 for knowledge and 0.78 for attitude was used. There were 22 items for knowledge and 12 items for attitude. The answers were in 5 point Likert Scale from strongly agree to strongly disagree. The cut off point for both good knowledge and attitude was 80%. Data were entered using SPSS 12.0 and analysed with STATATA 8.0.

Results: A total of 116 primary care providers responded making a response rate of 87.9%. Among the respondents, 45.6% were medical doctors, of which 10.3% were family medicine specialists. The mean (SD) percent score for knowledge and attitude were 72.4 (6.51) and 56.6 (11.28) respectively. The percentages for good knowledge and attitude were 1.38% and 3.4% respectively. About 41.4% were not aware of the current recommendation for colorectal cancer screening. Only 22.8% updated their knowledge on CRC screening.

Conclusion: This study showed that the knowledge and attitude on CRC and its screening is still poor among primary care providers. Primary care providers should be kept abreast with the latest recommendations and aware on the importance of CRC screening.

Poster Abstract 4
Knowledge and attitude on colorectal cancer and screening among private general practitioners in Kelantan, Malaysia

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Introduction: Colorectal cancer (CRC) is among the commonest cancer in Malaysia. Studies showed that private general practitioners (GPs) have inadequate knowledge and negative attitude towards screening for CRC which results in poor screening practice.

Objectives: To determine the level of knowledge and attitude on colorectal cancer screening among private general practitioners in Kelantan.

Methods: A cross sectional study was done on 170 registered GPs from January to March 2013. A validated self-administered questionnaire was used. It contained 18 questions on knowledge and 13 questions on attitude components. A five point Likert Scale (strongly agree to strongly disagree) was used. The cut off point for good knowledge and attitude was 80%. Descriptive analysis was used using statistical Program for Social Science Version 20.0.

Results: A total of 127 GPs responded making the response rate of 74.7%. Majority (95.3%) did have any postgraduate training. Only 22 (17.3%) clinics have faecal occult blood test (FOBT) service. The mean (SD) percent score for knowledge was 69.8% (7.9). The percentage of GPs with good knowledge was 21.3%. Only 13.4% of GPs update their knowledge on CRC screening. The mean (SD) percent score for attitude was 19.8% (43.3). The percentage of GPs with good attitude was only 4.7%. About 90% agree that screening with FOBT is able to detect CRC at early stage.

Conclusion: Majority of GPs have inadequate knowledge and poor attitude on colorectal cancer screening. Providing updated knowledge and promoting positive attitude among GPs is important to help in the detection of early colorectal cancer.

Poster Abstract 5
Identifying electrocardiogram changes among athletes in a primary care setting

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Introduction: Identifying electrocardiogram changes among athletes in a primary care setting is important to help in the detection of early colorectal cancer. The mean (SD) percent score for attitude was 19.8% (43.3). The percentage of GPs with good attitude was only 4.7%. About 90% agree that screening with FOBT is able to detect CRC at early stage.
**Introduction:** Athletes are at risk of sudden cardiac death (SCD). The 12-lead electrocardiogram (ECG) is reliable in identifying potential cardiac abnormalities in the screening of athletes. The aim of this abstract is to identify the ECG pattern changes among athletes during a 'pre-participation' screening.

**Methods:** A pre-participation screening for athletes was conducted in a primary care specialist clinic from the 1st-28th February 2018. The screening was based on the Football Association Medical (FAM) proforma which includes cardiovascular risk e.g. blood pressure, fasting sugar, lipid profile, ECG and Echocardiogram. The ECG patterns are analyzed based on the International criteria for electrocardiographic interpretation in athletes and divided into normal versus abnormal changes. The descriptive data was analyzed using SPSS v24.

**Results:** A total of 85 athletes participated in the screening. The mean age is 20.11 ± 2.996. The mean pulse is 55.22 bpm, systolic pressure (123.66 mmHg) and diastolic pressure (70.55 mmHg). Normal "athlete's heart" changes are 80%, and abnormal are 20%. The normal ECG changes are lead III, V1 T-inversions (72%), J-point elevation (58%) and incomplete RBBB (4.7%). The abnormal ECG changes are Multiple leads T-inversions (5.9%), Hypertrophy (2.4%), prolonged PR interval (3.5%) and deep Q waves (8.2%). Echocardiogram abnormalities are found in 7.1% athletes with one consistent with apical hypertrophy. Abnormal Echocardiogram are significantly consistent with abnormal ECG with p < 0.05.

**Conclusion:** To reduce SCD among athletes, physicians should be trained in ECG interpretation to distinguish between normal physiological changes from abnormal findings suggestive of pathology.

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**Poster Abstract 6**

Quality of life among infertile individuals in Malaysia: How do we fare against other Asian countries?

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**Introduction:** Infertility problems have been shown to reduce quality of life and can affect a person's overall health and wellbeing. The Fertility Quality of Life (FertiQoL) questionnaire has been translated into Malay and has been showed to have good properties with consistency in validity and reliability.

**Objectives:** This is the first study conducted in Malaysia to measure the QoL among infertile individuals and to compare with other Asian countries.

**Methods:** This is a cross-sectional study and was conducted among those who attended four major public fertility clinics in Malaysia. A demographic details were collected and participants answered the FertiQoL (Malay) questionnaire consists of 4 Core domains with 24 questions for measuring Quality of life. Data was analyzed using SPSS v24. Ethical approval was obtained from the University Ethics Committee.

**Results:** A total of 395 participants were analyzed with mean age of 33.18 ± 4.45 SD. 57.2% were female and 82.5% were Malays with 7.6% Chinese, 7.6% Indian and 2.3% others. The total Core FertiQoL scores are 74.68 (14.35) and are divided into Mind-body 77.56 (17.55), Emotional 70.26 (19.88), Relational 77.32 (17.19) and Social 73.56 (15.74) domains. This total score is higher in comparison to other Asian countries such as Indonesia 70.05 (13.36), Pakistan 52.17 (13.13) and Taiwan 55.12 (13.72).

**Conclusion:** Malaysians with infertility have good quality of life in comparison to other Asian countries. However, the ability to assess and refer for counseling is crucial for those who need it within primary and secondary care settings.

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**Poster Abstract 7**

Quality of life and comorbidities among elderly attending a wellness program at a primary care clinic

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**Introduction:** Presently, quality of life among the elderly is receiving increased attention. There are multiple factors influencing quality of life in the elderly. Some of these factors include health, co-morbidities and socio-demographic profile.

**Objectives:** This study was designed to estimate the quality of life, comorbidity and the socio-demographic profile amongst the elderly attending a wellness program at Pandamaran Health Clinic.

**Methods:** This was a cross-sectional descriptive study conducted by face-to-face interview among individuals aged ≥ 60 years attending a wellness program at Pandamaran Health Clinic from March 2016 – March 2018. To detect the quality of life CASP19 questionnaires was used. The questionnaires were age specific and were used to assess quality of life in the elderly. Data was analyzed using SPSS 21.

**Results:** Hundred twenty-four older people volunteered in the program. The mean age was 68± 5 years and they were mostly females, 85(68%). The mean score of CASP 19 was 42. Common co-morbidities included diabetes mellitus, 71(56.8%), hypertension 88(70.4%), heart disease 20(16%), stroke 13(10.4%), respiratory problem 21(16.8%), visual problem 73(58.4%), hearing problem 44(35.2%), dental problem 38(30.4%), incontinence 31(24.8%) and cancer 6 (4.8%). About 72(57.6%) had poly-pharmacy issues, 48(38.4%) had nutritional issues, 31(24.8%) had sexual problems, 45(36%) had history of fall(s), 75(60%) had physical inactivity, 21(16.8%) were current and ex-smokers.

**Conclusions:** Comorbidities in the elderly are multiple and may affect the quality of life. A structured health program in the community may improve the quality of life. Further study is needed to see the outcome of such intervention.
Poster Abstract 8
Individualized glycaemic targets among Type 2 Diabetes Mellitus (T2DM) patients in Klang district health clinics

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Introduction: A good glycaemic control in people with T2DM prevents microvascular complications and reduces the risks of macrovascular diseases. Getting the glucose controlled to target is the principal treatment goal. In Malaysia, national clinical practice guideline recommends HbA1c target of < 6.5% as adequate control. Decision analyses have demonstrated the importance of acknowledging life expectancy, hypoglycemia, and treatment burden when setting the treatment goals. Recent trials demonstrated conflicting results regarding appropriateness of tighter glycaemic control on cardiovascular outcome. Therefore, treatment needs to be individualized by balancing the risks and benefits.

Objectives: This study was conducted to determine the achievement of appropriate glycaemic control among T2DM patients.

Methods: This is a cross-sectional analysis on 250 pre-recruited adult T2DM patients from Klang district by randomization from National Diabetes Registry database. The latest HbA1c result within July 2015 to June 2016, ranging between 6.6-8.0% were taken for analysis. Individualized HbA1c target were assigned by investigators based on personalized patient’s risk profile using an audit questionnaire. Quantitative analysis was performed using IBM SPSS.

Results: This study found that the actual performance based on individualized HbA1c target was 40.8% as compared to 28.8%, which is below the optimum achievable standard of 30% and above.

Conclusion: Individualization of glycemic targets increases the number of T2DM patients with appropriate control. This approach favors elderly patients with multiple comorbidities, longer diabetes duration, shorter life expectancy, impaired cognitive and functional status.

Poster Abstract 9
Prevalence of diabetic peripheral neuropathy among type 2 diabetic patients in primary care kota tinggi district

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Introduction: Type 2 Diabetes Mellitus (T2DM) is a chronic disease that interferes with the body’s metabolism system for insulin secretion required by the body and involves glucagon secretion failure. Based on the National Diabetes Registry Report Vol 1 (2009 - 2012), the number of T2DM patients in Malaysia registered under MOH is 653,326. The state with the highest number of T2DM patients is Selangor which is 106,101 people followed by Johor which is 92,750 people while the state with a small number of patients is Labuan, 524 people. T2DM associated with multiple complication involving micro and macro vascular system. Complication includes neuropathy, nephropathy, retinopathy, and cardiovascular disease. Diabetic Peripheral Neuropathy (DPN) is defined as the presence of symptoms and sign of peripheral nerve dysfunction in people with diabetes after the exclusion of other causes.

Objectives: The general objective is to determine the prevalence of Diabetic Peripheral Neuropathy on T2DM in primary care Kota Tinggi District. The specific objectives are to determine the factors in contributing of DPN which affect quality of life of T2DM patients and to determine types of intervention that can reduce DPN.

Methods: The study was conducted using quantitative methods randomly and the data were obtained through questionnaire and physical examination. Subjects for this study were selected using a convenient sampling method with a total of 423 respondents who fulfilled the desired criteria. The data is analyzed using SPSS. Results: The results show factors in contributing of DPN which affect quality of life of T2DM. Factors to take into account are duration of T2DM, ages, history of amputation.

Conclusion: The prevalence of DPN among T2DM, factor associated with development of DPN and to determine types of intervention

Poster Abstract 10
Clinical Audit on Patient Waiting Time in The Primary Care Clinic

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Introduction: Waiting is a common phenomenon in every primary health care clinic.

Objectives: The purpose of this audit is to assess patient waiting time in a primary health care clinic.

Methods: This audit was conducted at a primary care clinic for two weeks duration. The inclusion criteria was patient who attend the clinic during this period except for those who required more time to be seen: those who were critically ill, those who came for procedures, those who were involved in a student teaching session and those who came for medical check-up, marital screening and antenatal follow up. The waiting time is basically the sum of pre-assessment and pre-consultation time. A total of 60 patients had been selected via systematic random sampling method whereby only even numbered were recruited. The time of arrival was captured using the queue management system (QMS) and then the time when patient been called for assessment and consultation room was recorded. The data were entered into the Statistical Package for Social Science (SPSS) version 16.0.

Results: The average waiting time from registration to seeing a doctor was 58 minutes. 98.3% of patients waited more than 30 minutes to see the doctor.

Conclusion: Problems identified in this audit were shortage of staff and ineffective tracing system of patient’s old notes. Strategies formulated to improve the waiting time were suggested such as increasing the number of staff at the assessment counter and improve the filing system.
Poster Abstract 11
Clients' acceptance with family doctor concept clinic (FDC) in Klinik Kesihatan Seri Tanjung
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Introduction: Family Doctor Concept Clinic (FDC) introduced late 2014 by Ministry of Health Malaysia commenced in Klinik Kesihatan (KK) Seri Tanjung since 1st October 2015. The general idea was based on general practice system that already established in developed countries such as the UK and Australia. General guideline was given by MOH, but local adaptations needed.

Objectives: FDC is a new system, so this study was done to review our clients and staff acceptance.

Methods: A survey was conducted at 3, 6 and 12 months after FDC started in KK Seri Tanjung. A same set of questionnaire given to all clinic staff and random clients visiting all 4 zones in KK Seri Tanjung, consists of 10 questions; divided into 5 demographic data questions and 5 questions about FDC in KK Seri Tanjung.

Results: At 3 month, 62% clients and 93% staff responded YES had been informed about FDC. After 6 and 12 months, findings improved to 85% and 100% of clients and 100% for staff. At 3 month, 80% clients and 77% staff agrees FDC started in KK Seri Tanjung. After 6 and 12 months, findings improved to 100% in both groups but decline to 95% clients and 98% staff. At 3 months, 85% clients and 88% staff agrees that KK Seri Tanjung will also accepts clients outside of their operational areas. Findings increased to 100% clients and 97% staff after 6 and 12 months. At 3 months, 85% clients and 89% staff agrees FDC should be started in other clinics in Melaka Tengah district. Findings increased to 100% in both groups after 6 and 12 months. At 3 month, 50% clients and 45% staff answered still confused about FDC. Findings decline to 25% and 10% clients and 15% and 5% staff after 6 and 12 months.

Conclusion: Generally FDC accepted among clients and staff in KK Seri Tanjung, although there is a decline in agreement FDC started in KK Seri Tanjung. There are still a few areas that need to be improved.

Poster Abstract 12
Two Case Series of Diagnosing Smear Negative Pulmonary Tuberculosis in Patients with Diabetes Mellitus
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Introduction: Tuberculosis(TB) is a major public health problem in developing countries including Malaysia. Being classified as an intermediate TB burden country, the smear negative rate among new pulmonary tuberculosis(PTB) patients in Malaysia was 28%. It is a challenging task to detect smear negative PTB which might have minimal disease with no or less cavitation-escape clinical detection.

Methods: We are reporting two case studies of successful diagnosis of smear negative PTB in patients with underlying diabetes mellitus(DM).

Results: Madam N is a 30 year-old lady with co-morbid of type-1 DM on insulin, hypertension and chronic kidney disease. She was treated as bronchopneumonia on October 2017. Although chest radiograph(CXR) showed some regression but she still has intermittent cough with no other symptoms of PTB. Sputum direct smears for acid fast bacilli(AFB) were all negative. A sputum TB culture had showed a positive culture for Mycobacterium tuberculosis(MTB) complex and she was diagnosed as smear-negative PTB and started on TB treatment. Meanwhile, Mr J is a 51 year-old gentleman, with type-2 DM on oral hypoglycaemic agents, presented with productive cough for one month duration. His CXR did not show any changes typical of PTB, and sputum direct smears for AFB were all negative. Sputum TB culture had isolated MTB complex. Similarly a diagnosis of smear-negative PTB was made and treatment was started for him.

Conclusion: High index of suspicion is needed in symptomatic patient with absence of typical PTB findings on neither CXR nor sputum direct smears. Further testing for sputum TB culture will assist in detection and subsequently treatment of PTB as in these two patients with underlying immune-compromised state of DM.

Poster Abstract 13
Tinea Imbricata: A Case Report In An Aboriginal Boy in Malaysia
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Introduction: Tinea Imbricata is a rare dermatophytosis caused by Trichophyton concentricum which is frequently found in rural areas with poor hygiene, high atmospheric temperature and high humidity. The skin lesions are characterized by concentric and lamellar plaques of scale.

Case report: A 10-year-old aboriginal (Orang Asli) boy who stayed in Kampung Chiong, Gerik district, presented with itchy rash over for two weeks. On examination, there was an erythematous patch with concentric rings of scales over the lower abdomen. Skin scrapings showed numerous septate branched hyphae under microscope examination. After two weeks of twice daily topical clotrimazole and daily oral griseofulvin 125mg, his skin rash resolved, leaving a hyperpigmented patch.

Discussion: 9.1% of 581 aborigines had Tinea Imbricata. It results from close contact with spores and filaments of Trichophyton concentricum. Malnutrition, immunological factor and genetic factors, both autosomal recessive and dominant inheritance, have been implicated to increase the susceptibility rates. Its characteristic concentric rings of confluent scaling are formed by desquamating skin which takes place from within outwards, with their free borders towards the center and scales adhere peripherally. Within each ring of scales, there is a circle of hypopigmented skin and within this, a ring of normally pigmented skin. Rings of desquamation do not cross one another. Scratching of the intensely pruritic lesions may lead to lichenification and obscure the original concentric pattern. Without treatment, it evolves into larger, more extensive but less pruritic, polycyclic to serpiginous exfoliative scaling lesions, which can be either hypopigmented in darker skin or erythematous in fairer skin individual. It responses
rapidly to griseofulvin, leaving brownish pigmented patch within seven days and negative scraping for fungus within ten days. Terbinafine has similar efficacy and was proven to reduce rate of relapse significantly compared with itraconazole after thirteen weeks of follow-up.

Conclusion: Tinea Imbricata is endemic in rural areas with poor hygiene, high humidity, high temperature and malnutrition. It is characterized by pruritic concentric rings of scales which response well to griseofulvin.

Poster Abstract 14
The Family Medicine Specialist Grooming Program in Negeri Sembilan
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Introduction: The Family Medicine Specialists in Negeri Sembilan has started this pilot program, called the Family Medicine Specialist(FMS) Grooming program since January 2018. The program gives medical officers opportunity for awareness and early introduction of family medicine training program while simultaneously working in public health care facilities.

Methods: The selected medical officers will attend training for a period of 6 months. They are given 2 full days per month to attend the structured program. The program is designed jointly by all the Family Medicine Specialists in Negeri Sembilan. At the end of program, assessment will be conducted.

Results: The first batch of participants consisted of 26 candidates from all districts in Negeri Sembilan. The participants has shown great interest and benefited from the training. Three of the participants has been accepted for post-graduate training Family Medicine for June 2018 intake.

Conclusion: Advantages of the program include enhancing clinical skill and knowledge, stimulate interest in active learning, possibility earlier entry into either the Family Medicine Post-graduate program, and ultimately to reduce the number of post-graduate Family Medicine candidate dropping out from the program.

Poster Abstract 15
The Impact of Parental Perinatal Depressive and Anxiety Symptoms on Newborn Low Birth Weight
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Introduction: Despite significant improvement in health status in Malaysia, the prevalence of low birth weight (LBW) infants is still remained static over the past 12 years. LBW newborns are at higher risk for perinatal and infant mortality. Prior evidence from developed and developing countries indicates the association between maternal antepartum depressive and anxiety symptoms with infant low birth weight is conflicting. There is no study in Malaysia that shows the impact of parental depressive and anxiety symptoms on LBW.

Objectives: This study aims to investigate the independent effect of parental antepartum depressive and anxiety symptoms on infant LBW in Kuantan, Pahang.

Methods: A prospective cohort study of 450 pregnant women and their spouses was carried out in six conveniently selected government health clinics in Kuantan, Pahang. Antepartum depressive symptoms was assessed using Edinburgh Postpartum Depression Scale (EPDS) and anxiety symptoms using Depression Anxiety Stress Scale-21 (DASS-21) anxiety scale and they were followed-up until delivery. Baseline data provided socioeconomics, anthropometrics, reproductive, obstetric and social support information. Infant birth weight of 445 (98%) singleton live babies born at term (≥37 weeks) were recorded to the nearest 0.1kg from Infant and Child Health Record. Length of pregnancy, mode and place of delivery, complications during labour, live or still birth, weight, height, and head circumference of the newborn were also recorded. Chi-square and independent sample t-test were done as descriptive statistics and a multiple logistic regression model was used to identify predictors of LBW.

Results: After adjusting for potential cofounders, maternal depressive (OR=5.02; 95% CI 1.75-14.43), paternal depressive (OR=4.29; 95% CI 1.17-15.72), and paternal anxiety (OR=4.62; 95% CI 1.74-12.26) symptoms were significantly associated with LBW (≤2.5kg). Low monthly household income, maternal malnutrition, being firstborn and shorter duration of pregnancy were also associated with LBW.

Conclusion: This study shows that maternal depressive symptoms and paternal depressive and anxiety symptoms during pregnancy predict the LBW of newborns. Therefore, it is crucial to detect and manage the depressive and anxiety symptoms for both the mothers and their spouses, which maybe help preventing LBW among newborns in Malaysia.

Poster Abstract 16
Retroviral disease (RVD) patients’ management in public primary health clinics in Selangor - where are we in ending AIDS?
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Introduction: Primary health clinics have started to manage RVD patients since early 2000. However, documentation of treatment outcomes pertaining to RVD patients in relation to National Strategic Plan Ending AIDS (NSPEA) are still lacking. This study was to determine the socio-demographic characteristics, clinical profile and the treatment outcomes of patients with RVD.

Methods: A cross sectional study was conducted, employing universal sampling of RVD patients registered from 1st January 2000 until 31st August 2017 at 41 public primary care clinics in Selangor.

Results: A total of 1722 RVD patients’ records were reviewed. Of these, 74.7% patients were on antiretroviral treatment (ART). The majority of the respondents were Malaysians, aged less than 40 year, male, Malay ethnicity, single, had at least secondary education. The overall prevalence of coinfection among RVD patients were 37.4%. There were 30.2% of respondents with very low CD4 count (less than 200 cells/mm3) and 16.1% had
opportunistic infection. After 1 year starting on ART, 74.2% of the patients had well suppressed viral load. There were 16.7% patients lost to follow up, 18.4% transferred out to other centres and 3.6% died.

Conclusion: One in three RVD patients presented late. Only about 75% were on ART, of which only two third had achieved viral load suppression. More effort are needed to strengthen RVD patients’ management, to ensure early diagnosis and linkage to treatment thus achieving optimum viral load suppression in order to achieve NSPEA target of 90:90:90.

Poster Abstract 17
Prevalence of non-alcoholic fatty liver disease (NAFLD) among adult patients in UiTM primary care clinics

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Introduction: Non-alcoholic fatty liver disease (NAFLD) is defined by excessive fat accumulation in the form of triglycerides (steatosis) in the liver. It is an emerging cardiovascular disease (CVD) risk factor, independent of known risk factors such as diabetes and metabolic syndrome. Population studies in Asia showed the prevalence of NAFLD ranging from 11.5 to 32.6%. However, little is known of its prevalence in primary care. Therefore, this study aimed to determine the prevalence of NAFLD among adult patients attending primary care clinics in UiTM.

Methods: This was a cross sectional study among adult patients who were receiving care at UiTM Primary Care Clinics. Patients with at least one CVD risk factor were recruited between July and September 2017. Socio-demographic information and anthropometric measurements were obtained during the clinic visit and liver ultrasound investigations were subsequently performed. Data were analyzed using SPSS version 23.

Results: A total of 213 patients completed ultrasound investigations. Out of this, 117 (54.9%) were found to have NAFLD. The mean age of patients with NAFLD was 54.8 (± 12.62 SD) years old. Type 2 Diabetes Mellitus (T2DM), waist circumference (WC), body mass index (BMI) and blood pressure (BP) were found to be significantly associated with NAFLD. Patients with NAFLD were found to have significantly higher WC (98.7cm [SD 15.9] vs. 91.1cm [SD 11.35]), p<0.001 and higher mean BMI (30.1 [SD 5.9] vs. 27.4 [SD 5.54], p<0.001) compared to patients without NAFLD. The prevalence of NAFLD among T2DM patients was 67.5%, whereas the prevalence in those without T2DM was 47.1%, p<0.004.

Conclusion: NAFLD was highly prevalent in UiTM Primary Care Clinics. Hence, it is important to identify those who are at risk and to further stratify their CVD risk for targeted intervention in primary care.

Poster Abstract 18
Knowledge and practice of Rotavirus vaccination among primary care doctors in Selangor

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Introduction: Rotavirus vaccination was recommended as routine immunization of all infants worldwide in 2009 by World Health Organization (WHO). In Malaysia, rotavirus vaccination is still an optional vaccine. It was done among primary care doctors because they are the main front liner health care professionals that involve in the care of children in their daily practice.

Objective: To determine the knowledge and practice of rotavirus vaccination among primary care doctors in Selangor.

Methods: A cross sectional study was conducted via convenient sampling among primary care doctors in government and private clinics in Selangor from March to May 2015 (3 months) by using validated self-administered questionnaire.

Results: 300 primary care doctors in Selangor were approached during the study period. The response rate was 82%. The knowledge of primary care doctors in Selangor regarding rotavirus vaccination was moderate, which median of total score knowledge were 12.0. 69.9% of primary care doctors had explained about rotavirus vaccination when children came with gastroenteritis symptoms, 90.7% did answer when being asked about rotavirus vaccine and 85% had recommended rotavirus vaccination. There were no significant different for median knowledge between doctors in government clinic and private setting. The median total knowledge was higher among female (p=0.008), married status (p=0.016), Master/FRACGP holders (p=0.002), older age (p=0.02), longer years of working (p=0.03) and lower estimated total patients seen per day (p=0.004). More married doctors explained about rotavirus vaccine when patient came with gastroenteritis symptoms compared with single/other status doctors (X2(df)=11.289 (1), p=0.001). More doctors who saw more patients per day answered (Z= -2.052, p=0.04) when being asked about rotavirus vaccine. Indian doctors and married doctors had recommended rotavirus vaccine more compared to other races (X2(df)=6.582 (2), p=0.037) and single/other status doctors (X2(df)=6.398 (2), p=0.041).

Conclusion: Primary care doctors in Selangor should improve their knowledge and practice towards this vaccine to deliver correct and effective information. Strategies should focus especially to young doctor and shorter years of working, such as provision of Continuous Medical Education (CME) and courses.

Poster Abstract 19
Evaluation on Use, Determinants and Knowledge of Health Supplement Among Undergraduate University / College Students in Ipoh, Perak

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Introduction: Health supplement is commonly used by the general population, especially by university students. However, there is no published data on the use of health supplement among those who are fairly younger in age. It is important to determine the use of health supplement and its determinants.

Methods: A cross sectional study was conducted among 300 students who are currently studying in University of Ipoh in March 2015 among the students above 19 years old. Students who currently taking health supplement were interviewed. Data were analyzed using SPSS version 23.

Results: A total of 291 students were interviewed. The prevalence of using health supplement among the students were 35.5%. There were no significant differences between the gender and the use of health supplement. However, the students who were using health supplement had higher educational experience of 4.73±2.78 years compared with the students who were not using health supplement 3.95±2.8 years (Z= -2.09, p=0.04). Similarly, the students who were taking health supplement had significantly higher total knowledge about health supplement (Z= -2.37, p=0.02) compared to the students who did not use health supplement.

Conclusion: Health supplement was commonly used among University of Ipoh students. Future study should focus on the effectiveness and the long-term consequences of health supplement usage by the students.
**Introduction:** This study aimed to determine the relationship between consumption and knowledge of health supplements among undergraduate students in Ipoh.

**Methods:** This cross-sectional study was conducted in March and April 2018. From 17 universities/colleges in Ipoh, Perak, two universities/colleges with health science students and another two with non-health sciences students were selected by cluster sampling and random sampling method. A set of questionnaire which comprised of socio-demographic data, lifestyle practices, prevalence of health supplement usage and assessment of knowledge was given to the undergraduate students selected. Their height, weight and body mass index were also obtained. The data was analysed using SPSS 22.0 (trial version).

**Results:** Twenty one percent of 374 respondents consumed health supplements (31 males, 48 females). Majority of consumers were overweight (43%) with family income of more than RM 5000. The most common types of health supplements used were vitamins (44%) and minerals (23%). The three most common reasons for its usage were to “maintain good health” (26%), “ensure adequate nutrition” (17%) and “improve immune function” (13%). Thirty six percent of all respondents had good knowledge were mostly among the non-consumers. Higher usage of health supplements with better knowledge was found among the health sciences’ students as compared to non-health sciences students.

**Conclusion:** The consumers of health supplements were mainly female, had family income more than RM5000, overweight and had better knowledge compared to the non-consumers.

**Poster Abstract 20**

The relative importance of internal and external factors influencing people’s intention to undergo CVD health check

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**Introduction:** Cardiovascular diseases (CVD) health checks are important for the early detection of high-risk patients to enable timely intervention and prevention of CVD. The aim of this study is to examine the relative importance of external and internal factors that influenced an individual’s intention to undergo CVD health check.

**Methods:** A cross sectional study was conducted in a hypermarket. Malaysians aged >30 years without known CVD were invited to participate. Participants were asked about their perceived internal (relevance of health check; readiness to face outcomes of health check) and external factors (external barrers; significant others) that influenced their intention to undergo CVD health check using a validated questionnaire. Ordinal hierarchical regression was used to evaluate the relative importance of the internal and external factors and Nagelkerke R2 was used to compare the importance of these factors sequentially.

**Results:** A total of 413 participants were recruited. More than half of the participants were Malays (53.3%), 60% were females and the median age was 45 years (IQR 17 years). Sixteen cases were removed from the analysis in view of Hawthorn effect, as those who never had health check indicated they had intention to undergo health check. The Nagelkerke R2 for the model was 22.7% with internal factors, 24.8% with external factors added, an addition of only 2.1%.

**Conclusion:** Internal factors are more important determinants of an individual’s intention to undertake CVD health check. Interventions to improve CVD health check may be more effective by focusing on internal factors.

**Poster Abstract 21**

Validation study of the parents’ attitudes about childhood vaccines (PACV) questionnaire - the Malay version

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**Introduction:** The Parent Attitudes about Childhood Vaccines (PACV) questionnaire was validated in the United States of America to identify vaccine hesitant parents (VHPs). This study aimed to adapt and translate the 15-item PACV questionnaire from English into the Malay language, and to examine its validity and reliability for the Malaysian population.

**Methods:** Parents of children aged 0 – 24 months were recruited at Klinik Kesihatan Seksyen 19 Shah Alam between November 2016 - June 2017. It involved three phases: i) adaptation and translation, ii) face validation and iii) field testing and psychometric evaluation of the Malay version. Established statistical approaches were used to examine psychometric properties. Test-retest reliability was tested four weeks later.

**Results:** During content validation, two items within the “Behaviour” domain were identified as items with formative scale and did not require validity testing, but retained for content validity. Exploratory factor analysis of the 13 items showed possibility of two to four factor domains, but the most conceptually equivalent finding was three domains. One item was deleted due to poor factor loading. Therefore, the validated PACV-Malay consisted of 14 items framed within four factor domains; “Behaviour”, “Safety and efficacy”, “General attitudes” and “Schedule and immunity”. The PACV-Malay was reliable with Cronbach alpha of 0.77.

**Conclusion:** The PACV-Malay is a valid and reliable tool which can be used to identify VHPs in Malaysia. Confirmatory factor analysis and scoring validation are recommended for future studies.

**Poster Abstract 22**

Patterns of preventable death among under 5 mortality (U5M) for year 2014-2017 in Kuala Selangor district: What should we do?

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Introduction: Preventable death among U5M is still a burden in Malaysia although it could be prevented or treated with access to simple and affordable intervention. In Kuala Selangor District the underlying factors that contribute to U5M is still not well recognized hence no appropriate action taken.

Objectives: This study aims to identify the patterns, clinical causes, remedial factors and discussed remedial actions among preventable U5M in Kuala Selangor District.

Methods: A retrospective study was conducted by reviewing stillbirth and U5M death form (SU5MR-1/2012) reported from 2014-2017.

Results: A total of 46 preventable U5M death forms were reviewed. There was four-fold increased trend of U5M from 2014 (4 cases) to 2017 (16 cases). The majority of the respondents were Malaysian maternal aged between 20-40 years old, Malay ethnicity, married, unemployed, had at least secondary education and low income. The 3 highest clinical causes of preventable U5M were respiratory (34.8%), certain infectious and parasitic disease (28.3%) followed by injuries and external causes (13%), 61.5% of certain infectious and parasitic disease were nosocomial infection. Clinical factors (33 cases) remained the main remediable factors followed by patient factors (27 cases) and non clinical (8 cases).

Conclusion: The alarming trend of U5M rate in Kuala Selangor District for the past 4 years was contributed by multiple factors. The sociodemographic patterns are still circulating among the low socioeconomic status. Clinical causes remain a major area for improvement but patient factors also need to be addressed. Improving clinical skills, strengthening hospital services and patient education remain the solution in preventing U5M.

Poster Abstract 23
Prevalence of pap smear uptake among primary care healthcare workers

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Introduction: Carcinoma of the cervix is the third commonest cancer among women in Malaysia. However, the uptake of pap smear screening by women in Malaysia has been low (22%). The primary healthcare workers (PHCW) are at the best position to advocate and offer this screening to the population but are they themselves doing it?

Objectives: This study aims to assess the uptake of pap smear screening among PCHCW working in the government’s Klinik Kesihatan.

Methods: This was a cross-sectional study conducted from January to February 2018. The number of participants was 206, selected randomly from 14 health clinics in the Gombak District, Malaysia. Ethical approval was obtained from the NMRR. Data was collected using a self-administered questionnaire that included demographic details. Statistical analysis was done using SPSS.

Results: The respondents comprised of 52 doctors and 154 nurses. The mean age was 34.6 (±7.31 SD) years old. 40% (83) of the respondents have undergone a pap smear in the last 3 years. 65 out of 154 nurses (42.2%) had gone for pap smear compared to only 18 out of 52 (34.6%) of the doctors. 58 (53.9%) of those who had training on pap smear (N=141), subsequently had a pap smear themselves.

Conclusion: The uptake of pap smear screening was higher among the primary healthcare workers as compared to the general population. Continued education, training and promotion of pap smear screening are recommended to ensure a higher percentage.

Poster Abstract 24
Audit regarding diabetic outcome and their associated factors among type 2 diabetic patients seen by family medicine specialist in Segamat district

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Introduction: Diabetes Mellitus is a major non-communication disease (NCD) burden in the world, South East Asia and Malaysia. In Malaysia, health clinic is one of the main place for follow up of these patients. Primary care physician in health clinic led by family medicine specialist (FMS) are taking care of the population. Diabetic patient seen by FMS are poorly controlled diabetic patients with Hba1c of > 10%, multiple co-morbidities and difficult patients refusing insulin. Little is known on the outcome of this service and factors associated with improvement of Hba1c among these patients.

Objectives: The study aimed to determine the socio-demographic, clinical profile and to identify factors associated with diabetic outcome.

Method: A retrospective cross-sectional study for all diabetic patients seen by FMS from 1/2/2018 to 31/3/2018 in Segamat district using a structured questionnaire. Universal sampling was used. The data was analysed using SPSS.

Results: There were total of 82 diabetic patients had been enrolled for the audit. The mean age of patients 59.09 ±4.19 (SD) years old, majority are females (61%) and the mean total FMS follow-up was 6.09 ±4.40 (SD) visits per patient. The average duration of diabetes 8.35 ± 4.19 (SD) years. 47.4% of the patients had >1% Hba1c reduction (N= 57). The average Hba1c before FMS referral was 10.43 ± 2.28(SD) %, while average Hba1c post FMS referral was 9.23 ± 2.28(SD) %.

Conclusion: There were no significant association factor influenced reduction of the Hba1c among these patients. Therefore, the authors strongly belief the consultation of FMS played a vital role in the Hba1c reduction among poorly controlled diabetic patients.

Poster Abstract 25
‘Out Of The Box’ Innovative Strategies In Combating Dengue (The Kinta District Health Office Experience)

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1Vector Unit, Kinta Health Department; 2Greentown Health Clinic; 3Kinta District Health Department, Perak, Malaysia
**Introduction:** Dengue being one of the major challenges in most tropical countries has been an issue in Kinta District. Besides the normal control and prevention method such as inspection of breeding premises and fogging to kill infected mosquitoes, the Kinta Health Department found there were other issues that need to be tackled so that a sustainable ‘out of the box’ strategies could be implemented. Issues like awareness, information mechanism, two way communication, lack of proper guidance, alertness and breaking early transmission cycle in dengue was the main focus given in combating dengue.

**Objectives:** To reduce dengue cases, prevent breeding areas, improve awareness among the risk population, increase two way communication between community and health authorities.

**Methods:** Health team members dealing with dengue provide health education via materials, direct communication and demonstration of indoor aerosol spraying. Whatsapp group created for two way communication

**Results:**

<table>
<thead>
<tr>
<th>Locality</th>
<th>Date of Last Outbreak</th>
<th>Duration of Outbreak(days)</th>
<th>Date whatsapp group created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taman Meru 1B</td>
<td>9.1.2015</td>
<td>4-6</td>
<td>4.5.2015</td>
</tr>
<tr>
<td>Taman Lim</td>
<td>9.1.2015</td>
<td>4-6</td>
<td>4.5.2015</td>
</tr>
<tr>
<td>Taman Rishah</td>
<td>29.3.2016</td>
<td>14</td>
<td>5.9.2016</td>
</tr>
<tr>
<td>Taman Klebang Jaya</td>
<td>3.4.2016</td>
<td>24</td>
<td>27.4.2016</td>
</tr>
</tbody>
</table>

No new uncontrolled outbreaks since the dates mentioned above after whatsapp group created

**Conclusion:** These ‘out of the box ‘approaches shows positive outcomes in dengue control and should be implemented wherever possible in a sustainable manner.

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**Poster Abstract 26**

**Aiding Unfortunates by Klinik Pakar Kesihatan USIM**

**Fathima Begum SM**, Muhammad Shamsir MA, Mohd Radziwan AR, Zuhairi M

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**Introduction:** Waqf is any property that benefits or interest for charitable purpose. These so called donation is an important to help the poor and the needy people. Waqf is not for only muslim community but it is for all mankind regardless of religion and race. Klinik Pakar Kesihatan USIM embraces a ‘waqf’ concept and so far a model and a pioneer clinic of its kind. We aimed at explaining how Klinik Pakar Kesihatan USIM clinic able to aid the unfortunates by mean of this concept.

**Methodology:** A case study.

**Results:** 136 Asnaf enjoyed the free medical services from specialists in 2017. 310 Asnaf (until April 2018) enjoyed the free medical services from specialists in 2018

**Conclusion:** Increasing number of Asnaf getting free specialist service. Thus, this waqf model clinic should be an exemplary to other states in assisting the unfortunate group to enjoy free medical service.

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**Poster Abstract 27**

**Cutaneous larva migrans (creeping eruption): A skin manifestation of worm infection**

**Yak CS**

1Klinik Kesihatan Sungai Acheh, Nibong Tebal, Pejabat Kesihatan Daerah Sebenang Peri Satu, Pulau Pinang, Malaysia

**Introduction:** Cutaneous larva migrans (CLM)/ Creeping eruption is a frequent parasitic infestation caused by migration of animal hookworm larvae into the human epidermis. Its prevalence is high in regions of warm climate, eg South East Asia. Humans are accidental and dead-end hosts, as the larvae lack collagenase that is needed to penetrate the basement membrane and invade the dermis. Therefore, cutaneous larva migrans remains limited to the skin when humans are infected. The prognosis is excellent in view of it being a self-limiting disease, with the larvae dying and lesions resolving within 4-8 weeks. In rare cases, the lesions may take up to year to resolve. In this study, the author reported a case of cutaneous larva migrans in a 6 year old boy with a characteristic clinical picture: erythematous-papular, vesicular lesion, serpiginous path, with progressive, and pruritic growth. He was treated with albendazole 40mg OD for 3 days.

**Methods:** Case report

**Results:** Lesions resolved within 7 days after commencing treatment.

**Conclusion:** CLM is a clinical diagnosis and a self-limiting disease. However treatment is mandatory in view of intense itchiness and significant duration of the disease if left untreated. It is treatable with antihelminthics.

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**Poster Abstract 28**

**Cutaneous larva migrans: Treatment in primary care**

**Yak CS**

1Klinik Kesihatan Sungai Acheh, Nibong Tebal, Pejabat Kesihatan Daerah Sebenang Peri Satu, Pulau Pinang, Malaysia

**Introduction:** Cutaneous larva migrans (CLM) is a clinical diagnosis of an erythematous migrating linear or serpiginous cutaneous track with intense pruritus. It occurs when an individual is infected by the larvae of cat or dog hookworm larvae into the human epidermis. Its prevalence is high in regions of warm climate, eg South East Asia. Humans are accidental and dead-end hosts, as the larvae lack collagenase that is needed to penetrate the basement membrane and invade the dermis. Therefore, cutaneous larva migrans remains limited to the skin when humans are infected. The prognosis is excellent in view of it being a self-limiting disease, with the larvae dying and lesions resolving within 4-8 weeks. In rare cases, the lesions may take up to year to resolve. In this study, the author reported a case of cutaneous larva migrans in a 6 year old boy with a characteristic clinical picture: erythematous-papular, vesicular lesion, serpiginous path, with progressive, and pruritic growth. He was treated with albendazole 40mg OD for 3 days.

**Methods:** Case report

**Results:** Lesions resolved within 7 days after commencing treatment.

**Conclusion:** CLM is a clinical diagnosis and a self-limiting disease. However treatment is mandatory in view of intense itchiness and significant duration of the disease if left untreated. It is treatable with antihelminthics.
Conclusion: CLM is best treated using Albendazole 400 mg orally for 3 days due to its high efficacy, tolerable side effects and wide availability in local setting. A 7 day course of anthelminthic can be considered in severe cases of CLM, and a repeated course in hookworm folliculitis.

Poster Abstract 29
Self-care activities among patients with type 2 diabetes mellitus in Penampang, Sabah and its association with depression, anxiety and stress

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Introduction: Performing self-care activities can be challenging but it is important for favourable outcomes of type 2 diabetes mellitus (T2DM). It may be influenced by psychological problems. Objectives: To examine the level of self-care activities and the presence of psychological problems among patients with T2DM. The association between the self-care activities and the psychological problems was assessed too.

Methods: This cross-sectional study was conducted at a government health clinic in Sabah. Data was collected between July and September 2017 using a validated self-administered questionnaire which include the depression, anxiety and stress scale-21 (DASS-21) and the summary of diabetes self-care activities (SDSCA) questionnaire.

Results: About 91% of 331 participants took diabetes medications in ≥6 days per week. They followed a healthful eating plan, performed feet inspection, monitored blood glucose and exercised 30 minutes a day in 5.0 (IQR 4.0), 4.0 (IQR 7.0), 0.0 (IQR 1.0) and 1.0 (IQR 4.0) days per week respectively. The proportion of those with depression, anxiety and stress were 4.5%, 8.8% and 5.7% respectively. Following a healthful eating plan (p<0.001) and monitoring blood sugar levels (p=0.045) were found to be significantly associated with anxiety.

Conclusion: Generally, self-care activities were poorly practised by the participants except for taking diabetes medications. Thus, more support should be provided to improve their level of self-care activities. Even though, psychological problems were uncommon among the participants, certain activities such as following a healthful eating plan and monitoring blood sugar might cause anxiety. Psychological support is also required to prevent deterioration in their performance of such activities.

Poster Abstract 30
Prevalence and associated factors of diabetes among Malaysian adult current smokers – A nationwide population-based study

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1Institute for Public Health, Ministry of Health, Kuala Lumpur

Introduction: Diabetes and smoking are major public health problems in Malaysia. The objectives of this study were to determine the prevalence and associated factors of diabetes among adult current smokers in Malaysia.

Methods: Data were obtained via face-to-face interviews from respondents aged ≥18 years who participated in the National Health and Morbidity Survey 2015. Current smokers were those who smoked at least one tobacco product every day, over a period of one month or more. Diabetes was defined as having fasting capillary blood glucose of ≥6.1 mmol/L (or non-fasting blood glucose of ≥11.1 mmol/L).

Results: Prevalence of diabetes among current smokers was 15.3% (n=762). The highest prevalence of diabetes among current smokers were those aged ≥60 years (31.3%), males (15.3%), Indians (21.6%), urban dwellers (16.4%), with no formal education (20.3%), smoked <10 cigarettes per day (16.2%), did not make a quit attempt in the last 12 months (15.5%) and obese (21.3%). Current smokers aged ≥60 years, 50-59 years and 40-49 years were 5.92, 4.59 and 2.71 times more likely to have diabetes respectively than those aged 18-19 years. Urban current smokers were 1.37 times more likely to have diabetes than rural residents. Current smokers who were obese were 1.90 times more likely to have diabetes than those with normal weight.

Conclusion: Diabetes was more prevalent among older smokers, who were obese and resided in urban areas. It is of utmost importance to educate this population in smoking cessation as to avert the unwanted complications arising from diabetes.

Poster Abstract 31
Depression, anxiety and stress status and dental caries experience among adult patients attending outpatient dental clinic in Hospital Universiti Sains Malaysia

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1School of Dental Sciences, Health Campus, Universiti Sains Malaysia, Kelantan, Malaysia.

Introduction: The study aimed to evaluate mental health status and dental caries experience among adult patients attending outpatient dental clinic in Hospital Universiti Sains Malaysia.

Methods: This was a cross-sectional study involving 106 adult patients who attended the outpatient dental clinic. Sociodemographic profiles were obtained and mental health status was evaluated using the Depression, Anxiety and Stress Scales (DASS-21) questionnaire. Clinical oral examination was conducted to determine the caries experience using the decayed, missing and filled teeth (DMFT) index.

Results: Results show that majority of the patients were Malay (92.5%), female (60.4%) and young adults (73.0%). The prevalence of moderate to extremely severe symptoms of depression, anxiety and stress was found in 5.7% (95% CI:1.2-10.1), 19.8% (95% CI:12.2-27.5) and 6.6% (95% CI:1.8-11.4) of the patients respectively. The median (IQR) of the caries experience was 7.0 (IQR=7). There was significantly higher caries experience in normal/mild (9.0) compared to moderate/severe/extremely severe (5.0) group of anxiety symptoms (p-value=0.029). However, there were no difference of caries experience between the group of depression symptoms (p-value=0.099) and stress symptoms (p-value=0.452).

Conclusion: Mental health plays a major role in an individual’s well-being and patients attending dental clinic exhibit less severity of mental health illness. Even though screening of mental health is not warranted in primary dental setting but it would be beneficial to check on oral health status in mental health clinic setting.
Nurul Aini Abdullah¹,²

Methods: This was cross sectional study done in a primary care clinic which involved elderly aged 60 years and above.

Objectives: The aim of this study was to compare the perception of walking ability, balance, risk of fall and doctor’s evaluation.

Introduction: Gestational Diabetes Mellitus (GDM), defined as any degree of glucose intolerance with onset or first recognition during pregnancy has many adverse effects on infants and pregnant women. This study aims to determine the prevalence of GDM and its associated factors among pregnant women in Negeri Sembilan, Malaysia.

Methods: This was a prospective cohort study in which 170 pregnant women were recruited from selected maternal and child health clinics in Negeri Sembilan between year 2014 and 2015. Blood samples were taken at <14th weeks of gestation for serum Vitamin D quantification. Modified Glucose Tolerance Test (MGTT) was conducted at 24-28 weeks of gestation for GDM diagnosis. A set of pre-tested interviewer-administered questionnaire was used to obtain relevant information. Descriptive and multivariate logistic regression analysis were used to analyse the data in SPSS Version 21.

Results: The prevalence of GDM was 14.1%. Mean serum Vitamin D was 38.16 ± 9.75 nmol/L for the pregnant women with GDM (n=24) while mean serum Vitamin D among the non-GDM pregnant women was 31.90 ± 10.83 nmol/L. Family history of Type 2 Diabetes Mellitus (DM) (AOR= 4.28, 95% CI= 1.67 – 10.99) and early pregnancy serum Vitamin D level (AOR: 1.05, 95% CI = 1.01-1.09) were associated with GDM.

Conclusion: Nutrition education, in terms of consuming food high in Vitamin D or adequate intake of Vitamin D supplements need to be emphasized for women in reproductive age, especially for those with family history of DM.

Poster Abstract 33

A Comparison study between self-perception of walking ability, balance and risk of fall with actual clinical assessment among ambulating elderly in a primary care setting

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¹Department of Family Medicine, Universiti Kebangsaan Malaysia Medical Centre; ²Klinik Kesihatan Jalan Lanang, Sibu, Sarawak; ³Department of Community Health, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia

Introduction: Gait and balance disorder are among the most common causes of falls in elderly and often lead to injury, disability, loss of independence and limited quality of life. However, there might be discrepancy between elderly’s perception of their own walking ability, balance, risk of fall and doctor’s evaluation. Objectives: The aim of this study was to compare the perception of elderly’s walking ability, balance and risk of fall with clinical assessment and factors influencing their self-perception.

Methods: This was cross sectional study done in a primary care clinic which involved elderly aged 60 years and above using systematic random sampling. Participants completed self-administered questionnaire comprising of sociodemographic data and question assessing their perception of ability to walk, balance and risk of fall. The clinical assessment was done using Tinetti Performance Oriented Mobility Assessment.

Results: Most of the participant perceived they had good perception of walking (84.4%) and balance (77%). A small proportion (11.5%) agreed that they are at risk of fall. There was a good agreement in walking ability (k:0.702, p: <0.001), moderate agreement in balance (k:0.546, p:<0.001) but poor agreement in the risk of fall (k:0.300, p<0.001). Multiple logistic regression demonstrated that factors associated with participant’s perception of risk of fall are age, having stroke and taking psychotropic drugs.

Conclusion: A discrepancy is observed between self-perception of balance and risk of fall with actual clinical assessment. Advanced age, history of stroke and psychotropic drugs were significantly associated with perception at risk of fall. It is important that our healthcare education is geared towards narrowing the discrepancy and targeted especially to those who are at risk of fall.

Poster Abstract 34

Knowledge and attitude on depression among Malaysian family medicine postgraduate trainees

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Introduction: Mental and substance use disorders were leading cause of the years lived with disability (YLDs) worldwide. Objectives: This study aims to assess the knowledge and attitude on depression among Malaysian family medicine postgraduate trainees.

Methods: A cross sectional study was conducted in May 2015 among junior postgraduate (DFM) and senior postgraduate (ATP) family medicine trainees of Academy of Family Physician Malaysia (AFPM) during the centralized workshop. Data was collected using self-administered questionnaire, included personal data, knowledge assessment which consists of 10 single-best answer Multiple Choice Question (MCQ) based on four clinical vignettes (adolescent, female, adult man and postpartum women) and attitude assessment with Depression Attitude Questionnaire (DAQ) consist of 22 items. The data was analyzed using the SPSS 19.0 software.

Results: A total of 312 trainees were included in the analysis from 523 potential trainees under AFPM. The ATP trainees were found to have better diagnostic ability for major depression than DFM trainees with p value <0.05. In the DAQ, ATP trainees have a higher mean score (83.1, SD 8.5) than DFM trainees (81.4, SD 8.8) which was not statistically significant. Postgraduate trainees who have higher score in DAQ have higher number of correct answers in knowledge test which is statistically significant (p<0.05).

Conclusion: The ATP trainees have better diagnostic ability for major depression and attitude towards depression in comparison to the DFM trainees. Hence it can be said that postgraduate family medicine programs have been successful in improving the knowledge on depression among primary care doctors.
Poster Abstract 35
Adaptation and validation of a questionnaire measuring knowledge, awareness and practice regarding familial hypercholesterolaemia among primary care physicians in Malaysia

Ahmad Baihaqi A1, Anis Safura R1,2, Zaliha I3, Suraya AR1, Noor Alicezah MK4, Siti Fatimah BS1, Mohamad Rodi I3, Norsiah A5, Hapizah N2, Gerald F Watts6
1Primary Care Medicine Discipline, Faculty of Medicine, Universiti Teknologi MARA (UiTM), Selayang Campus, Selangor, Malaysia; 2Institute of Pathology, Laboratory and Forensic Medicine (I-PPerForM), Universiti Teknologi MARA (UiTM), Sungai Buloh Campus, Selangor, Malaysia; 3Public Health Medicine Discipline, Faculty of Medicine, Universiti Teknologi MARA (UiTM), Selayang Campus, Selangor, Malaysia; 4Klinik Kesihatan Tampin, Negeri Sembilan, Malaysia; 5Klinik Kesihatan Tampin, Negeri Sembilan, Malaysia; 6Royal Perth Hospital and School of Medicine, University of Western Australia, Australia

Introduction: Primary care physicians (PCP) play an important role in early detection of familial hypercholesterolaemia (FH). However, knowledge, awareness and practice (KAP) regarding FH among Malaysian PCP were not well established, and there was no validated tool to assess their FH KAP. Therefore, this study aimed to adapt an FH KAP questionnaire which was originally developed in Australia by Bell et al. and to determine the validity and reliability of this questionnaire among Malaysian PCP.

Methods: This was a cross-sectional questionnaire validation study involving PCP with ≥1-year working experience in the Malaysian primary care settings. The original 19-item FH KAP questionnaire was content validated and adapted by 7 experts and was then face validated by 10 PCP. The adapted questionnaire was then distributed via e-mail to 1500 PCP for self-administration. Data was collected on their KAP as well as demographics. The questionnaire validity was tested using Kuder Richardson formula-20 (KR-20) and the test-retest reliability was tested on 26 PCP using Kappa statistics.

Results: Seven items were added, 8 items were modified and 1 item was moved to demography during the content validation. The adapted questionnaire contained 25 items (11 knowledge, 5 awareness and 9 practice items) and was further refined following face validation. A total of 130 out of 1500 PCP (response rate: 8.6%) completed the questionnaire. The mean percentage knowledge score was significantly higher in PCP-PG-Qual compared to PCP-noPG-Qual (53.5, SD±13.9 vs. 35.9, SD±11.79), t(128)=6.90, p<0.001. The median percentage awareness score was significantly higher in PCP-PG-Qual compared to PCP-noPG-Qual (15.4, IqR±23.08 vs. 7.7, IqR±15.38), p=0.030. The mean percentage practice score was significantly higher in PCP-PG-Qual compared to PCP-noPG-Qual (69.2, SD±17.62 vs. 54.4, SD±19.28), t(128)=3.79, p<0.001. The KR-20 was 0.79 indicating a moderate reliability and average Kappa was 0.796 indicating a substantial agreement.

Conclusion: These robust validation methods and their findings suggest that the adapted 25-item FH KAP questionnaire is a valid and reliable tool to measure FH KAP among the Malaysian PCP.

Poster Abstract 36
Factors associated with low birth weight in Tumpat district in 2017

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Introduction: Low birth weight is a well-known factor associated with neonatal mortality and has contributed to a poor health outcomes including growth impairment and poor cognitive development.

Objectives: To determine the prevalence and the factors associated with low birth weight infants in Tumpat District.

Methods: A case control study was conducted involving all health clinics under Tumpat District. Data of deliveries were obtained from district health office and mother’s antenatal card. All registered deliveries from January to December 2017 were used as sample populations. There were 105 pairs of cases and controls. Cases were selected randomly from all infants delivered with birth weight of less than 2500 gram. Control infants were sampled among infants with birth weight ≥ 2500 gram by matching month of delivery and their registered clinic.

Results: The prevalence of LBW in Tumpat district in 2017 was 7.41% (95% CI: 6.40, 8.50). Multivariate regression analysis revealed maternal pre-pregnancy body mass index (BMI) and history of LBW infants were significantly associated with risk of having LBW. Mother with pre-pregnancy BMI <18.5 had 3 times the risk to deliver LBW baby compare to mother with normal BMI (adjusted odds ratio (AOR) = 3.27;CI: 1.07, 9.97; p-value = 0.037) and mother with history of LBW are having 2 times risk to get LBW compared to mother without similar history (AOR = 2.3 ;CI: 1.3,4.71 ; p-value =0.022)

Conclusion: Low maternal pre-pregnancy BMI and history of LBW infants were identified as factors associated LBW in Tumpat District. Thus, it is essential to educate mother to acquire good pre-pregnancy BMI especially for those who had history of LBW infants. The importance of pre pregnancy screening, early antenatal booking and identification of high risk mother need to be strengthened in order to reduce the incidence of LBW infants. Further study should be done to explore other variables associated with LBW.

Poster Abstract 37
Isolated Mildly Elevated Alkaline Phosphatase (ALP) - A Liver Tumor Hint not to be Missed at Primary Care.

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**Introduction:** As primary care providers, our roles includes being great manager to our patient by discussing and reviewing their laboratory results as part of medical screening or chronic disease follow up. It is quite common to receive a medical report of mildly deranged liver enzymes that most of us tend to treat conservatively in low risk and asymptomatic patients. The dilemma is how mildly elevated is considered clinically insignificant. Indeed, a further assessment is still required. We report a case of a focal liver tumor in a 31-year-old gentleman with underlying obesity and gouty arthritis presented with isolated persistent mildly elevated alkaline phosphatase (ALP) during his obesity follow up. He is clinically asymptomatic. He benefited an ultrasound liver arranged from our center which showed dilated common bile duct. He benefited our referral to surgical department in which subsequent CT scan favors diagnosis of fibrolamellar carcinoma and he was managed well with surgical intervention.

**Methods:** A case report

**Conclusion:** This case has indeed proven that a focused and proper history taking; appropriate physical examination with a high index of suspicion; as well as selected and supportive investigations; as well as selected and supportive investigations; as well as selected and supportive investigations; as well as selected and supportive investigations; as well as selected and supportive investigations; as well as selected and supportive investigations.

**Poster Abstract 38**

**Concomitant dengue fever in Varicella Zoster infection – A rare presentation**

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**Introduction:** Varicella Zoster (VZV) infection is one of the commonest viral infections during childhood typically a self-limiting illness. Meanwhile Dengue Fever (DF) is an endemic infectious disease in our country commonly presented with nonspecific febrile phase in its initial presentation. It is very rare to find those two common viral infections occur at same point of time. We report a case of Dengue Fever (DF) without warning sign in a five year old girl who initially presented to us with fever and vesicular rashes. She was treated clinically as Varicella Zoster (VZV) infection on her first visit. Surprisingly, she remains febrile even at day six of illness despite no new vesicular lesions appeared on her skin. In view of suspicious of other underlying infection, further workup done revealed isolated thrombocytopenia which was confirmed with positive NS1Ag. She recovered well with close monitoring at our Klinik Kesihatan for subsequent one week duration. We would like to report a case of a rare presentation of concomitant Dengue Fever (DF) in a background of Varicella Zoster (VZV) infection.

**Methodology:** A case report

**Conclusion:** A persistent fever in a background of non-specific symptoms is indeed still an indication to do Full Blood Count (FBC) not only to support findings towards Dengue Fever (DF) but to rule out possibility of concomitant concealed infection. Principle of management of Dengue Fever (DF) with a background of other on-going infection is still the same as managing the dengue case alone.

**Poster Abstract 39**

**Adequacy and quality of pap smear using liquid base cytology test in Muar**


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**Introduction:** Cervical cancer is the second most common cancer. Screening for cervical cancer is done by Pap (Papanicolaou) test using Conventional Pap Smear (CPS) technique or by Liquid Based Cytology (LBC). The Liquid Based Cytology (LBC) technique was seen to improve smear sensitivity, specificity, adequacy and quality. Adequacy of smear is defined as satisfactoriness of the smear for evaluation. Quality of smear is defined as present or absent of endocervical cells. Objectives: This study is to determine the adequacy and quality of smear using LBC Test in PKD Muar among women aged 20-65 years old from January till December 2016.

**Methods:** This is a descriptive study. A stratified simple random sampling method was used. The sample size calculated was 360 based on prevalence of good quality of pap smear taken from transformation zone in Malaysia is 30% with 0.05 Confidence Interval and considering dropout rate 10%. The samples were further divided to eleventh Health Clinic in Muar based on 40% target of pap smear from each population (Referring to IDS). Sample of LBC results from each group will be selected randomly using Random Sample Calculator. Descriptive statistic is used to determine the socio demographic profiles of clients and cytological abnormalities while Multinomial regression was used to determine association between good quality of smear with staff and patient’s factors.

**Results:** All 369 smears were adequate (100%). Good quality smear (presence of endocervical cell) was 282(76.4%). Out of 282 samples of good quality smear, 278(98.2%) were negative for intraepithelial malignancy and 4(1.6%) were having epithelial cells abnormalities. Multivariate logistic regression, women with parity 5 and below have 0.375 odds (aOR 0.375, 95% CI 0.169 – 0.832, p value 0.016), or in other words 2.7 times less likely have a good quality smear, compared to grandmultipara women. Nurses with midwifery training have 3 times odds (aOR 3.107, 95% CI 1.173 – 8.230, p value 0.023) compared to nurses without midwifery training obtained good quality smear. Staff with 20 years and above work experience have 0.220 odds (aOR 0.220, 95% CI 0.056 – 0.869, p value 0.031), or in other words 4.5 times less likely, compared to staff with less than 10 years of experience for obtaining good quality LBC smear when adjusted for other confounders.

**Conclusions:** LBC is able to improve adequacy of pap smear but not the quality of smear. Patient’s and staff’s factors may contribute to quality of smear taken.

**Poster Abstract 40**

**Audit on antibiotic prescription in primary care specialist clinic, Universiti Teknologi Mara (UITM)**

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**Introduction:** Emergence of antibiotic microbial resistance which was declared as a global health threat is mainly contributed by the injudicious and irresponsible use of antibiotics. This audit aimed to assess antibiotic prescribing practices in the Primary Care Specialist clinic (PCSC), UiTM against the National Antibiotic Guidelines (NAG) 2014.

**Methods:** A retrospective audit of electronic medical records was conducted between 1st until 31st May 2017. Fifteen criteria were set and the standards were agreed based on local practice.

**Results:** A total of 64 medical records were audited. The most prescribed antibiotic was Augmentin®. The highest prescription was for respiratory cases. Only four criteria achieved the standard including availability of an onsite pharmacy, family medicine specialist and qualified medical officers, and prescribing recommended antibiotics. Eleven criteria did not meet the standard including availability of first line antibiotics (36.95%), availability of NAG 2014 in consultation rooms (16.7%), yearly training on usage of NAG 2014, correctly prescribed antibiotic dosage (84.4%), frequency (68.8%), duration (73.4%), documentation of drug allergy (34.4%), indication (93.8%), evidence of infection from physical examination or relevant investigation (87.5%), correct treatment of culture positive result (80%). The outcome of prescribing the recommended antibiotic with the correct prescription with a clinical indication was 43.75%.

**Conclusion:** Despite achieving the standard in only four criteria, the findings of this audit showed an overall improvement compared to an audit that was done in this centre in 2015. More comprehensive strategies are required for improvement especially on availability and training on usage of NAG 2014.

**Poster Abstract 41**

**To improve diabetic retinopathy screening among diabetic type 2 in klinik kesihatan Bota Kiri, Perak Tengah**

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1Klinik Kesihatan Bota Kiri, Perak Tengah; 2Pejabat Kesihatan Daerah Perak Tengah

**Introduction:** Diabetic Retinopathy (DR) is the leading cause of blindness and visual disability in adults. In Malaysia, the prevalence of DR from the 2007 Diabetic Eye Registry was 36.8% . It has been recommended that all DM patients should have at least a yearly eye examination.

**Objectives:** Our aim is to improve in the percentage of DR screening among Type 2 Diabetics and improving the salient criterias needed in the process of DR screening using fundus camera in Klinik Kesihatan Bota Kiri, District of Perak Tengah.

**Methods:** This is a 3 phase cross sectional study done in Klinik Kesihatan(KK) Bota Kiri,Perak Tengah. Phase 1 was a retrospective analysis for preliminary data collection to identify the most likely contributing factors to inadequate screening of DR. Model of Good Care(MOGC) was developed and intervention packages were devised consisting of health care provider alerts and patient alerts. Phase 2 was an implementation of the interventions and adherence to MOGC intensively for three months for both staffs and patients. Phase 3 involved post intervention data collection collected monthly for three months.

**Results:** Pre intervention collection data showed that only 18.4 % of Diabetic Type 2 patients screened for DR. The fundus photo appointment book was reviewed (11%), tested for visual acuity(56%), two fundus view were taken(43.5%), grading correctly(69%) and following schedule for subsequent appointment(17%), also appropriate time given for referral to hospital(83%). About 62% of patients knew that DR can cause visual disability and 48% of them were aware that eye screening must be done at least annually. About 86% of them had received proper education from staffs. About 4% did not turn up to health centers for eye related problems. Post intervention study revealed an improvement in the main indicator and criterias as in MOGC. Percentage of DR screening among type 2 diabetics was increased to 51.9%. The fundus photo appointment book was reviewed (60%), tested for visual acuity(83.4%), two fundus view were taken(77%), grading correctly(90%) and following schedule for subsequent appointment(80%), also appropriate time given for referral to hospital(95%). About 98% of patients knew that DR can cause visual disability and 76% of them were aware that eye screening must be done at least annually. About 98% of them had received proper education from staffs. All of them had came to health centers for eye related problems.

**Conclusions:** Health care provider’s adherence to MOGC and intensive delivering of staffs alert and patients alert were able to improve screening of DR using fundus camera in primary care. With continuous monitoring this achievement could be sustained and implemented to other clinics in District of Perak Tengah.

**Poster Abstract 42**

**Knowledge, Attitude And Practice In Hypertensive Disorders Of Pregnancy Among Maternal-Child Healthcare Providers At Rural Serian Health Clinics**

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**Introduction:** Hypertensive disorders of pregnancy (HDP) are a major contributor of maternal and perinatal mortality, with significant effect on long-term morbidity. Knowledge plays a pivotal role in early detection and proper management of the disease.

**Objectives:** We aimed to assess the knowledge, attitude and practice (KAP) among maternal-child healthcare (MCH) providers with regards to the management of HDP in primary care setting and its associated factors.

**Methods:** This was a cross-sectional study conducted during a period of 1-month. Universal sampling was used whereby all MCH providers of health clinics at rural Serian were included. Consented participants answered a self-administered validated questionnaire on their demography and KAP towards HDP. The score of KAP was categorised into good (≥75%), fair (50–74%) and poor (<50%). The factors affecting the scores were identified and further analysed.

**Results:** The response rate was 100% (114/114). The KAP regarding management of HDP was found to be good, in which the proportion of good knowledge, attitude and practice score were 75.4%, 59.6% and 99.1% respectively. Good knowledge showed significant association with longer duration of service (p=0.046, X2), while poor knowledge significantly associated with lack of obstetric emergency course (p=0.044, Fisher’s Exact Test).

**Conclusion:** In general, MCH providers of rural Serian health clinics were capable in caring and managing patients with HDP.
This competency combined with experience and training could further improve maternal health practices particularly in the rural areas.

**Poster Abstract 43**

**Have We Done Enough? – An Audit on Management of Hypertensive Disorders of Pregnancy in Health Clinic at Serian Division**

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¹Klinik Kesihatan Balai Ringin; ²Klinik Kesihatan Siburan; ³Klinik Kesihatan Teluk Rubiah; ⁴Klinik Kesihatan Kuching; ⁵Klinik Kesihatan Enugu; ⁶Klinik Kesihatan Ibu dan Anak Serian, Sarawak, Malaysia

**Introduction:** Hypertensive disorders of pregnancy (HDP) are a major contributor of maternal and perinatal mortality, with significant effect on long-term morbidity. Meticulous antenatal care including early disease recognition and prompt treatment is essential to improve feto-maternal outcomes. Hence, we aimed to evaluate the management of HDP in primary care setting and its associated maternal and perinatal outcomes.

**Methods:** We conducted a retrospective cohort study by reviewing all antenatal cases of HDP who were managed at health clinics in Serian Division from February 2016 to January 2018. The patients’ management was scored based on the recommended guidelines, and categorised into good (≥75%), fair (50-74%) and poor (<50%) guidelines compliant. The scores were further analysed to examine association with maternal and fetal outcomes.

**Results:** Of 73 available antenatal records, 87.7% of the cases were managed accordingly (total score ≥75%). Good compliance to guidelines (score ≥75%) was associated with lower incidence of pre-eclampsia symptoms (p=0.024, X²) and lack of foetal surveillance via ultrasonography (p=0.022, Fisher’s Exact Test). Overall score of ≥50% of guidelines compliant was associated with a better maternal outcome (p=0.027, Fisher’s Exact Test). Good compliance to guidelines was significantly associated with lower incidence of pre-eclampsia symptoms (p=0.024, X²) and lack of foetal surveillance via ultrasonography (p=0.022, Fisher’s Exact Test).

**Conclusion:** The preliminary results of our ongoing study showed that majority of patients with HDP received guideline-concordant care. Optimal management with guideline adherence could improve maternal and perinatal outcomes.

**Poster Abstract 44**

**Personal Diet and Exercise Habit of Primary Care Doctors and Their Counseling Practice in Managing Obesity at Health Clinics in Selangor.**

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**Introduction:** Obesity is a common presentation in primary care clinics and the prevalence is increasing. Obesity is associated with multiple health disorders thus counseling of patients to lose weight is very important. Primary care doctors’ personal diet and exercise habits may affect their counseling practice in managing obesity.

**Objectives:** To describe the association between personal diet and exercise habits of primary care doctors and their counseling practice in managing obesity at health clinics in Selangor.

**Methods:** This cross-sectional study involving 625 doctors was conducted in April 2017 at various public health clinics in Selangor. Universal sampling method was used. A self-administered questionnaire was used to assess their socio-demographic characteristics, diet habit, exercise habits as well as obesity counseling practice.

**Results:** The response rate was 73%. There were more females (80%) than males (20%). More than half (67.2%) of the respondents were between age 31 – 40 years and majority have been in service for 5 – 10 years. From this study, only 14.9% of respondents practiced healthy diet and 79.8% were categorized as physically inactive. With regards to counseling practice, low percentage (14.1%) of respondents were more likely to practice on obesity counseling than physicians with unhealthy diet habit and 79.8% were categorized as physically inactive. 48.6% of respondents will counsel patients based on their own diet and exercise habits.

**Conclusion:** Low percentage of doctors practicing healthy diet habit or perform active physical exercise. Those with healthy meal habit and being physically more active were more likely to practice obesity counseling than those who were not.

**Poster Abstract 45**

**Factors Associated with Primary Care Doctors’ Self-Efficacy in Obesity Counselling**

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**Introduction:** Self-efficacy determines individual’s motivation and performance of a specific task. Higher level of self-efficacy has been shown to enhance accomplishment and ensure doctors’ endurance in obesity counselling. However, previous studies have reported that the level of self-efficacy was low to moderate. In response to escalating global burden of obesity and increasing expectation towards primary healthcare services, this research investigates factors that are associated with doctors’ self-efficacy in obesity counselling.

**Methods:** This was a cross sectional survey over 151 primary care doctors working in government health clinics in the East Coast of Peninsular Malaysia. The respondents were selected by simple random sampling. An invitation letter were sent to each respondent with an instruction to visit an online questionnaire...
which assess sociodemographic profiles, self-efficacy in obesity counselling, knowledge and awareness of obesity management. Results: From statistical analysis, factors found to be associated with the level of self-efficacy include involvement in Non-Communicable Disease team (95% CI 0.38, 9.27; p<0.05), formal training on physical activity (95% CI 0.57, 8.48; p<0.05) and knowledge on CPG recommendations (95% CI 0.36, 2.50; p=0.05). These finding supported social cognitive theory that outline the principle source of self-efficacy which includes past performance, vicarious experience, social persuasion and emotional cues.

Conclusion: A structured training and an organized management of obesity in primary care that emphasize physicians’ involvement in multidisciplinary multicomponent obesity care, empowerment of physical activity training and enhancing knowledge on CPG recommendations seem to be associated with confidence and perceived effectiveness of obesity counselling by primary care doctors.

Poster Abstract 46
Diabetes-Related Distress And Poor Glycemic Control Among Type II Diabetes Mellitus Patients In Sabak Bernam
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Introduction: The prevalence of Diabetes Mellitus among Malaysians aged 30 years and above has increases by more than two-fold over 20-year period (Wan Nazaimoon et. al., 2013). Living with Diabetes Mellitus can affect patients physically and psychologically. This may cause patients to become emotionally burden and leading to Diabetes-Related Distress (DRD). Objectives: To explore relationship between Type II Diabetes Mellitus (T2DM) with poor glycemic control and DRD, and its contributing factors.

Methods: In a non-interventional cross-sectional study, we assessed 377 (stratified random sampling, Confidence level of 95%) T2DM patients, in 8 public health clinics in Sabak Bernam. Inclusion criteria were adults (25-70 years), diagnosed with T2DM at least 1 year with no severe T2DM complications and never diagnosed with psychiatric disorder. Validated and permitted Malay version of Distabetic Distress Scale 17-items (MDDS-17) was used (B. H. Chew et al., 2015). We explored the cross-sectional relationship of DRD and glycemic control (HbA1c) with other contributing factors such as gender, age, comorbidity and socio-economic status using SPSS (ver. 23.0)

Results: The response rate was 86.5% (377/436). Majority of patients were Malay (100%), females (62%) and married (98%). The prevalence of DRD and poor glycemic control were 65.5% (M 2.71) and 87.5% respectively. Emotional (Mean 3.08) and regime related distress (Mean 2.91) score the highest in DRD patients. In this study, patients with DRD are significantly associated with female gender (p = 0.049), no physical activity (p = 0.001), smoker (p = 0.001), hypertensive (p = 0.022), high cholesterol (p = 0.008) and whom with non-severe T2DM complications (p = 0.022). However, HbA1c level (p = 0.899) found to be not significant with DRD status in this population.

Conclusion: DRD found to be common among T2DM especially in those with poor glycemic control and indirectly influenced by gender, physical activity, smoking, hypertension, dyslipidemia and non-severe T2DM complications.

Poster Abstract 47
Sexual dysfunction among post partum women and its associated risk factors in primary care clinics in Kuantan, Pahang - A preliminary report
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Introduction: Childbirth is one of the recognized risk factor for female sexual dysfunction (FSD). Despite high prevalence of female sexual dysfunction worldwide, there is very limited data concerning sexual dysfunction in postpartum women. The aim of our study is to determine the prevalence of FSD and its subtypes among postpartum women in primary health clinics in Kuantan, Pahang.

Methods: This cross-sectional study was conducted at 9 primary health clinics located at urban and suburban areas in Kuantan, Pahang from February to May 2018. A validated Malay version of Female Sexual Function Index (MVFSFI) was used to assess FSD. A total of 372 women who have given livebirth within 6 months were invited to participate in this study.

Results: The prevalence of FSD among postpartum women in the primary care population was 35.5%. The most common reported sexual dysfunction was pain disorder (54%), followed by lubrication disorder (51%), desire disorder (37.9%), orgasm disorder (19.9%), arousal disorder (11.8%) and satisfaction disorder (7.8%). Our preliminary result shows that age, level of education, parity and mode of delivery were insignificant of FSD.

Conclusion: The prevalence of FSD among postpartum women in primary care clinics in Kuantan, Pahang was high. Thus, it is important for the healthcare providers to address this issue during post-partum consultation at primary care level.

Poster Abstract 48
Abnormal Postnatal Oral Glucose Tolerance Test (OGTT) In Women With Gestational Diabetes (GDM) And The Associated Factors: Results from SBI-GDM Prospective Randomized Controlled Study
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Conclusion: The prevalence of FSD among postpartum women in primary care clinics in Kuantan, Pahang was high. Thus, it is important for the healthcare providers to address this issue during post-partum consultation at primary care level.
Introduction: Diabetes Mellitus (DM) is a major non-communicable disease in Malaysia which is increasing in trend with prevalence of 17.5% in adult population. Women with a history of GDM are at higher risk for future diabetes, with 17–63% developing DM within 5–16 years of delivery. This study will determine the incidence of abnormal OGTT at 6 weeks postnatal and its associated factors among the GDM mothers attending public health clinics in Selangor.

Methods: This report is part of “Does System Based Intervention Reduce the Progression of Diabetes in Women with History of Gestational Diabetes (SBI-GDM)” study SBI-GDM is an ongoing randomized controlled study. Up to March 2018, 475 women with GDM underwent a 75g OGTT at 6 weeks postnatal. The data on demography, risk factors, OGTT, and clinical management were collected. Univariate and multivariate regression analysis were done.

Results: Overall incidence of abnormal postnatal glucose tolerance was 17.9%. (14.1% was prediabetes and 3.8% was DM). The independent risk factors for abnormal glucose tolerance were grandmultipara (OR 3.8; 95%CI 7.48-8.27), insulin therapy (OR 4.62; 95%CI 1.99-10.75) and family history of DM (OR 2.07; 95%CI 1.25-3.44). However, no association was found for other risk factors (maternal age, weight of the mother and previous history of GDM).

Conclusion: Incidence of abnormal postnatal glucose tolerance is higher compared to the previous local study (12.1%) done in 2015. It is very important to ensure all GDM mothers have their OGTT done postnatally particularly among grandmultipara, women with insulin therapy and family history of DM.

Poster Abstract 49
Attributable Burden of Major Risk Factors in Malaysia, 2013

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Introduction: Measurement of burden of disease and injury contributed by risk factors is vital for health decision-making and planning.

Objectives: To estimate the attributable burden of disease due to major risk factors among Malaysian population.

Methods: Using WHO comparative risk assessment (CRA) methodology, the disease burden attributable to a risk factor is estimated by comparing the current local health status with a theoretical minimum counterfactual with the lowest possible risk. The calculation of Burden of Disease in terms of Disability Adjusted Life Years (DALYs) was done using the methodology used in the Global Burden of Disease Study.

Results: The leading risk factors for burden of disease among males were diabetes mellitus (17.1%), high blood pressure (BP) (15.4%) and high body mass index (BMI) (15.3%). High BMI (19.0%), diabetes mellitus (18.4%) and high BP (14.3%) were the top 3 leading risk factors among females. Before the age of 60 years old, the highest contributors were high BMI and diabetes mellitus in both genders with high BP was the major contributor after the age of 70. Smoking was the major contributor among males after the age of 80 years old.

Conclusion: There were differences in the contribution of risk factors by gender and age group. Understanding the role of these risk factors is important for developing clear and effective strategies to improve the health of the population.

Poster Abstract 50
Audit on INR clinic managed by primary care in Universiti Teknologi Mara (UiTM)

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Introduction: Management of warfarin therapy requires a considerable amount of healthcare resources which includes INR monitoring, dose adjustment, review of patient adherence issues and bleeding complications.

Objectives: This audit aimed to assess the management of warfarin therapy conducted in the Primary Care clinic setting in UiTM against the Medication Therapy Adherence Clinic: Warfarin Protocol 2010.

Methods: This audit was conducted in 2 parts. The first part of the audit involved an observation of the doctors’ practice during the INR clinic between 14 August until 28 September 2017. The second part of the audit involved a review of electronic medical records between 1st January until 31st December 2017. Twenty-four criteria were set, and the standards were agreed based on local practice.

Results: A total of 29 patients were observed and audited during their INR clinic visit. Subsequently a total of 62 electronic medical records were audited. The biggest indication for warfarin were atrial fibrillation. Only six criteria did not meet the standard including the absence of INR clinic patient registry and defaulter tracing system, and documentation of adverse events from warfarin (95.2%). For outcome, only 50% achieved their target INR during the current clinic visit, and 1 documented major bleeding complication.

Conclusion: Despite being the first audit performed since its conception, the findings from this audit showed that the clinic managed to achieve majority of the standards set, with only six criteria that requires further improvement. More comprehensive strategies are required to improve the current services, namely to achieve target INR.

Poster Abstract 51
Community Feeding Program – Sharing Experience

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Introduction: Community Feeding Program is a part of Ministry of Health Malaysia initiative to reduce malnutrition among children in Orang Asli (OA). This program was started in Perak, followed by Pahang, Kelantan and Sarawak since 2013. We trained volunteer among OA themselves to be the agent for giving knowledge among community.

Objectives: This program is to improve nutritional status among children by giving food with high calories and nutrient such as Ready to use therapeutic food (RUTF), food supplementation and food basket program. In Johor, this program was started in Johor Bahru regarding mortality incident due to malnutrition, and called ‘biadiman’ which mean giving children eating pronounce from Seletar ethnic language.
Objectives: This study aimed to determine the reliability and validity of modified and translated questionnaire in Bahasa Malaysia on health belief model of breast cancer preventive activities to assess patient's knowledge, perception and practice.

Methods: The study was piloted using self-administered translated Bahasa Malaysia questionnaire as research instrument to collect primary data in October 2017 among women staffs of Universiti Sultan Zainal Abidin, Kuala Terengganu. Forward and backward translation of questionnaire were done. Content and face validation were performed. This questionnaire was adapted from previous studies among women college students (Frankenfield, M.K, 2009) and Saudi women (Aholfotouh M.A et al, 2015). There were seven variables (knowledge, perceived susceptibility, perceived seriousness, perceived benefit, perceived barriers, cues of action and self-efficacy) for Cronbach's alpha values on health belief model of breast cancer preventive activities. Data was examined using SPSS version 22. Construct validity was calculated using Cronbach's alpha.

Results: The total of respondents was 30 women staffs of Universiti Sultan Zainal Abidin, Kuala Terengganu recruited in this study. The Cronbach's alpha for dependent variable knowledge is 0.803, perceived susceptibility is 0.851, perceived seriousness is 0.820, perceived benefit is 0.892, perceived barriers is 0.917, cues of action is 0.688 and self-efficacy is 0.766.

Conclusions: This modified and translated questionnaires into Bahasa Malaysia is reliable and valid to be used for assessing knowledge, perception and practice on breast cancer preventive activities among women.
3.2% had ever drank alcohol, 1.7% had experienced cannabis, 0.2% had sniffed glue before, 0.5% had taken Amphetamine Types Stimulants (ATS) and 0.2% had taken heroin.

**Conclusion:** Prevalence of substance use especially cigarette smoking and pre marital sex in this studied population is worrying. More interventions need to be done to curb these potentially serious issues.

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**Poster Abstract 55**

**The importance of good glycaemic control in wound healing process in type 2 Diabetes Mellitus: A case study of burn**

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**Introduction:** Hyperglycemia results in osmotic diuresis which diminishes oxygenation and tissue perfusion. It also restricts Polymorph Nuclear Neutrophils (PMN) functioning that helps in wound healing. In this case study, we present a 58 years old female with underlying Type 2 Diabetes Mellitus who had alleged spilled hot oil onto both her calves on 29.10.2017. She sustained second degree burn. She sought treatment at a private clinic and was given Silver Sulfadiazine. She visited Klinik Kesihatan Senawang on 7.11.2017 for poor wound healing.

**Methods:** On the first day 7.11.2017, sharp wound debridement was done, distilled water was used as cleansing solutions, Silver Antiseptic Spray and Chitoheal Gel were used for modern dressing and toulle dressing and gauze were used as secondary dressings. Blood glucose monitoring were done during follow up visit. She was advised to do regular Home Blood Glucose monitoring. Her Insulin doses were adjusted accordingly. She was seen by Dietician for nutritional advise.

**Results:** Her blood glucose monitoring results showed significant improvement of glycaemic control from RBS 10.7 mmol/L on 7.11.2017 to 6.4 mmol/L on 5.1.2018. Wound sizes became smaller from (R calf) 9.5cmx12cmx0.2cm, (L calf) 12cmx9.5cmx0.2cm on 7.11.2017 to (R calf) 6cmx12cmx0cm, (L) 12cmx7cmx0cm on 5.1.2018. Positive granulation tissue and cell epithelization were well observed. Wound completely healed after 60 days on treatment without complications.

**Conclusion:** It is important to achieve good glycemnic control to attain normal function of connective tissue and cells in wound healing process. Strict control of blood sugar (with caution of hypoglycemia) in patient with Type 2 Diabetes Mellitus should be addressed concurrently with modern wound dressing.