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Plenary Abstracts

Plenary Abstract 1

Primary care challenges in the 21st Century: Breathing in new life

Lee KH¹

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Family medicine as a discipline and primary care as a concept emerged in the late 1960s. It was born out of the vision of a better healthcare system for the people, a return to the roots of providing care to a person in the context of his or her physical and psychosocial milieu. In the decades that followed, there had been significant progress. However, it is universally agreed that we have not realized our vision and there remain significant challenges even now, in the 21st century.

New challenges have emerged as the world population is aging rapidly with an increase in life expectancy and decrease in fertility. A combination of aging and lifestyle changes have led to the rise of chronic diseases which trigger a host of other diseases resulting from the complications that they cause.

At the same time, healthcare resources are becoming scarce as demand begins to outstrip supply. Existing hospital centric models are not cost effective in the new environment. Governments around the world are worried about their ability to fund healthcare in the future. There is a call for a better model of care to deliver better value to our patients and our communities. Family medicine and primary care is seen as the essential driver of this new model of care. We are now re-discovering the unfulfilled vision and mission of family medicine, thus we have a second chance to finally realize the original aspirations of family medicine.

We need to learn from history and review what we had done well and where we had been lacking. From the original general practitioner of the past to the present day family physician who is a product of a new system of specialty training, we need to find out where things had gone wrong and how we can correct this. These lessons will show us the way to bring new life to our old aspirations.

Plenary Abstract 2

Moving forward in primary care: Family medicine specialist at the helm

Nazrila Hairizan N¹

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Primary care is an essential component of a health system delivery where it provides the first point of contact for patients and ensures continuing and coordinated care within the healthcare system.

Malaysia has a strong health system with strong foundations on accessibility and equity. The system has progressed over the years. With advancement in skills and technology, the secondary care and tertiary care in Malaysia has developed substantially.

Primary care too has made much progress over the years with more services being offered at the primary care level that was not available before. This was made possible with the introduction of Family Medicine Specialists within the Malaysian healthcare system in the past 18 years.

As Malaysia moves towards attaining a developed nation status, it is of importance that the primary care services move forward improvement of its services not only in the variation of services but also in achieving a service of high quality. The services in developed countries would be discussed and contrasted with the services available in Malaysia. The role and contributions of Family Medicine Specialists would be discussed as the focal people at the forefront to spearhead this shift as Primary Care in Malaysia move forward in the coming years.

Plenary Abstract 3

Capacity building in diabetic management at primary care level

Christensen UB¹

¹*Steno Diabetes Centre, Denmark*

According to the International Diabetes Federation (IDF, 2015), 415 million people were living with diabetes on a global scale. In Malaysia, an estimated 3.5 million people are living with diabetes and the prevalence in adults amongst 20-79 years of age is reaching to 17.5% and rising. The increase in diabetes prevalence is pressuring the health care system with an average cost estimate of 2250 MYR per diabetes patient. The more complications, the higher the cost and specialised care will be needed.

An increasing number of patients are seen at the primary care level with an increasing treatment gap, requiring new ways of thinking regarding diabetes management with an integrated approach towards capacity building. Could engaging doctors, nurses, dieticians and other health care professionals and patients in new ways of working together improving their knowledge be a way forward?

The talk describes learnings from the literature, and from Steno Diabetes Center in Denmark, a specialised diabetes clinic. A new initiative called Steno-REACH certificate course which is a combined face-to-face, online and blended learning format programme targeting non-specialist doctors and nurses working at the primary care level will also be described. The course has been developed and piloted by Steno Diabetes Center in collaboration with the Malaysian Ministry of Health.

Plenary Abstract 4

Dengue vaccination: Latest developments and future direction

Thahira JM¹

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The need for dengue vaccine is more pressing now since the global burden of disease caused by this vector-borne disease has steadily increased over the years. The search had started since the 1980's and currently a chimeric tetravalent dengue vaccine (CYD-TDV) has shown efficacy of about 56% following phase III clinical trial in the Asia-Pacific region. This vaccine has now been approved in countries like Mexico, Philippines and Thailand as part of the strategy to combat dengue. There are several more dengue candidate vaccines progressing through clinical trials including DNA-based vaccines and protein sub-unit vaccines and it seems promising that we might have in the future a vaccine whose efficacy is above 60% and able to confer protection against all four serotypes.

Plenary Abstract 5

Transformation of the Malaysian primary health care system.

Kamaliah MN¹

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Malaysia has a fairly developed healthcare system, which has achieved universal access since the 1980's in an equitable manner, through a well-functioning synergistic system of public and private sector delivery. The challenges that the Malaysian health system is facing has necessitated periodic reviews of the structure of the whole health system and the most recent of Malaysia's efforts to transform the health system is to develop a comprehensive strategic plan through the Malaysian Health System Research (MHSR).

An assessment of the health system, with an emphasis on primary care, together with benchmarking to international standards is presented, making the case for reform. The strengthening of primary health care delivery is a technically sound reform strategy identified, aimed at addressing three main concerns of seamless integration of care especially for the management of chronic diseases, ensuring universal coverage and responsiveness of the health system.

The micro reforms in increasing access to services, development of primary health care teams to deliver comprehensive PHC, the application of ICT, the renewed emphasis on health promotion & prevention activities and a renewed focus on community empowerment and participation, are discussed. Support in terms of human resource, capacity building in monitoring & evaluation as well as change management to effect the reforms are identified. The paper concludes with lessons derived from other countries' reform efforts and the importance of systemic reform to offset rising health care costs associated with epidemiologic and demographic transitions. By making PHC central to the health care model, with its coordinator role for patient-centred quality care and preventive care, the Malaysian health system is poised at sustaining and increasing universal health coverage, equitably and efficiently.

Symposium Abstracts

Symposium Abstract 1

Smartphone addiction: Is it a problem?

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Recent data from Malaysia showed that smartphone penetration increased from 47% in 2012 to 63% in 2013. In 2014, 10.13 million Malaysians were active smartphone users, compared with 7.7 million in 2012. Currently, the smartphone has become one of the most popular and important communication tools, however its excessive use has emerged as a social issue worldwide and created a new mental health concern, wherein the user tends to develop dependency on it.

Smartphone addiction is also called "mobile phone dependence", "compulsive mobile phone overuse" or "mobile phone overuse". These terms mainly describe the phenomenon of problematic

mobile phone use. "Smartphone addiction" is the term typically used in the literature, which is mainly characterized by excessive or poorly controlled preoccupations, urges, or behaviours regarding smartphone use, to the extent that individuals neglect other areas of life. It has been associated with stress, sleep disturbance, smoking and symptoms of depression.

"Smartphone addiction" can be screened using the Malay-version of the Smartphone addiction scale (SAS-M) adapted from the original SAS created by Professor Min Kwon from Korea. It was validated locally and reported to have good reliability and validity. The SAS-M exhibited good internal consistency with a Cronbach's alpha of 0.94. The parallel reliability between the SAS-M and the SAS was high, as demonstrated by an ICC of 0.95. The AUC for the ROC curve was 0.801 (95% CI = 0.746 to 0.855). The optimal cut-off score for identifying at-risk cases was more than 98, with a sensitivity of 71.43%, a specificity of 71.03%, a positive predictive value of 64.10% and a negative predictive value (NPV) of 77.44%. The prevalence of an at-risk case developing smartphone addiction among medical student in a public university was 46.9%. Future study to look at the treatment option is needed urgently.

Symposium Abstract 2

Vaping: Managing vapers in primary care

Amer Siddiq AN¹

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Smoking kills 6 million lives each year and is the leading cause on non-communicable diseases. Stop smoking is the single best public health measure that can be done to reduce this epidemic. The "O" in MPOWER, strategies under the Framework Convention for Tobacco Control to reduce smoking prevalence in member countries aims to do just that - offer people who smoke best evidence to quit their addiction. The current methods include both behavioural and pharmacological support with the latter showing better efficacy compared to placebo and behavioural support on its own. A combination of both behavioural and pharmacological support was found to be far superior in assisting smokers to quit. Of late, however, there has been increased interest in new nicotine delivery products which can include electronic cigarettes. Advocates for electronic cigarettes have touted these devices to assist people to quit smoking despite the evidence to date being unconvincing. Nevertheless, this is a great concern for public health as such devices, which mimic the action of smoking, can lead to the re-normalizing of smoking. As for primary care physicians, there will be an increase of interest in seeking their views on these devices and its role in stopping smoking by the general public. This presentation aims to address the common questions on electronic cigarettes and suggestion on managing this debate with patients that come to the practice with these concerns.

Symposium Abstract 3

Alcohol addiction: Effective and practical interventions in primary care

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Alcohol addiction contributes to a significant disease burden worldwide. It is a disease that affects a patient's mental, physical,

social, and economic status, as well as people around him or her. Hence, treating addiction can be very challenging as it is also a chronic relapsing condition that affects the reward centre in the brain. In order to provide a comprehensive package of service to manage a person with alcohol addiction, primary care providers must be well equipped with the knowledge, skill and reasonable strategies & interventions in handling alcohol addiction. Elements of primary, secondary and tertiary prevention for this issue can also be incorporated in existing services in primary care clinic. There are a few screening and effectively proven intervention strategies available such as Alcohol Use Disorder Identification Test, AUDIT, CAGE and ASSIST. Medical problems resulting from alcohol addiction can also be managed at the primary care level. Thiamine can be supplied to moderate and heavy alcohol users to minimize neurological implications. Those already affected severely such as with complications of associated medical conditions like stroke and neurological complications of alcohol addiction like post Wernicke's encephalopathy can benefit from the domiciliary care provided by health clinics. In short, primary care clinic staff can increase awareness among the general public about the danger of alcohol especially towards the growing brain, help in identifying & intervene in people who use alcohol and treat mild to moderate alcohol related problems. For severe alcohol dependency, primary care providers who work near to patients' homes can still assist in sharing the care with more specialized treatment units.

Symposium Abstract 4 **Basic statistics for paramedics**

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Statistics is the methodology for collecting, analysing, interpreting and drawing conclusions from information. It provides methods for planning and carrying out research studies; summarizing and exploring data and making predictions and generalizing about phenomena represented by data. There are two major types of statistics; descriptive statistics and inferential statistics. The type of analysis for each statistics will depend on the type of data collected (categorical or continuous data) as well as the objective of the analysis.

Symposium Abstract 5 **M-CHAT for autism spectrum disorder: Is it effective?**

Azah AS¹

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Studies of toddlers with autism spectrum disorders (ASDs) have found that intensive, specialized early intervention has resulted in better outcomes for these children. Therefore early identification of toddlers at risk is very important. There is still a debate as to what is the most effective strategy for identifying the early signs of autism in very young children and when is the best time to screen. Two popular tools for developmental surveillance which are suitable for use in busy primary care settings are the Checklist for Autism in Toddlers (CHAT) and the Modified Checklist for Autism in Toddlers (M-CHAT). The available evidence suggests that M-CHAT has slightly better predictive accuracy than CHAT. It is recommended to use M-CHAT at approximately 18 months and 24 months.

Symposium Abstract 6 **Multidisciplinary approach in managing chronic illness in primary care**

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Multidisciplinary care is well accepted as essential in providing holistic care to patients. This is most critical in caring for patients with chronic diseases and co-morbidities in the community. Primary care physicians are among the earliest to embrace and advocate for this community. Nevertheless, true multidisciplinary care is hard to achieve despite widespread acknowledgement that it will lead to better outcomes and improvements in cost-effectiveness.

There are many reasons contributing to this present state. Modern medicine is dominated by academic medical centres that operate through high levels of specialisation. Physicians, nurses and allied health professionals are encouraged to specialize and sub-specialize as part of their professional development and career advancements. Healthcare professionals tend to be organized in departmental hierarchies and care is organized along silos. In addition to passive neglect, primary care physicians find that they are often left to navigate through the hospital systems. Manpower and resources for multidisciplinary teams in primary care is severely lacking. Making matters worse, the members of the team often organized as a team in name but function independently through a system of referrals.

The need to transform from a hospital centric model to a community centric model for healthcare systems had finally led to the realization that more resources need to be provided to primary care to work in multidisciplinary teams. The emergence of transitional care as a concept to improve system efficiency had given rise to the opportunity to practice true multidisciplinary primary care.

We had incorporated the concepts of transitional care, chronic care model and integrated practice unit into our family physician led multidisciplinary teams. Our research data showed that it delivers good outcome to patients with complex care needs. Such teams can operate in the primary care environment and will be able to provide true multidisciplinary care for patients with complex chronic diseases.

Symposium Abstract 7 **Shared decision making: An effective partnership in managing chronic disease**

Stigglebout A¹

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Shared decision making provides a model for patients and their clinicians to engage in a deliberative, communicative process about health decisions in which there is no clear best option from a medical standpoint. Different models for decision making in varying contexts, and some differences between the chronic care setting and other settings were discussed. Some of the research on clinician and patient preferences for the different models were explored. This talk also showed how current modes of communication risk obviating shared decision making. Finally, the use of e-Health and tools to support patient empowerment and decision making were addressed.

Symposium Abstract 8

Dermatology quiz

Leelavathi M¹

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In most parts of the world, primary care doctors are usually the first to be consulted for skin conditions. A vast spectrum of skin diseases are encountered at primary care, among different age groups ranging from infancy e.g. eczema, acne in adolescents and malignancies in elderly. Hence there will be a constant need for dermatology consult at some point of time in life and most of these conditions can be easily identified and managed at the primary care itself. This practice would eventually reduce the need for referral to specialist dermatology clinics at tertiary hospitals hence lowering the overall burden for both patient and the hospital.

The shortage of dermatologists in public hospitals may cause a backlog, resulting in more of these cases presenting at primary care. Therefore it is important for the non-dermatologists servicing the primary care health facility to equip themselves with adequate knowledge of different skin conditions and manage these cases appropriately. The effective management of skin conditions at primary care will help reduce the overall cost and morbidity.

This session on dermatology quiz helped participants recollect and revisit some of the common skin conditions likely to be encountered at primary care, those which should not be missed and address the main principles of treatment.

Symposium Abstract 9

Dealing with “anti-vaxxers”: Are we doing it right?

Suhazeli A¹

¹*Klinik Kesihatan Ketengah Jaya, Malaysia*

As a result of the vaccines discovered in the 20th century, parents and many healthcare providers of the 21st century have limited or no experience with the devastating effects of diseases such as polio, smallpox or measles. Fear of disease has shifted to concerns regarding vaccine safety. Even though scientific evidence has refuted many of the misconceptions regarding vaccine safety, parental refusal of vaccines is increasing. There are viral messages either from social media and alternative media that give a negative impression on vaccine to children. This happens all around the world, including Malaysia.

Negative impressions are created by exaggerating the possible side effects of the vaccine exists and casting doubt on the effectiveness of the vaccine. Anti-vaxxers propagandize that unvaccinated children are healthier than children who receive vaccinations. They question the halal status of vaccines and emphasize how meat built from illegal sources shall be consumed.

This talk aimed to clear up some confusion regarding vaccination / immunization of children. The speaker did not intend to expose any associations or individuals who oppose the vaccine. In fact, they may not know about the importance of vaccination themselves and are misinformed about vaccines.

Symposium Abstract 10

Contraception in adolescent

Ani Amelia Z¹

¹*Paediatric & Adolescent Gynaecology Unit, Universiti Kebangsaan Malaysia Medical Centre, Malaysia*

Adolescents are defined by the World Health Organization (WHO) as those between the ages of 10 and 19 years. Adolescence is characterized by dynamic brain development in which the interaction with the social environment plays a role in shaping the adolescent's capabilities in his / her adult life. The approach to adolescent sexuality is full of debate and controversy and varies from country to country, thus the primary care physician needs to be aware of local laws and practices. Adolescent pregnancy and its consequences represent a major public health concern in many countries worldwide and it is no less an issue of great concern in Malaysia, a conservative Asian country where premarital sex is taboo and sex education is inadequate. There are many indications for contraception in the adolescent patient such as following sexual assault or an unwanted pregnancy, for a sexually active adolescent with high risk behaviour and for a married adolescent who wishes to space her pregnancies. Thus knowledge of the appropriate contraception for adolescents is of great importance to a primary care physician as she or he may be the first doctor the adolescent comes into contact with.

Symposium Abstract 11

The Orchid (Anggerik) approach: What can we learn?

Sheela Bai P¹

¹*Klinik Kesihatan Cheras, Kuala Lumpur, Malaysia*

Sexually transmitted infections (STIs) remain a global public health threat, with more than a million people infected with a curable STI daily. There is also an increase in cases of HIV infection, an incurable STI. The HIV epidemic in Malaysia has been increasing by sexual transmission among key populations who are men having sex with men, sex workers, and transgender persons.

STIs have a direct physical, psychological and social impact on quality of life and are a prime indicator of the quality of global sexual and reproductive health care. Unfortunately, one of the major setbacks in managing STIs is stigma, more so among the key populations who are often ostracised. Viewed as being “sexually immoral”, those suffering from it shy away from seeking help especially in busy and resource limited government primary care (PCC) clinics. Hence, a dedicated sexual health unit in a PCC, such as the ‘Bilik Anggerik’ (Orchid Room) in Cheras Health Clinic Kuala Lumpur, can provide preventive care to key populations.

The ‘Bilik Anggerik’ (Orchid Room) was started on the 3rd of September 2014, under the auspices of the Kuala Lumpur Federal Territory Health Department, to create an enabling and non-discriminatory environment for key populations practicing high-risk sexual activities. In preparation, healthcare workers were given training and counselling sessions to sensitise them, increase awareness and create a non-judgmental attitude towards clients. Meetings were held with supportive NGOs to help in getting clients. Walked-in clients are usually referred from the outpatient unit (OPD) or brought by NGOs. News about ‘Bilik Anggerik’ has spread through word of mouth and social

networks, thus clients start bringing in their friends. Regular meeting with NGOs are held to discuss challenges faced by clients as well as healthcare workers with a view to smoothen out operations. 'Bilik Anggerik' has been a resounding success with more than 1000 new clients registered.

Symposium Abstract 12

Thinking safe: Drug prescriptions for the elderly

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Polypharmacy is defined either as the use of multiple (e.g. ≥ 5 or ≥ 10) medications or administration of more medications than are clinically indicated, and it increases with age. It is associated with multiple adverse consequences or impacts, which include: medical errors (medicine, pharmacy, nursing), decreased adherence, adverse drug reactions, increased risk of hospitalization, drug-drug and drug-disease interactions, disrupted daily routines, and social activities and increased fiscal costs (medication, adverse events, monitoring). Failure to detect and diagnose drug-induced illnesses may lead to polypharmacy and a prescribing cascade, as well as unnecessary investigations with further iatrogenic events. Thus, in evaluating virtually any new symptom in an older patient, the possibility of an adverse drug event should be considered in the differential diagnosis. The prescribing doctor must avoid taxing the elderly person's limited reserves with the burden of additional medications. The symposium discussed about evidence-based strategies to reduce polypharmacy including STOPP=START, BEERS criteria, CGA and pharmacy's role in geriatrics care and avoidance of polypharmacy.

Symposium Abstract 13

The "neglected" patient in dementia

Chin LF¹

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The responsibilities and demands of care giving, even under the best circumstances, can impact on the well-being of caregivers. Caring for someone with dementia can be challenging, stressful and intensely overwhelming. Caregivers often sacrifice their own needs and well-being to provide care for their loved one.

The key fact is that caregivers need care too. Moreover, if the caregiver is elderly and of poor health, such situation can unfavourably affect their ability to provide sufficient care. Spouses are the most vulnerable caregivers due to their own advancing age and prevalence of chronic illness that potentially diminish physical capacity.

Many exhausted caregivers never seek help because they do not realize that they are physically and emotionally drained. Caregiver burnout is common. When a caregiver feels increasingly isolated, the possibility of depression, anxiety, abuse, guilt, shame, lack of self-care, illness or substance abuse increases.

Support and coping comes in the form of accepting offers of help from trustworthy family members or friends, obtaining respite care relief, taking time off from care giving and prayers. Sharing feelings and experience with others may acquire helpful advice

and alleviate caregiver burnout. Care giving responsibilities should be shared among reliable family members, even if they live elsewhere.

Symposium Abstract 14

Sex over 60: Is it a taboo?

Mohd Faudzi A¹

¹*Klinik Kesihatan Kuah, Langkawi, Malaysia*

Most people are brought up with an unhealthy attitude towards sex. The very thought of sex beyond 60 raises eyebrows. Unfortunately, people older than 60 were brought up in orthodox settings where sex is considered taboo. It is connected to marital duties, and believed to be limited to procreation. Those with grown-up children are considered inappropriate to have sex as they are too old for it. Furthermore, sex has never been liberally talked about. One has to undo all the taboos placed by traditional thinking and realise that sex could be a natural channel for expression.

These 'norms' may hinder the natural expression of joy associated with the sexual experience, causing one's own natural instincts to conflict with these social parameters. This conflict may decrease self-esteem, which is an important factor that influences how people feel about sex after 60.

Physical condition also has a role in enjoying sex at 60. The sexual wires are in place but the body has slowed down. Men can have great sex drives even at after 60, but their partners may have decreased libido, especially with hormonal changes. Some have reduced sex drive due to medical conditions.

Things may be slower but sex can still be good. Sex is an opportunity to bond with their partner. Once they get into the habit of having sex, their body may respond and make them feel younger. After all, sex can bring the mental, emotional, physical and spiritual abilities to come together in perfect unison, resulting in a kind of satisfaction that has positive effects on both mind and body. And what could be a better age than 60 to achieve this state!

Symposium Abstract 15

Screening in men: Have we done enough?

Tong SF¹

¹*Department of Family Medicine, Universiti Kebangsaan Malaysia Medical Centre, Malaysia*

Health screening is often taken as a beneficial and desired preventive measure to achieve good quality of life, reduce morbidity and avoid preventable death. Because of the shorter life expectancy and poorer morbidity profile of men compared to their women counterparts, men's health screening becomes a logical measure to address men's health issues. However, a few key issues need to be addressed before we can conclude whether we have done enough for men's health screening. These would include a clear picture of the main causes of death, the magnitude of under-diagnosed morbidities, the availability of effective treatment and men's desire to act on the morbidities once diagnosed. We have sufficient epidemiological data to inform us on what is desired to be the target for health screening. But we lack data to inform us on how best we can implement men's health screening effectively. Although we may have done a lot in providing facilities for health screening, we may not have

done enough to effectively engage men in health screening and its subsequent treatment. An understanding of men's health psychology will give us a sense of direction of where we are supposed to be heading.

Symposium Abstract 16

When men have hot flushes: Is it andropause?

Saiful Bahari I¹

¹Department of Family Medicine, School of Medical Sciences, Universiti Sains Malaysia, Malaysia

Testosterone is the most important androgen in men and it is needed for normal reproductive and sexual function. Testosterone decreases with age, usually during late thirties in healthy men but the decrease is greater if they are obese, with chronic diseases or physical/emotional stress, smoking, alcoholic, and using opioids. Testosterone deficiency (TD), sometimes known as 'andropause', is a very real medical condition. Many men experience hot flushes due to a severe TD, causing the hypothalamus to believe that the body is over-heating. As a result, blood vessels in the skin dilate to expel the perceived excess heat to keep the body cool. Even though hot flushes are commonly reported by literature, based on our local clinical experience, the most common symptoms for TD are low libido, lack of energy, reduced vitality, and poor sleep.

TD has been associated with several important disease including cardiovascular disease, hip fracture and depression. It may independently predict development of Type II Diabetes Mellitus. In patients at risk or suspected to have TD, biochemical assessment is mandatory. At least two tests that show low total serum testosterone are required to confirm the condition.

Lifestyle changes are important for the treatment of TD, with or without testosterone replacement therapy (TRT). The TRT in the form of oral testosterone undecanoate, short-acting intramuscular testosterone enanthate, or long-acting intramuscular testosterone undecanoate may improve quality of life, libido and body composition of men with TD. Once they are on TRT, close monitoring is required as it may worsen severe chronic heart disease and sleep apnoea. However, it does not aggravate benign prostate hypertrophy nor raise prostate-specific antigen. The aim for testosterone level is at mid-normal to slightly higher range. If there is no symptomatic benefit by 6 months, TRT should be discontinued and possible diagnosis must be re-evaluated.

Symposium Abstract 17

Sick and sad: Do men suffer in silence?

Azizul A¹

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Depression affects both sexes and can lead to disruption in relationships and interfere with daily work and activities. However clinical depression was commonly considered as 'women's disease' and much of the attention were given to them in terms of screening and professional attention. This has unfortunately keep men who are clinically depressed from recognising the symptoms of depression and seeking help.

Although symptoms of depression may overlap, there are several

reasons why the symptoms are not commonly recognised in men. Men are less likely to show more "typical" symptoms such as sadness. Depression in men may cause them to keep their feelings hidden. Instead of expressing a depressed mood, they may seem to be more irritable and aggressive. For these reasons, many men as well as doctors and other health care workers may fail to recognise the problem as depression.

Depression in men may cause overwhelming impact on many aspects in quality of life and treatment with medication is not conveniently containing the problems. Though more women attempt suicide, more men complete the act of actually ending their lives. This presentation highlighted the differences of symptoms between the genders, the meaning of depression in men, and possible ways to facilitate men to talk openly about their depression.

Symposium Abstract 18

Obesity-recommendations for management in general practice

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The prevalence of obesity in Malaysia has been noted to have climbed over the last two decades. Despite efforts to heighten awareness and change of lifestyle, it continued increasing to its highest point of 15.1% based on the National Health Morbidity Survey 2011.

The primary care practitioners have an important role in managing this obesity pandemic. Obese patients attend the health clinics because of co-morbid disease conditions especially type 2 diabetes mellitus and hypertension. Similarly, a huge burden is nowadays seen at the Mother and Child Health Clinic as mothers have increased their waistlines and many are later detected to have gestational diabetes or hypertensive disorder in pregnancy. Some may even present with obstructive sleep apnoea syndrome and are considered to have higher risk for thrombo-embolic disease.

The burden of disease has transected all levels of healthcare. Therefore, it requires more effort in not only increasing awareness but reorientation of the current healthcare services to focus on prevention and intervention. Community obesity awareness and intervention programs include the setting up of obesity clinics at the Klinik Kesihatan and developing clinical care pathways. Treating weight gain issues need to be integrated as part of managing chronic diseases for which the treatment may even potentiate worsening of the disease condition itself.

Managing obesity involves behavioural modification, medical nutrition therapy, exercise and pharmacotherapy. An update on the usage of currently available drugs was highlighted. Finally, a case illustration in the management of an obese patient with diabetes served to explore the understanding of our day-to-day practice in managing such cases.

Symposium Abstract 19

Adult onset asthma, COPD or both: Does it matter?

Loh RLC¹

¹Department of Medicine, Penang Medical College

The diagnostic features of asthma and COPD are well established today. However, adult-onset asthma, which constitutes a much

smaller group in the overall asthma population, can be confused with COPD especially when one smokes. Furthermore adult-onset asthma tends to be harder to control and requires treatment indefinitely like COPD. Nevertheless, its characteristics remain those of asthma i.e. diurnal variation, eosinophilic inflammation and bronchial hyperresponsiveness.

Recently a term, Asthma-COPD Overlap Syndrome (ACOS), has been coined to explore the existence of a possible specific phenotype among asthma and COPD populations. Empirical evidence suggests that up to a quarter of COPD population may be ACOS. The clinical importance of this hypothetical entity is that they are generally worse in symptoms, quality of life, lung function and comorbidities compared to having either asthma or COPD alone. Treatment of ACOS patient needs to be individualized. Whether ACOS merely represents the existence of two diseases in one or a common and unique pathophysiology remains to be confirmed. Despite advances in understanding, the availability of drug therapy to treat all these conditions are still primarily bronchodilator and inhaled corticosteroids.

Symposium Abstract 20

Mental illness masquerades in Primary Care

Riana AR¹

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Like many other countries, primary care setting has been the first-line provider for health services in Malaysia. The primary care doctors are at the cornerstone of recognition, diagnosis, treatment, and specialist referral for all types of disorders, whether they are somatic, psychological, or both.

A WHO study on 'Psychological Disorders in Primary Care', conducted in 18 countries in the 80s reported that the total point prevalence of psychiatric disorder was 24% with variations between countries (from 20% in Shanghai to 50% in Santiago de Chile). The most frequent diagnoses were major depressive disorders (10%) and generalised anxiety disorder (8%), followed by neurasthenia (5%), alcohol dependence (3%) and somatization disorder (3%). However, only 49% of the mental disorders were recognised.

On the basis of these statistics, several factors have been identified as the contributors to the barriers in diagnosis and treatment of psychiatric illness in primary care. Factors such as competencies need to be tackled with collaborative and educational approaches. The long-term impacts from unrecognised and untreated psychiatric illness will lead to significant health burden to the society in terms of cost and productivity.

Symposium Abstract 21

Home birth: Between fairy tales & gory truth, what is the solution?

Ani Amelia Z¹

¹*Paediatric & Adolescent Gynaecology Unit, Universiti Kebangsaan Malaysia Medical Centre, Malaysia*

Home birth is defined as the process of giving birth to a baby in a place of residence, which may be planned or unplanned, and

attended to by a midwife, a physician or others such as family members or emergency medical technicians. Women may choose home births as an alternative to hospital deliveries to avoid the cascade of unwanted medical interventions or to attain greater physical autonomy of what essentially is a normal physiological process and not a pathological one. Malaysia has been a role model to the world in reducing effectively the maternal mortality rate however the increase in homebirths unattended by trained birth attendants may affect this rate adversely. It has been reported that homebirths are associated with an increase in neonatal mortality rates. At present, there are no national statistics for unassisted home births in Malaysia. However, searches from the Internet such as certain childbirth-related sites may list as many as 90 unassisted home birth stories (The Star online). A possible solution where the safety and wellbeing of a woman and her baby and her need for privacy and respect of her and her husband's wishes may be in the establishment of trained midwife-led birth centres with strong support and linkages from nearby hospital and emergency services where the midwife can assist the births in the home environment, as already practiced in many developed countries.

Symposium Abstract 22

TOP guideline: What is there to know?

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Induced abortion or termination of pregnancy is a controversial topic that ignites complex and emotional debate. Unintended pregnancy is a problem that may never be fully resolved, and women who do not wish to continue a pregnancy will often seek out termination by any means, regardless of safety.

Malaysia, a member of the United Nations General Assembly Special Session in June 1999, has agreed that in circumstances where abortion is not against the law, health systems should train and equip health service providers, as well as carry out measures to ensure that such abortion is safe and accessible. These measures can safeguard women's health. Hence in 2012, under the chairmanship of Yg Bhg. Datuk Dr Soon Ruey of SWACH, the Guideline for Termination of Pregnancy (TOP) for Hospitals in the Ministry of Health was developed. This guideline is based on local experiences and references from practices of other countries such as United Kingdom, Singapore, Australia and Canada. It complements the document developed for the primary health care setting which addressed sexual and reproductive health entitled "*Garis Panduan Pengendalian Masalah Kesihatan Seksual dan Reproduksi Remaja di Klinik Kesihatan 2011*".

The Guideline on Termination of Pregnancy in Government Hospitals was developed to create awareness among government health care professionals on the complexity of the issues of induced abortion and to be mindful of existing provisions given by the professional ethics, legislation, religion and reproductive rights during consultation with the clients. Every case considered for termination of pregnancy should be handled appropriately in a holistic manner. This guideline is to update clinical care of women undergoing abortion including procedures and precautions. Information on the Penal Code, stand of various religions and the Code of Professional Conduct are appended.

Oral Abstracts

Oral Abstract 1

Adaptation, translation and validation of the diabetes in the family questionnaire (DMFQ): The Malay version

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Introduction: Offspring of Type 2 Diabetes Mellitus (T2DM) patients have an increased risk of developing T2DM. Patients with T2DM are encouraged to promote healthy lifestyle within the family as to prevent their offspring from developing T2DM. The Diabetes Mellitus in the Family Questionnaire (DMFQ) assesses the perceptions of T2DM patients on the risk of their first-degree relatives in developing T2DM and the possibility of intervention to reduce this risk. The DMFQ English version consists of 34-items framed within seven concepts. This study aimed to adapt, translate and validate the DMFQ from the English language into the Malay language.

Methods: This was a cross sectional validation study among T2DM patients at Klinik Kesihatan Sungai Buloh. It was conducted in three phases: (1) adaptation and translation of the DMFQ, (2) face validation, and (3) field testing of the DMFQ Malay version. Construct validity was determined using Exploratory Factor analysis (EFA). Reliability was determined by the internal consistency reliability and test-retest reliability.

Results: Face validation was conducted on 20 T2DM patients and another 159 were recruited for the field-testing. A total of 12 items were removed during the whole process of adaptation, translation and validation of the DMFQ Malay version. Three items were removed during the content validation process, three items were removed due to poor factor loadings, five items were removed as they loaded onto factors which were not interpretable and one open ended question was removed as it did not fit into any of the retained concepts. The final DMFQ Malay version consisted of 22-items within five concepts. The Cronbach alpha was 0.714 and the test-retest analysis was consistent over time.

Conclusion: The DMFQ Malay version is a valid and reliable research tool, which can be used to assess the risk perception among T2DM patients in Malaysia.

Oral Abstract 2

Why do tuberculosis patients default treatment? A qualitative study

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Introduction: Tuberculosis is a preventable and curable infectious disease. Yet, the rate of poor treatment outcome remains significant. This is partly due to treatment non-adherence. Understanding why patients default treatment is

important to improve treatment adherence and outcomes. This study explored the reasons for non-adherence to anti-tuberculosis regimen among the adult PTB patients in a tertiary hospital.

Methods: A qualitative study with 15 defaulters using in-depth semi-structured interviews was conducted from April to August 2015. Recruitment continued until data saturation was reached. The Health Belief Model was used as the theoretical framework. Interviews were audio-recorded, transcribed verbatim and checked. Thematic analysis was performed.

Results: The reasons for treatment interruption include perceived barriers for taking anti-TB medication, low disease susceptibility (which was contributed by negative tests, no TB contact and distrust of doctors' capability) and low perception of disease seriousness due to symptom misinterpretation. Barriers identified include personal and system factors. Personal factors were medication-related problems, symptom improvement, life priorities, and lack of awareness about the treatment course. System factors were non-favourable clinic layout, poor accessibility to directly observed treatment (DOTS) clinic, and misunderstanding of health services.

Conclusion: Perceived barriers and low illness susceptibility were the key issues associated with treatment non-adherence. Interventions to address these issues should be taken to improve treatment outcomes.

Oral Abstract 3

A qualitative study on parental refusal of childhood vaccination in Klang Valley

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Introduction: Vaccine preventable diseases have been near eradication as a result of childhood vaccination programs. However these diseases are making a comeback due to parental vaccine refusal. The reasons for refusal among these parents have not been adequately explored in Malaysia. This study aimed to explore the reasons for parent's refusal of childhood vaccinations.

Methods: A qualitative study design involving individual in depth interviews both face-to-face and online were used. The topic guide was developed from the Health Belief Model theoretical framework. Seven face-to-face and seven online interviews were conducted at various locations in Klang Valley. All interviews were audio-recorded, transcribed verbatim and checked. Data was collected until data saturation was reached. Thematic approach was used to analyse the data.

Results: Findings were summarised into two main categories: Personal Health Beliefs and Vaccine Related Concerns. Six Personal Health Beliefs identified were: lack of confidence in modern medicine and health care personnel, pharmaceutical conspiracy to sell medicines, preference to a natural approach to health, personal instincts, religious beliefs, and partner with similar beliefs. Four main Vaccine Related Concerns identified were: concerns on negative effects and content, doubts of necessity and lack of information and knowledge regarding vaccines.

Conclusion: This study identified reasons for parental refusal of childhood vaccinations. Addressing these concerns at multiple levels in the health care system and society may help increase the vaccine uptake in the future.

Oral Abstract 4

Validation of self-reported questionnaire to screen periodontal disease among diabetes patients: a study at 3 selected health centres in Kuantan

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Introduction: There is growing evidence on the bilateral relationship between diabetes mellitus (DM) and periodontal disease (PD). PD is commonly assessed through basic periodontal examination (BPE) performed at dental clinics. However, PD screening among DM patients at diabetes clinics is still limited. Thus, a self-reported questionnaire (SRQ) was developed to be used as a screening tool for PD by non-oral health-practitioners at diabetes clinics. This study aimed to validate a Malay-translated self-reported questionnaires (SRQ-M) to assess periodontal disease among DM-patients.

Methods: This study was conducted among 237 DM-patients in 3 selected health centres in Kuantan in 2015 by a medical-dental team. SRQ-M, which contains 8 items, was distributed to the patients. A positive screening for PD using SRQ-M was when patients responded to three or more items indicating criteria for PD. Subsequently, BPE was done by two PD-specialists at dental clinics in the respective health centres. It was used as a gold standard to check the validity of SRQ-M in terms of sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV). Cronbach's alpha was analysed for reliability of SRQ-M.

Results: Out of 237, 51.9% (123/237) DM-patients were screened as having PD using BPE while 72.2% (171/237) were screening-positive by using SRQ-M. Sensitivity, specificity, PPV and NPV of SRQ-M were 77.2% (95/123), 33.3 % (38/114), 55.6 (95/171) 57.6% (38/66) respectively. Although, Cronbach's alpha of SRQ-M-8 items was 0.2, the value increased to 0.5 if one item which asked DM-patients to rate their own gum disease was deleted.

Conclusions: SRQ-M is a valid tool for screening PD among DM-patients because of high prevalence of DM-PD comorbidity and acceptable sensitivity of SRQ-M. However poor and changing reliability results leave room to further modify SRQ-M.

Oral Abstract 5

Relationship between self-efficacy with self-care behaviour, medication adherence and glycaemic control among type 2 diabetes mellitus patients in public primary care clinics

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Introduction: Evidence has shown that glycaemic control could be improved with better self-efficacy, self-care behaviour and medication adherence among Type 2 Diabetes Mellitus (T2DM) patients. However, such evidence is lacking in the Malaysian primary care setting. The objectives of this study were to determine the levels of self-efficacy, self-care behaviour, medication adherence and its relationship to glycaemic control among T2DM patients. It is also aimed to determine the factors associated with good glycaemic control.

Methods: This was a cross-sectional study involving T2DM patients from two public primary care clinics in Malaysia. Self-efficacy, self-care behaviour and medication adherence levels were measured using previously translated and validated diabetes management self-efficacy scale (DMSES), summary of diabetes self-care activity (SDSCA) and Morisky medication adherence scale-8 (MMAS-8) questionnaires, respectively. Glycaemic control was measured using HbA1c.

Results: A total of 340 T2DM patients were recruited. The total mean ($\pm$ SD) of self-efficacy, self-care behaviour and medication adherence scores were 7.33 ($\pm$ 2.25), 3.76 ($\pm$ 1.87) and 6.31 ($\pm$ 1.50), respectively. A positive relationship was demonstrated between self-efficacy with self-care behavior ($P < 0.001$, R^2 0.538) and medication adherence ($P < 0.001$, R^2 0.261). Higher self-efficacy score was shown to be correlated with lower HbA1c ($P < 0.001$, R^2 -0.41). Linear regression analysis demonstrated that higher self-efficacy score (adjusted OR: -0.015; 95% CI: -0.020, -0.011; $P < 0.001$), better medication adherence score (adjusted OR: -0.514; 95% CI: -0.706, -0.322; $P < 0.001$), shorter duration of diabetes (adjusted OR: 0.005; 95% CI: 0.003, 0.008; $P < 0.001$) and smaller waist circumference (adjusted OR: 0.017; 95% CI: 0.003, 0.031; $P = 0.016$), were significantly associated with good glycaemic control.

Conclusion: This study demonstrated that higher self-efficacy was correlated with improved self-care behaviour, higher medication adherence level and better glycaemic control. Findings of this study suggest the importance to include routine use of self-efficacy measure in the management of T2DM in primary care aiming to improve glycaemic control.

Oral Abstract 6

Home blood pressure monitoring effect on office blood pressure and medication adherence among hypertensive patients attending the outpatient clinic at Hospital Universiti Sains Malaysia (HUSM)

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Introduction: Home blood pressure monitoring (HBPM) is a useful adjunct to office blood pressure (BP) readings in the

management of hypertension. It is recommended by local and international guidelines. This study aimed to evaluate the HBPM effect on office BP and medication adherence among stage I and II hypertensive patients attending outpatient clinic at HUSM

Methods: A randomized controlled trial was conducted from December 2014 to April 2015, involving 88 patients, allocated to either HBPM group or control group. Medication adherence was measured by a validated new Medication Adherence Score (MAS) questionnaire. Patients were seen at baseline and two months after intervention. The primary outcomes were to evaluate the differences of office BP and MAS at baseline and at two months within groups and in between-groups.

Results: The mean changes of systolic BP (SBP), diastolic BP (DBP) and MAS were statistically significant within groups. However, the mean changes were greater in HBPM group than the control group (SBP 17.6mmHg, DBP 9.5mmHg, MAS 1.5 vs SBP 14.3mmHg, DBP 6.4mmHg, MAS 1.3). For comparison in-between group at two months, the HBPM group had lower mean SBP, DBP and MAS compared to the control group (SBP 141.5mmHg, DBP 81.0mmHg, 27.4 (0.76) vs SBP 146.1mmHg, DBP 81.5mmHg, MAS 27.5 (0.76)). There were no significant differences in between groups in all variables at two months of study.

Conclusion: HBPM at two months was not associated with office BP reduction and improvement of medication adherence. However, this finding requires further study with longer duration and larger sample size to assess the long term effect of HBPM.

Oral Abstract 7

The effect of listening to al-Quran recitation on mood among Muslim patients attending primary care clinic at Hospital Universiti Sains Malaysia

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Introduction: Studies have shown that reading and listening to The Quran relieve stress and provide a relaxing body response. The verses of Al-Quran are being used by Muslims in many activities in their life. The objectives of this study was to determine the effect of listening to The Quran on mood score using POMS-B (Profile of Mood State-Brief) among Muslim patients attending the Primary Care Clinic at Hospital Universiti Sains Malaysia.

Methods: This was a randomized controlled trial of 202 patients who were randomly allocated to either listening to Al-Quran recitation group or control group. At baseline and thirty minutes after the intervention, mood score using POMS-B (Profile of Mood State-Brief) were assessed. There were six measured domains in POMS-B which were tension, depression, anger, confusion, fatigue, and vigour activity. It also measured total mood disturbance.

Results: The change for total mood disturbance score for pre and post intervention was 4.05 (95% CI: 3.4, 4.7) in the intervention group and 2.63 (95% CI: 1.7, 3.5) in the control group. The difference was statistically significant (P=0.001). Other domains which showed statistically significant difference between the intervention and control group were tension, anger, fatigue, and rigour. The difference in the domains of depression and confusion were not statistically significant.

Conclusion: This study showed that listening to Al-Quran recitation could result in improvement in most areas affecting mood. This method may be used in the management of Muslim patients with mood disorders such as anxiety as well as other mental health issues.

Oral Abstract 8

Factors associated with tuberculosis (TB) treatment default in Klang district

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Introduction: Defaulting from TB treatment is a serious public health issue and may result in significant morbidity and mortality. This study was therefore designed to determine prevalence and factors associated with TB treatment default in Klang District.

Methods: This is a retrospective cohort study done by reviewing all registered patients in Malaysian National Tuberculosis Surveillance Registry from 2012-2015 in Klang district. All socio-demographic, clinical data and treatment outcomes were analysed.

Results: A total of 2263 tuberculosis patients were registered in Klang district within the studied period. The mean age was 40.3 ± 16.5 years and 16.1% were non-Malaysian. Of these, 205 (9.1%) patients were observed to have treatment default. Majority were males (152/205, 74.2%) and Malays (59/205, 28.8%). About 92 (25.3%) foreigners were found to default in TB treatment, 99 (48.3%) had lower education, 119 (58.9%) stayed in town area, and mostly getting treatment from government services (201/205, 98.0%). About 135 (67.8%) had smear positive PTB, 19 (9.3%) were diabetic and 2 (1%) had HIV co-infection. After adjusting for confounders using regression, being foreigners was found to be associated with higher risk of defaulting TB treatment (OR 3.53; 95% CI: 2.26, 5.50).

Conclusion: Strategies to address this risk factor is important to reduce risk of treatment default. Financial issue, lack of knowledge about treatment and language barriers may contribute to this finding. Adequate support and further measures are needed to ensure that foreigners are compliant to TB treatment.

Oral Abstract 9

Patients' involvement in decision-making: A cross-sectional study of adult patients attending rural health clinics

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Introduction: Shared decision-making has a positive impact on patients' health outcome and satisfaction. This patient-centred approach is favourably advocated and should be equally and routinely practised in both urban and rural health clinics. As rural communities experience unique circumstances to health care and information compared to urban communities, it is believed that these patients prefer passive role in clinical consultation. This study aimed to determine patients' role preference in decision-making at rural health clinics and to study the associated factors.

Methods: A cross-sectional study was conducted at rural health clinics in Kuala Langat district namely Klinik Kesihatan Sijangkang, Klinik Kesihatan Bukit Changgang and Klinik Kesihatan Tanjung Sepat. Patients aged 21 years and older were chosen using universal sampling. Consented patients answered a self-administered questionnaire, which included their demography and preferred role during consultation. The Control Preference Scale was used to assess patients' role preference.

Results: The response rate was 93.1% (516/554). Majority of patients (55.6%) preferred passive role in decision-making, followed by shared (28.3%) and active (16.1%) roles. Older age group ($p<0.0001$), male gender ($p=0.041$), marital status mainly widow/widower ($p=0.014$), lower educational level ($p<0.001$) and lower household income ($p<0.0001$) showed significant association with passive role preference. Following multinomial regression analysis, male and lower educational level were found to independently predict passive role preference compared to shared decision-making.

Conclusion: Majority of patients attending the rural health clinics preferred passive role in decision-making, mainly attributed by their socio-economic factors. Rural clinicians are encouraged to consider these factors and patient education during consultation in attempts to enhance shared decision-making practice.

Poster Abstracts

Poster Abstract 1

Depression among elderly with type 2 diabetes mellitus in Kedah

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Introduction: The prevalence of diabetes mellitus in elderly is escalating. Depression carries high mortality and morbidity and is often under diagnosed and undertreated. Furthermore, elderly with Type 2 Diabetes Mellitus also have a higher chance of having depression compared to those who are not. This study aimed to determine the proportion of depression and its associated factors among elderly with Type 2 Diabetes Mellitus in Sungai Petani, Kedah.

Methods: This was a cross-sectional study involving 509 elderly with type 2 Diabetes Mellitus age 60 and above. Systematic random sampling 1:3 was applied to elderly patients who attended Klinik Kesihatan Bandar, Sungai Petani. Questionnaires and case notes were used to obtain the information needed. The Malay version of GDS (M-GDS-14) was used to assess the depressive symptoms. The data was analysed using descriptive statistics and multiple logistic regression.

Results: A total of 511 elderly with Type 2 Diabetes Mellitus was involved in the study and the response rate was 99.6%. The proportion of depression was 32.1%. Elderly living with children ($p=0.002$, 95%CI 0.07, 0.55), elderly living with spouse, children, in-law and/or grandchildren ($p=0.021$, 95%CI 1.18, 7.37), diabetic complication ($p=0.001$, 95%CI 2.63, 8.35), and HbA1c ($p=<0.001$, 95%CI 1.09, 1.39) were significantly associated with depression.

Conclusion: Depression was common among elderly with Type 2 Diabetes Mellitus. Living arrangement, diabetic complication and HbA1c were significantly associated with depression.

Poster Abstract 2

Monitoring of hypertension patients during follow-up: A clinical audit in two primary care clinics

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Introduction: Hypertension is commonly managed in the primary care setting. Published literature showed that the monitoring of hypertensive patients in the Malaysian primary care clinics is suboptimal, despite the availability of evidence-based clinical practice guidelines (CPG). Hence the aim of this audit was to assess monitoring of hypertensive patients in two primary care clinics.

Methods: This audit was done in the two outpatient clinics utilized by UPM; one was a government outpatient clinic and the other was an Army outpatient clinic. A total of 40 patients from both clinics were selected by purposive convenient sampling method. All adult patients with hypertension ≥ 18 years old were included. Duration of the audit was six weeks.

Results: In the government clinic, BP was measured in all patients during the follow-up. Complications of hypertension were screened in 90% of patients. All patients were screened for risk factors of cardiovascular disease (CVD). In the army outpatient clinic, BP was also measured in all patients during the follow-up. Complications of hypertension were screened in 40% of patients. CVD risk factors were screened in 75% of patients.

Conclusion: The poor performance in screening for complications of hypertension and CVD risk factors among hypertensive patients in the army outpatient clinic was because they did not have a structured checklist for documentation during the follow-up, unlike the MOH clinics. Nevertheless, the medical staff mentioned that they had done the screening for these problems but it was not documented in the patient case sheets. In conclusion, checklists of the various chronic medical conditions are useful to ensure proper monitoring protocol during the follow-up period.

Poster Abstract 3

Metabolic syndrome among diabetic patients: A study between primary care clinics and diabetic specialist clinic in Kuantan, Pahang

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Introduction: Central obesity, diabetes, hypertension and high cholesterol constitute a cluster of metabolic syndrome (MetS), which is a strong cardiovascular disease (CVD) risk factor. However, there is limited data on its magnitude among Type 2 diabetes mellitus (T2DM) patients. This study aimed to evaluate the prevalence of MetS among T2DM patients at two government primary care clinics (PCCs) and a diabetes specialist clinic (DMSC) in Kuantan. Its association with their socio-

demography and control of CVD risk factors was also examined. **Methods:** This cross-sectional study involved 407 diabetes patients. The International Diabetic Federation (IDF) definition 2006 of MetS was used to identify the cases. Semi-structured questionnaires were distributed to collect socio-demographic and clinical data. Investigation results were extracted from the records.

Results: Prevalence of MetS among T2DM patients at PCCs and DMSC were 59.5% and 58.8% respectively. Compared to DMSC patients, more females (76.6% vs 67.8%), housewives (67.5% vs 49.4%), and Malays (95.2% vs 64.4%) were seen at PCCs, but less patients with strong family history of CVD (52.6% vs 71.3%) were documented. The majority developed MetS after the age of 40-years (99.4% at PCCs and 95.9% at DMSC) and after 5-years of T2DM diagnosis (88.9% at PCCs and 81.8% at DMSC). More patients from PCCs had achieved targets for the following CVD risk factors compared to DMSC patients: FBS/RBS (27.6% vs 19.7%), HbA1c (16.1% vs 10.6%), Triglyceride (50.3% vs 49.4%), HDL-C (66.2% vs 64.3%) and BP<135/75 (22.4% vs 20.3%), except LDL-C (32.8% vs 40.5%).

Conclusion: There were more Malay female housewives T2DM patients with MetS visited PCCs. Although, they appeared to have better control of CVD risk factors compared to DMSC patients, it was still suboptimal. As MetS is a strong prognosticator for cardiovascular complications, this suboptimal control and early development of MetS are very alarming.

Poster Abstract 4

An audit of hyperthyroidism cases at Seremban health clinic

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Introduction: Hyperthyroidism is a condition with multiple etiologies, manifestations, and potential therapies. In 2011, American Thyroid Association/ American Association on Clinical Endocrinologists (ATA/AACE) developed an evidence-based guidelines on the management of hyperthyroidism to aid in the care of patients with hyperthyroidism. However, there is no latest guideline on the management of hyperthyroidism in Malaysia. Studies on hyperthyroidism in Malaysia are also lacking. Therefore, this study aimed to describe the sociodemographic data, investigation and management of patients with hyperthyroidism.

Methods: A retrospective study of records of hyperthyroid patients who attended Seremban health clinic from June till December 2015.

Results: There were 48 cases of hyperthyroidism aged between 20 and 74 years old. Sixty nine percent were female. Majority were Chinese (72.9%), followed by Malay (22.9%) and Indian (4.2%). Thyroid function test was done in 83.3% of cases, but no etiological diagnosis was made in 97.9% of them. Blood pressure and pulse rate were assessed in 87.5% and 91.7% respectively, but only 14.6% of cases were assessed for signs of Grave's ophthalmopathy. Weight was measured in merely 8.3% of patients. The majority (95.8%) of them were on carbimazole. About 41.7% of cases were on antithyroid drugs for more than 24 months and 22.9% of them had relapse of hyperthyroidism.

Conclusion: The majority of patients with hyperthyroidism were female and of Chinese ethnicity. The diagnosis of

hyperthyroidism was mainly made by measurement of T4 and TSH, and carbimazole was the treatment of choice. Nevertheless, documentation of body weight and signs of Grave's ophthalmopathy were lacking.

Poster Abstract 5

Reasons for declining periodontal treatment by diabetic patients with periodontal disease although appointments were made for them in Kuantan, Malaysia

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Introduction: Regular screening for periodontal disease (PD) among diabetic patients is recommended because PD-treatment affects glycaemic control of diabetic patients. However, data on attendance of diabetic patients with PD after referring them to PD-Specialists' clinics from diabetes-clinics is still limited. This study aimed to examine the proportion of diabetic patients with PD who declined PD-treatment after referring to PD-specialists' clinics by medical professionals. Their reasons for declining were also explored.

Methods: PD screening was conducted among 237 diabetic patients from 3 Klinik Kesihatan in Kuantan in 2015. A total of 95 diabetic patients with PD were informed of their PD status by medical professionals who recommended them to receive PD-treatment. Those who agreed for the treatment were provided with an appointment date via phone. The outcomes of the study were categorized into: received PD-treatment and declined PD-treatment appointment. Influence of patients' socio-demography, knowledge on PD, perception on benefits of PD-treatment and HbA1C level on their refusal for PD-treatment were analysed.

Results: Out of 95 patients, 52 (54.7%) agreed to refer to PD Specialists' clinics. The majority of them (37, 71.1%) received PD-treatment, but 11 (21.2%) declined and 4 (7.8%) did not answer phone-calls. Busy-schedule on personal-matters, priority to other medical disease, not allowed by spouse, co-morbidity with Hepatitis-C, loss of interest, and being outstation were reasons for declining PD-treatment appointment. More patients with uncontrolled-HbA1C declined PD-treatment than those with controlled-HbA1C (31% vs 16.7%). Higher knowledge on PD was significantly associated with lesser refusal of PD-treatment (7.1% vs 36.8%) ($p<0.05$). However, socio-demography and perception of benefits of PD-treatment did not significantly influence their decision to refuse PD-treatment ($p>0.05$).

Conclusion: Refusal of DM-patients with PD for receiving PD-treatment may indicate that more promotional efforts are required. Their reasons of refusal should also be considered seriously to improve periodontal health services for them.

Poster Abstract 6

Abdominal obesity among attendees of KK Kota Sentosa and its association with psychological stress

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Introduction: Abdominal obesity is a stronger predictor for the development of diabetes mellitus and cardiovascular diseases compared to general obesity alone. The deposition of adipose tissue around the abdomen is postulated to be linked to psychological stress due to functional hypercortisolism. This paper describes the prevalence of abdominal obesity and its association with psychological stress among attendees of a public primary care clinic in Sarawak.

Methods: This cross sectional study was conducted among all adult patients attending Klinik Kesihatan Kota Sentosa from July to December 2014, using systematic sampling. The sociodemographic data, comorbidities, body mass index and waist circumference were collected. Participants were also required to complete a bilingual version of the 10-item Perceived Stress Scale (PSS-10). Abdominal obesity was defined as waist circumference of more than 90cm for men and 80cm for women. The association between abdominal obesity and psychological stress was tested using multiple logistic regression (MLR).

Results: A total of 380 participants were recruited for this study. Abdominal obesity was highly prevalent (72.4%) among the clinic attendees. The prevalence among patients with hypertension was 79.6%, whereas the prevalence among those with diabetes mellitus was 92.1%. There was no significant differences in the level of psychological stress between those with and without abdominal obesity. MLR showed that females (Adjusted OR 2.34, 95% CI 1.23-4.47) and married (Adjusted OR 3.69, 95% CI 1.43-9.54) participants had higher risk of having abdominal obesity.

Conclusions: The high prevalence of abdominal obesity among clinic attendees is worrying. Most of the patients with abdominal obesity have co-morbid hypertension and diabetes. This study does not show a significant association between psychological stress and abdominal obesity. Future studies should include other factors such as diet and physical activity.

Poster Abstract 7

Risk for obstructive sleep apnoea among patients with type 2 diabetes mellitus and its associated factors

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Introduction: Obstructive sleep apnoea (OSA) is common yet frequently under-recognised among patients with type 2 diabetes mellitus (T2DM). It is associated with cardiovascular diseases as well as motor vehicle accidents. Facilities to diagnose OSA are relatively scarce in our country. This paper describes the proportion of patients with T2DM who are at high risk for OSA and its associated factors.

Methods: This cross-sectional study was conducted among all adult patients in Klinik Kesihatan Seberang Jaya who were

receiving follow up for T2DM. Systematic sampling was used where every 3rd patient who registered for their diabetes follow up were approached for the study. The respondents self-administered the validated Malaysian version of the Berlin Questionnaire. Sociodemographic data, body mass index, blood pressure and glycemic indices were collected as well. Multiple logistic regression (MLR) was used to identify the associated independent risk factors for OSA among this population.

Results: The study recruited 402 respondents, with a response rate of 95.5%. About 32.3% (131/402) of respondents were found to be at high risk of having OSA. Only one respondent had been formally diagnosed with OSA. MLR showed that high risk of OSA was independently associated with secondary school education (Adjusted OR 2.46, 95% CI 1.23-4.90), coronary heart disease (Adjusted OR 2.91, 95% CI 1.31-6.45) and low HDL-cholesterol (Adjusted OR 1.952, 95% CI 1.18-3.21).

Conclusions: About a third of patients with type 2 diabetes were found to be at high risk for OSA, and almost all were not assessed formally. This suggests that patients with T2DM may have higher risk to develop OSA compared to the general population. Clinicians should consider screening for symptoms of OSA among patients with T2DM, especially those with history of coronary heart disease and low HDL-cholesterol levels.

Poster Abstract 8

Association of exposure to mosquito coil smoke and lung function in patients attending a primary care clinic

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Introduction: Mosquito coils are widely used as a mosquito repellent in Malaysia. There is evidence to show that exposure to mosquito coil smoke is linked to a reduction of pulmonary function. The aim of this study was to evaluate the effect of exposure to mosquito coil smoke on pulmonary function. Therefore, the association between FEV1 and exposure to mosquito coil smoke was examined and the lung age of individuals exposed to mosquito coil smoke was also estimated.

Methods: This was a cross sectional study with matched controls. Participants exposed to mosquito coil smoke were matched for age, height, sex, ethnic group and smoking status to controls who were not exposed to any mosquito coil smoke. Demographic data and years of exposure in the exposed group were captured. All participants underwent a pulmonary function test using a computer based SPIROLAB spirometer. Data collected was analysed using SPSS software version 22.0.

Results: There was a significant difference in FEV1 among participants who were exposed to mosquito coil smoke (FEV1=1.8) compared to the controls (FEV1=2.49) ($p=0.001$). FVC was also reduced in those exposed. The estimated mean lung age of those exposed was 80.5 years when the actual mean chronological age was 41.7 years in the exposed versus 57.5 years when chronological age was 41.7 years in the control group (p value= 0.001).

Conclusion: Exposure to mosquito coil smoke causes deterioration in pulmonary function and is associated with an older estimated lung age.

Poster Abstract 9

Perceived stress among patients with type 2 diabetes mellitus and its associated factors

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Introduction: People suffering from chronic diseases such as diabetes may experience high levels of stress. High levels of stress may affect a patient's ability for self-care. This study was conducted to assess the perceived stress among patients with type 2 diabetes mellitus (T2DM) and its associated factors

Methods: A cross-sectional study involving 250 patients with T2DM was conducted at a public primary healthcare clinic through systematic random sampling method. Perceived Stress Scale (PSS-10) was used to measure the perceived stress level. A self-administered questionnaire was used to assess their socio-demographic characteristics, and perceived social support. Detailed information of their clinical characteristics (duration of diabetes, HbA1c, Body Mass Index, type of treatment, presence of co-morbidity and complications) were extracted from the medical records.

Results: The mean total perceived stress score of the respondents was 16.6 (SD 5.92). Age was found to be negatively correlated with the stress score ($r=-0.193$, $p=0.002$) and Chinese ethnicity had lower perceived stress score compared to other races ($F=5.792$, $p=0.001$). There was also a negative correlation between perceived stress score and HbA1c but this was not found to be statistically significant ($r=-0.056$, $p=0.382$). Perceived stress score was not associated with perceived social support, duration of illness, presence of complications and type of treatment.

Conclusion: The current study found a lower perceived stress score among the T2DM patients. Increasing age and Chinese ethnic group were significantly associated with lower perceived stress score. These findings highlight the need to identify and manage stress in younger as well as in non-Chinese patients with T2DM.

Poster Abstract 10

KEKASIH: A post stroke therapy initiative through support group

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Stroke is a debilitating disease that has long-term psychological and social consequences to the survivors and also their caregivers. This requires on-going medical support that is normally scarce with the ever-straining medical resources resulting in many of the stroke patients being discharged from hospital prematurely. Nearly half of stroke survivors felt that they are abandoned once they leave the hospital, with many of their social needs remaining unmet long after the initial incident. This has become a challenge for managing post stroke patients in the community which most often falls onto the family physicians' shoulders.

Realising this, the Long Term Stroke Clinic team in Pusat Perubatan Primer, UKM Medical Centre has formed a support group for stroke patients that have been discharged from acute care in the hospital. Given the name *KEKASIH* (Kelab Komuniti Ahli Stroke Impikan Harapan) which directly translates to Community Stroke Club Dreaming of Hope. *KEKASIH* aims to empower patients to retain a sense of purpose in life after stroke, in addition to being a platform where caregivers can gain better access to the medical support staff and facilities.

The post-stroke patients are encouraged to be in the working committee, and help with running and organising events on their own with support from the medical staff and caregivers. Since its inception in 2013, *KEKASIH* has organised many social and health related awareness programmes which are relevant to stroke. It is hoped that with these events the patients can engage in social and physical activities as part of their rehabilitation process while the caregivers are able to share experiences and ventilate problems caring for these patients. Not only that, medical providers can benefit as they can learn and understand patients' needs and approach management of post-stroke cases holistically and tailored to the patients' and caregivers' needs.

Poster Abstract 11

Prevalence of depression, anxiety and stress among obese patients with chronic medical illness and its associated factors in Klinik Rawatan Keluarga, Hospital Universiti Sains Malaysia

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Introduction: Obesity and depression are two prevalent disorders that are costly to both individuals and society especially in patients with chronic medical illness. Depression usually co-exists with anxiety and stress. The aim of this study was to determine the prevalence and the factors associated with depression, anxiety and stress in obese patients with chronic medical illness attending Klinik Rawatan Keluarga, Hospital Universiti Sains Malaysia (HUSM).

Methods: This cross-sectional study involved a total of 274 eligible consenting respondents. The Depression, Anxiety and Stress Scale (DASS-21) questionnaire was used for measurement of depression, anxiety and stress among the respondents. Data was analysed using the SPSS version 21 software using both descriptive and inferential statistics (simple and multiple logistic regression).

Results: The prevalence of depression, anxiety and stress among obese patients with chronic medical illness were 13.9%, 23.4%, and 10.9% respectively. Using multiple logistic regression, age ($p=0.003$, OR: 0.96, 95%CI: 0.91, 0.98), unemployment ($p=0.013$, OR: 3.65, 95% CI: 1.32, 10.09) and current smoking status ($p=0.022$, OR: 3.18, 95% CI: 1.18, 8.55) were associated with depression. For anxiety, the associated factors were no formal education ($p=0.011$, OR: 5.70, 95%CI: 1.49, 21.89), BMI ($p=0.029$, OR: 1.07, 95% CI: 1.01, 1.13) and family history of mental illness ($p=0.018$, OR: 5.10, 95% CI: 1.33, 19.56). Stress was strongly associated with female gender (OR 5.06, 95% CI: 1.70, 15.13) and current smoking status (OR: 6.49, 95% CI: 2.03, 20.70).

Conclusion: Prevalence of depression, anxiety and stress symptoms in obese patients with chronic medical illness were 13.9%, 23.4% and 10.9% respectively. The significant associated

factors were age, unemployment, BMI, current smoker, no education, family history of mental illness and gender. Screening of obese patients with chronic illness for depression, anxiety and stress at primary care setting is recommended so that early intervention can be offered.

Poster Abstract 12

Professional health: Obesity status and 24-hours dietary recall of health-staff working at selected three primary care clinics in Kuantan, Malaysia

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Introduction: Obesity is common in Malaysia thus health practitioners are recommended to provide advice on Therapeutic Lifestyle Change-diet (TLC-Diet) to overweight and obese patients. However, there is limited data on the obesity status and dietary patterns among health practitioners. This study aimed to assess obesity status and its relation to 24-hour dietary recall of health staff in primary care.

Methods: A cross-sectional survey was conducted among 69 primary care health-staff aged between 20 and 60 years from 3 Klinik Kesihatan in Kuantan in April 2015. Body mass index (BMI) was measured to determine overweight (BMI: 25-30) and obesity (BMI >30). Values of macronutrient-intake [carbohydrate (CHO) (%), protein (%), and total-fat (%)], micronutrient-intake [cholesterol (mg), added-sugar from food/beverage (%), dietary-fibre (mg), and sodium (mg)] and total-energy-intake (TEI) (Kcals) were extracted from 24-hours-dietary recall using Nutritionist-Pro software. Total-energy-expenditure (TEE) was computed using Harris-Benedict formula to determine TEI in three status (adequate, inadequate, or excessive). Similar formula was also applied to categorise macro- and micro-nutrient intakes.

Results: Prevalence of overweight and obesity among health-staff were 34.8% and 24.61% respectively. Majority (81.2%) obtained inadequate TEI from their diet, whereas 18.8% had excessive TEI. In macro-nutrients analysis, those who consumed adequate CHO, protein and total-fat were 52.2%, 18.8%, and 39.1% respectively. The proportions with inadequate and excessive intake of macro-nutrients were: CHO (14.5% vs 33.3%), protein (43.5% vs 37.7%) and total-fat (36.2% vs 24.6%). Only 1.5% of them consumed adequate dietary-fibre (25-30gm/day), however excessive consumption of added-sugar (>10%/day), cholesterol (>200mg/day) and sodium-intake (>2400gm/day) were found among 66.1%, 53.6%, and 21.7% of them respectively. Significant relationships between obesity status and consumption of macro- or micro-nutrients, except protein-intake, were not demonstrated.

Conclusion: TLC-Diet should be intensified among primary care health-staff particularly those overweight and obese. An in-detailed nutritional assessment should be done for more valid results.

Poster Abstract 13

Blood pressure control and its associated factors among hypertensive patients at health clinics in Kuala Muda district, Kedah

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Introduction: Primary care providers play a major role in treating patients with hypertension. Despite the wide availability of primary healthcare facilities, blood pressure control remains poor. This study aimed to determine the proportion of blood pressure (BP) control and its associated factors among patients attending health clinics in Kuala Muda district, Kedah.

Methods: A retrospective study was done from April to May 2015 at seven health clinics in Kuala Muda district, Kedah. Stratified random sampling was used and data from patients' record were retrieved using self-designed data collection proforma. Samples chosen were those newly diagnosed hypertension patients from January 2014 onwards, aged more than 18 years old and with at least 6 months follow up. Controlled blood pressure was defined as in the Malaysian Clinical Practice Guidelines for the Management of Hypertension (4th edition).

Results: A total of 331 hypertensive patient records were selected. There were 160 patients (48.3%) with controlled BP. Multiple logistic regression analysis showed that age (OR= 1.03, 95% CI: 1.01, 1.05, $p= 0.041$) and systolic BP at presentation (OR= 0.95, 95% CI: 0.93, 0.96, $p< 0.001$) were associated with controlled BP. Initial BP stage and risk level at presentation were not associated with controlled BP.

Conclusion: BP control in this population was at par with other studies. However, with the increasing prevalence of hypertension and its complications, multiple strategies should be implemented to increase the proportion of patients with controlled blood pressure.

Poster Abstract 14

Type-2 diabetes mellitus (T2DM) treatment intensification and its associated factors: A pilot study at a university-based primary care clinic

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Introduction: Physicians' failure to intensify diabetes treatment may be responsible for poor glycaemic control. It is associated with physicians' poor knowledge, overestimation of care provided and perception that patients will not adhere or refuse treatment. However, the influence of patients' characteristics and self-care activities in physicians' decision making to intensify treatment is still undetermined. This study aimed to examine the proportion of poorly controlled T2DM patients with HbA1c >6.5% who received treatment intensification (increase dosage and/or addition of oral agent and/or insulin). Patient factors associated with treatment intensification were also assessed.

Methods: A cross-sectional study involving 156 T2DM patients in the Universiti Kebangsaan Malaysia primary care clinic was conducted in 2013 using convenient sampling. A self-administered questionnaire was used to obtain socio-demography, clinical characteristics and self-care activities (adherence to treatment, exercise and diet). Their medical records were examined for management given, presence of diabetes complications and co-morbidities at post consultation.

Results: The participants' median HbA1c and duration of diabetes were 8.2% (IQR: 2.6) and 7.0 (IQR: 6.0) years respectively. Majority had ≥ 2 co-morbidities (85.4%), no treatment side-effects (90.4%) and good medication adherence (median days/week: 7.0; IQR: 4.0). However, their adherence to diet (median days/week: 4.5; IQR: 3.0) and exercise (median days/week: 2.0; IQR: 3.0) were suboptimal. About 55% had no complications. Treatment intensification occurred in 59.6% of them. Only HbA1c level was independently associated with treatment intensification after being adjusted for all other independent variables. Every 1.0% increment in HbA1c, the odds of treatment intensification increased by 1.34 times (adjusted OR: 1.34, 95% CI: 1.04, 1.73; p : 0.02).

Conclusion: Lack of treatment intensification was substantial. HbA1c level was the only factor influencing physicians' decision in intensifying treatment, suggesting inadequate individualisation of management which requires further studies. Physicians should put more effort for individualising care by considering patients' multiple factors and HbA1c as a guidance.

Poster Abstract 15

Perceived involvement, preferences and factors affecting shared decision-making among patients with hypertension

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Introduction: Shared decision-making (SDM) has been advocated in healthcare due to its potential benefits in improving the quality of the decision-making process, and ultimately patient outcomes. Patients' preferences for involvement in decision-making also need to be taken into account as a step towards patient-centred care. However, there is limited information on the practice of SDM in Malaysia, particularly in chronic conditions requiring long-term management such as hypertension. The objective of this study was to determine perceived involvement, role preferences and factors affecting SDM among patients with hypertension.

Methods: A cross-sectional study involving survey was conducted among patients with hypertension at a teaching hospital in Malaysia.

Results: A total number of 210 respondents participated in the study. The majority of respondents (89.5%) agreed that physicians recognised the need for a decision to be made regarding their treatment. About 77.1% of them stated that physicians informed them of the different available treatment options. However, respondents' perceived level of involvement in other steps of the treatment decision-making process was low, including ways to identify patients' treatment preferences, deliberate treatment options and reach an agreement for treatment. In terms of role preferences in decision-making, 51.4% of them preferred

a collaborative role with their physicians, 44.8% preferred a passive role, while only 1.9% preferred an active role. Age and educational level were found to be significantly associated with respondents' preferences for involvement in treatment decision-making. Younger respondents (<60 years old) and those with higher educational level preferred SDM over passive decision-making ($p < 0.01$). Encouragement from healthcare providers was perceived as the main factor that would motivate patients' participation in SDM.

Conclusion: Patients' age and educational level are associated with their preferences for involvement in SDM. Encouragement from health care providers may be a key in promoting patient participation in SDM.

Poster Abstract 16

Glycaemic control among patients attending diabetic clinics in Klang district

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Background: Glycaemic control has been well documented as being significantly associated with diabetic complications. Understanding the significance of blood sugar control among patients at primary care level may help us to be more patient-centred in term of educating, counselling and screening for complications. This study aimed to determine the demographic data and complications among diabetic patients attending the diabetic clinics in Klang District.

Methods: This is a retrospective study on the database obtained from the National Diabetic Registry Annual Audit at Klang Health district. It includes the attendees to diabetic clinic at government health centre in Klang district between January 2013 and December 2015. A total of 1913 patients were audited and enrolled in the study. All relevant information including demographic parameters were extracted from the registry.

Results: A total of 1913 data were reviewed. Of these, 51.6% were elderly (>60 years old), 58.6% were female and the majority were Malays (46.2%). About half of the patients (50.6%) had uncontrolled diabetes (HbA1C $\geq 6.5\%$). About 36.5% were pre-obese and 38.5% were obese. Among these diabetic patients, 75.5% had hypertension, 62.3% diagnosed with hyperlipidemia, 6.2% complicated with ischaemic heart disease, 7.7% had nephropathy and 1.3% found to have cerebrovascular disease. As for diabetic complications, retinopathy was present in 9.4% of these patients, diabetic foot ulcer in 2.2%, electrocardiography abnormality in 3.8%, erectile dysfunction in 3.2%, and urine protein in 25.6%. Only 26.9% of them were on insulin, whereas the remaining were on oral hypoglycaemic agents.

Conclusion: This study has shown that about half of our patients had uncontrolled diabetes with multiple co-morbidities.

Poster Abstract 17

Knowledge, attitude, exposure and future intention of Universiti Sains Malaysia medical and dental students toward exclusive breastfeeding

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Introduction: Exclusive breastfeeding for the first six months is the optimal way of feeding infants. As future health professionals, it is important for medical and dental students to have good knowledge and attitude about exclusive breastfeeding. This study aimed to determine the knowledge, attitude, exposure and future exclusive breastfeeding intention among dental and medical students of Universiti Sains Malaysia (USM).

Methods: It was a cross-sectional study involving 162 students. A self-administered questionnaire was used, which consists of five parts assessing the participants' demographic characteristics, previous exposure, future intention, knowledge, and attitude toward exclusive breastfeeding.

Results: Almost all students knew that exclusive breastfeeding must be practiced until the infant is 6 months old (98.1%). A majority of them also knew that breast milk provides more protection against allergy than formula milk (98.8%) and helps in proper development of baby's teeth and gum (95.1%). About 97.3% of the students also knew the advantages of breastfeeding to mothers. However, more than half (53.7%) thought that expressed milk can be warmed in a microwave and the remaining milk can be stored again. Most students strongly agreed that exclusive breastfeeding is easier to be practiced than formula feeding (95.1%) and it is the best choice for working mothers (73.5%). More than 80% of them had previous exposure to exclusive breastfeeding and 93.2% intended to breastfeed their children in the future. Exclusive breastfeeding intention of the students was significantly associated with their ethnicity ($p=0.024$), previous exposures to exclusive breastfeeding ($p=0.006$), and attitude towards exclusive breastfeeding ($p=0.001$).

Conclusion: This study concludes that the medical and dental students in USM had good knowledge, attitude and future intention towards exclusive breastfeeding. Ethnicity of the students, their past exposures to exclusive breastfeeding and attitude towards the practice were associated with their future intention for exclusive breastfeeding.

Poster Abstract 18

Antenatal care knowledge among ever married women at Sikuati area, Kudat, Sabah

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Introduction: Antenatal care is vital for all pregnant women and for reduction of maternal mortality and morbidity. Antenatal care knowledge and its specific practices are some of the crucial components of what determines effective antenatal care. In developing nations, the health of pregnant women can be even more sensitive to these factors. Objectives of this study were to determine the sociodemographic characteristics of ever married women aged 15-49 years old having at least one pregnancy experience, residing in villages of Sikuati area, Kudat. The knowledge of antenatal care among the studied population was also investigated.

Methods: It was a cross-sectional analytical study. Using non-probability convenience sampling method, 150 eligible

participants were selected. Between March and December 2015, they were interviewed face-to-face by a trained interviewer who was guided by a semi-structured questionnaire. Their knowledge of antenatal care was assessed during the interview as well.

Results: Almost all participants (99%) received antenatal care. The study revealed that overall knowledge on antenatal care amongst the women was good in 48% of them; however 52% had low levels of knowledge. There were statistically significant associations between knowledge score and: education level ($p=0.025$), income ($p=0.01$), and number of parity. However, knowledge score was not significantly associated with their age, duration of being married, occupation, and husband's occupation.

Conclusion: Health education intervention should be provided to the antenatal mothers in this area, particularly those with a low level of knowledge on antenatal care.

Poster Abstract 19

First report on the use of long acting insulin 'glargine' for pregnant women with diabetes during the fasting month of Ramadan

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Introduction: Large proportions of diabetic patients including pregnant women who fast during Ramadan represent a challenge to their physicians. Due to the lack of studies on safety and absence of established guidelines on the management of diabetic pregnant women who wish to fast during Ramadan, women with pre-gestational or gestational diabetes are at very high risk and may be strongly advised not to fast. In reality, many of them insist on carrying out this religious duty and some may not consult their physicians at all. In our hospital, there is a protocol for management of pregnant patients with diabetes who wish to fast during Ramadan using insulatard and actrapid.

Methods: We have managed 8 pregnant diabetic patients during the fasting month of Ramadan in 2014 and 2015. Long-acting insulin glargine and ultra-rapid acting insulin lispro were used, which are similarly recommended for use during Ramadan among non-pregnant diabetic patients.

Results: We believe that this is the first report on the use of long acting insulin for pregnant diabetics during religious fasting. The patients were able to fast for most of the Ramadan days (mean: 20.8 days, SD 9.13) with no documented hypoglycaemic event. Average glucose level per day during fasting period was 6.39 mmol/L (IQR 2.14) with significant improvement in glycaemic control towards the end of Ramadan (5.87 mmol/L) compared to the control in early Ramadan (6.98 mmol/L) (p value: 0.028).

Conclusion: This is a promising finding since it will lead to wider options of insulin types and regimes as the use of glargine particularly had caused less hypoglycaemia. Fasting should no longer be considered a contraindication for pregnant women including those with diabetes (gestational or established). Since it is a religious obligation, physicians are duty-bound to support their diabetic patients before and through Ramadan to enable safe fasting.

Poster Abstract 20

Antenatal-ultrasound in primary care: Two sided views of medical officers and pregnant mothers from a selected Klinik Kesihatan in Kuantan

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Introduction: Antenatal-ultrasound (AN-USG) is an effective diagnostic modality for early detection of foetal and placental abnormalities, as well as monitoring foetal growth. Routine AN-USG for normal-pregnancy is recommended once by the World Health Organisation but twice by the local protocol. This study aimed to assess current practice of AN-USG, experiences of medical officers (MOs) and satisfaction of pregnant mothers.

Methods: A participatory action research was conducted among 6 MOs and 45 pregnant mothers, selected from 319 women who had AN-USG performed within a month in 2016 at a health clinic. MOs' practice background, training and experiences, knowledge on ethical and legal aspects, as well as indications and suggestions on AN-USG use were assessed. Clinical data of pregnant mothers, frequency of AN-USG and its gestational weeks, as well as their satisfaction and its reasons were also collected.

Results: Out of 319 scans, 43.9% were routine AN-USG. The MOs' duration of practice ranged from 4 to 9 years. Their duration of experiences performing AN-USG were 1.5 to 7 years in which 4 to 25 AN-USG were done per week. All MOs received training and performed both routine and indicated USG. Half and one-third of MOs knew ethical and legal aspects of AN-USG respectively. Gravida-1 to gravida-8 pregnant mothers received 1 to 8 times AN-USG between gestation week-5 and week-37. The mean interval of the 1st and 4th AN-USG ranged between 3 and 7.6 weeks. All pregnant mothers wanted to have AN-USG; 71% were satisfied with knowing foetal conditions and gender, but 29% were dissatisfied with unclear images. MOs suggested upgrading USG machines to detect foetal abnormalities and evaluation of MOs' ability to detect foetal abnormality.

Conclusion: Workload of MOs and clients' satisfaction should be considered in setting local protocol for routine AN-USG. Appropriate AN-USG modality should be installed in primary care.

Poster Abstract 21

Suggested insulin adjustment protocol for pregnant women with diabetes who wish to fast in Ramadan

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Introduction: Pregnant and breastfeeding women are among those who are exempted from Ramadan fasting. Many pregnant women had chosen to fast despite understanding its risks, especially hypoglycaemia. In our centre, there is a protocol for insulin adjustment for those who wish to fast. It was formulated from expert opinion and consensus by the lecturers of the department. This study aimed to determine the safety and effectiveness of the regime.

Methods: The regime of insulin adjustment: total dose of insulin requirement prior to Ramadan was divided into 2/3 of the dose given during *iftar* (after sunset meal) and 1/3 during *sahur* (pre-dawn meal). For each timing, 2/3 of the calculated dose given as actrapid and remaining 1/3 as insulatard. Three patients had been monitored in the ward while fasting for two days by checking their blood glucose for eight times per day. Subsequently, these patients and another 8 patients were followed up as out-patients during Ramadan in 2015. Weekly blood sugar profile (BSP) was taken.

Results: All patients were able to fast without any hypoglycaemic episode. Mean blood glucose per day for in-patient monitoring was 7.3mmol/l with the lowest being 4.56mmol/l in the afternoon. For Ramadan fasting, 7 patients fasted for more than 15 days and 4 patients fasted for more than 25 days. The average glucose level during Ramadan was higher (6.79mmol/l) compared to the one prior to Ramadan (5.67mmol/l) (p -value=0.063). However, improvement was observed towards the end of Ramadan.

Conclusion: Due to the design of the study and inadequate sample size, our study could be only considered as a pilot observation that might suggest safety and effectiveness of the tested regime. Pregnant women with diabetes treated with insulin may fast safely during Ramadan, provided they comply with dietary advice, insulin injection, frequent follow-up, and be aware of hypoglycaemic symptoms.

Poster Abstract 22

Prevalence of obesity and self-perception of body weight status among pregnant women in Seremban district

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Introduction: The prevalence of obesity among women is on a rising trend worldwide with a general misconception of own body weight. The aim of this study was to determine the prevalence of obesity and self-perception of body weight among pregnant women in Seremban district.

Methods: A cross sectional study was done among women in the first trimester of pregnancy. Their body mass index (BMI) was recorded and their self-perception of weight was also assessed using a single question: "How do you perceive your current weight status?" to which the participants selected one answer option, either underweight, normal, overweight or obese.

Results: A total of 315 women participated in this study. The prevalence of obesity among the pregnant women was 29.8% ($n=94$). Most participants (65.7%, $n=207$) perceived their weight to be normal, while 19.4% ($n=61$) and 5.4% ($n=17$) of them felt they were overweight and obese respectively. About 9.5% ($n=30$) considered themselves as underweight. There was poor agreement between the participants' perception of their weight status and their actual BMI wherein most of them underestimated their weight status ($\kappa=0.185$, 95% CI: 0.119-0.258, $p<0.001$).

Conclusion: There was a high prevalence of obesity among pregnant women in Seremban and unfortunately they tended to underestimate their weight status. This misperception could be an obstacle in obesity management as failure to recognize accurate body weight status impedes healthy lifestyle and weight management intervention. Education regarding the ideal body

weight, healthy lifestyle and obesity related pregnancy risks need to be highlighted during health promotion campaigns and pre-pregnancy care. This would help to create awareness, correct perceptions and eventually prevent obesity related pregnancy risks.

Poster Abstract 23

Prevalence of effective family planning practice and its associated factors among women with high risk pregnancy in Sabak Bernam, Selangor

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Introduction: Family planning allows couples to ascertain spacing of their births, which has direct impact on women's health and pregnancy outcome. Successful family planning practice is defined as effective contraception use for birth spacing for at least 24 months. The study was to determine the prevalence of effective family planning practice among women with high risk pregnancies and its related factors.

Methods: A cross sectional study was conducted involving 120 women with high risk pregnancies attending Klinik Kesihatan in Sabak Bernam district, Selangor from 2012 until 2014. A convenience sampling was applied and the respondents were interviewed using a questionnaire. All women with high risk pregnancies aged 15-49 years old were included in this study. Women who were under fertility treatment, menopause, divorced or having valvular heart disease or heart failure were excluded. Data analysed using IBM SPSS Statistics Data Editor.

Results: The prevalence of effective family planning practice was 66.95%. There were significant associations between effective family planning practice and: education ($p=0.051$), occupation ($p=0.041$), parity ($p=0.035$), side effect of contraception ($p=0.001$), husband support ($p=0.01$) and peer influence ($p=0.037$). However, income ($p=0.883$) and family planning counselling ($p=0.153$) had no significant association with effective family planning practice.

Conclusion: The prevalence of effective family planning practice in Sabak Bernam district was good. Skills of healthcare workers in giving family planning counselling need to be improved. Family planning support group was established to influence more women with high risk pregnancy to practice effective family planning.

Poster Abstract 24

The views and experiences in utilising primary care services among homosexual women in Malaysia: A qualitative study

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Introduction: Homosexual women have been shown to have greater health needs; yet they under-utilise healthcare services. Studies have explored the reasons for this but few have been conducted in Asia. This study aimed to understand homosexual women's views and experiences in utilising primary care services in Malaysia. It explored their perceptions and health-seeking

behaviours, and the facilitators, barriers and needs in obtaining quality primary care.

Methods: This qualitative study used an interpretive descriptive approach. Participants were recruited from Malaysian online groups for homosexual women, and through word-of-mouth. Purposive sampling was performed to include various ethnic groups. One dyadic interview and eight in-depth interviews were conducted in Klang Valley between February and May 2015 using an interview topic guide. The Health Belief Model was used as a theoretical framework. Interviews were audio-recorded and transcribed verbatim. Thematic analysis was performed.

Results: Participants were between 25 and 41 years old, and comprised various ethnic groups. This study found that previous negative healthcare encounters or perceived discrimination affected homosexual women's health-seeking behaviours and their decision to disclose their sexual orientation to the primary care providers. Some participants perceived themselves to be at low risk of sexually-transmitted diseases and cervical cancer because of their homosexual practices. There was a lack of health information targeted specifically at homosexual women in Malaysia.

Conclusion: Discrimination and lack of health information were important barriers to accessing primary care services by homosexual women. Primary care providers and the health care system should be sensitive and more responsive to the health care needs of homosexual women in Malaysia.

Poster Abstract 25

Prevalence of urinary incontinence among postmenopausal women attending outpatient clinic at Hospital Universiti Sains Malaysia

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Introduction: Urinary incontinence (UI) is common in women, but is under diagnosed and under treated. Menopause leads to urogenital atrophy due to the decline in estrogen that cause UI. Studies have shown that UI is prevalent among adult women. However, limited studies on UI among postmenopausal women were conducted in ASEAN countries. The objective of this study was to determine the prevalence of urinary incontinence and its associated factors.

Methods: A cross sectional study was carried out involving 348 postmenopausal women between 47 and 82 years old who visited an outpatient clinic from February 2015 to April 2015. Every participant was given a validated self-administered Questionnaire Survey formulated by a panel of experts from the Asia-Pacific Continence Advisory Board (APCAB), which had Cronbach's alpha of 0.64. It consists of three parts assessing sociodemographic data, urinary incontinence and health seeking behaviour.

Results: The mean (SD) age of the respondents was 67.4 (± 5.8) years old. The majority of them had menopause for more than 5 years (70.4%), no past gynaecological history (87.1%), and attained at least secondary education (61.7%). The prevalence of urinary incontinence was 58.9% and 36% of them had the problem for more than 5 years. The most common type of UI was stress incontinence (83.4%). Only higher family income was significantly associated with UI (adjusted odds ratio [OR]: 0.32, 95% confidence interval [CI]: 0.12, 0.85).

Conclusion: The prevalence of UI among postmenopausal women attending outpatient clinic Hospital Universiti Sains Malaysia was unexpectedly high. Hence, medical practitioners need to be more proactive in seeking out these patients.

Poster Abstract 26

Oral health care among pregnant women in a local primary care institution in Kuantan Pahang: A preliminary report

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Introduction: Oral health problem among pregnant mothers is associated with preterm birth and low birth weight. Factors that contribute to this problem include oral health care attitude and practices among pregnant mothers. This study aimed to describe the attitude and practices of oral health care among pregnant mothers.

Methods: This was a cross-sectional pilot study conducted among pregnant mothers in a primary care clinic in Kuantan, Pahang. Pregnant mothers aged more than 18 years and at more than 14 weeks gestation were invited to participate in this study. Patients were requested to answer a self-administered questionnaire that assessed their attitude and practices on their oral health. Descriptive statistics and univariate analysis were performed using SPSS version 23.

Results: A total of 32 pregnant mothers participated in this pilot study. The mean (SD) age of the participants was 29.94 (5.0) years and the mean (SD) parity was 2 (1.7). The majority were Malay (96.9%). The preliminary result showed that the majority had poor practice of oral health care (65.6%). Half of them had good attitude towards oral health care (50%). Correlation analysis showed that the participants' attitude and practice were not significantly correlated with age ($p=0.51$ and $p=0.10$), level of education ($p=0.113$ and $p=1.00$), and parity ($p=0.63$ and $p=0.80$). However, those with higher income had poor attitude towards oral health care ($p=0.003$).

Conclusion: There was a high proportion of pregnant mothers who poorly practiced oral health care. Therefore, efforts are required to promote good attitude and practices of oral health care among these pregnant mothers.

Poster Abstract 27

Comparing the treatment outcomes between fixed dose combination and multiple single drug chemotherapy for smear positive pulmonary tuberculosis in Kuala Muda district

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Introduction: Fixed-dose combinations (FDC) has replaced multiple single drugs (MSD) in managing smear positive pulmonary tuberculosis at Kuala Muda district since March 2013. This study aimed to evaluate the treatment outcome by comparing sputum conversion rate (SCR) at 2 month and 3 months, and cure rate at 6 and 7 months between patients

treated with FDC and MSD regime. Common side effects in both regime were also examined.

Methods: A retrospective cohort study was done among all patients with smear positive pulmonary TB who completed treatment at Bandar Sungai Petani and Merbok health clinics through reviewing their case records. Those treated with MSD had their treatment between May 2011 and May 2013, whereas those who completed FDC regime were treated between May 2013 and May 2015.

Results: A total of 115 cases were analysed (67 cases took MSD and 48 cases had FDC regime). Most of the patients from both groups were male (58.3% from FDC group and 68.7% from MSD group) and Malay (81.3% from FDC group and 67.2% from MSD group). SCR at 2 months was slightly lower in MSD group (68.7%) compared to FDC group (70.8%) and the difference was not statistically significant ($p=0.428$). At 3 months, the SCR increased to 100% among those in MSD group, but only 71.4% in FDC group (p -value=0.019). Cure rate at 6 months was also higher in MSD group (53.7%) compared to FDC group (45.8%), but the difference was not significant (p -value=0.404). At 7 months, the cure rate was 100% for MSD group whereas 96.2% for FDC group; the difference was also not significant (p -value=0.456). Common side effects were nausea and vomiting.

Conclusion: Current evidence does not indicate FDC of TB drugs improve treatment outcomes.

Poster Abstract 28

Practices related to dengue fever prevention among international students in Universiti Putra Malaysia, Serdang.

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Introduction: Dengue is a vector-borne, notifiable and preventable communicable disease. There is a need to study and comprehend practices related to dengue fever prevention and its concomitant factors as it is associated with high morbidity and mortality in Malaysia. This study focuses on practices correlated to dengue fever prevention and its contributing factors among the international students in Universiti Putra Malaysia, Serdang.

Methods: A cross sectional study was conducted among the international students of Universiti Putra Malaysia, Serdang in early April 2016 using cluster sampling proportionate to size method. From a total of 15 faculties, 5 faculties were chosen as cluster and respondents were selected using simple random sampling. Data was collected using a pre-tested, self-administered questionnaire which had Cronbach's Alpha coefficient of reliability of 0.86. Data were computed using IBM Statistical Package for Social Sciences (SPSS) version 22. Chi-square test was used to measure association and logistic regression was done to determine predictors.

Results: The response rate was 87.4% with 641 respondents, who were mostly male (65.5%), Asian (74.6%), and married (61.5%). Their mean age was 33.41 ± 6.562 . Overall respondents had poor knowledge (45.9%), negative attitude (51.6%), and good practices (53.7%) related to preventive practices. Dengue preventive practices were significantly associated with gender ($p<0.010$), marital status ($p=0.003$), knowledge ($p<0.001$), attitude ($p<0.001$), influence of mass media ($p<0.001$), and previous history of dengue ($p=0.019$). Predictors for good

preventive practices were being single (AOR: 4.122, 95% CI: 1.083-15.685), good knowledge (AOR: 5.908, 95% CI: 3.134-11.139), and highly exposed to mass media (AOR: 3.654, 95% CI: 2.506-5.328).

Conclusion: This study highlights that if a community is equipped with adequate knowledge and attitude, ultimately it will lead to better preventive practices. Therefore knowledge based health education and cultivating positive attitude with enhanced preventive practices should be further reinforced.

Poster Abstract 29

Audit on antibiotics prescribing for upper respiratory tract infection in primary healthcare facilities in Kedah

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Introduction: Many URTIs are viral in origin and of a self-limiting nature. The use and overuse of antibiotics in patients is a major contributor to the emergence of antibiotic resistant organisms. Recent evidence has shown that primary care prescribing patterns play an important role in this development. This study aimed to evaluate the appropriateness and choices of antibiotics prescribed for URTIs in primary care.

Methods: This was a retrospective study reviewing management of all patients diagnosed with URTIs (pharyngitis, tonsillitis, rhinosinusitis otitis media) at health clinics with resident Family Medicine Specialist in Kedah between 23rd and 27th August 2015. The choice of antibiotics used and its appropriateness following the National Antibiotics Guideline (second edition, 2014) and the local infection management guideline were assessed.

Results: Of the 2749 URTIs encountered, 34.4% resulted in antibiotics prescription. Among those prescribed with antibiotic, 62.6% were indicated. However, among those indicated for antibiotic, only 3.8% did not receive antibiotic. The preferred antibiotics for pharyngitis or tonsillitis were amoxycillin and erythromycin, whereas Penicillin V was notably underused. Majority of the patients with acute rhinosinusitis were prescribed with erythromycin rather than amoxycillin. For otitis media, the preferred antibiotics were amoxycillin and Chloramphenicol eardrop. In overall, 74.2% of antibiotics prescriptions were according to the guidelines, which were practiced by only half of the prescribers.

Conclusion: The patients with URTI appeared to be appropriately prescribed with antibiotics as indicated by the guidelines. However, the choice of antibiotic was inappropriate. Thus, prescribers should be updated with the latest guideline in managing URTIs and provided with a quick reference guide for further improvement in care.

Poster Abstract 30

Clinical audit on antibiotic prescription in primary care specialist clinics, Universiti Teknologi MARA (UiTM)

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Introduction: Antimicrobial Stewardship Programme was developed in response to increasing evidence of bacterial resistance and escalating cost on antibiotic usage. One of the strategies is for clinicians in primary care clinics to audit their practice on antibiotic prescription. This study aimed to assess antibiotic prescribing practice against the National Antibiotic Guidelines (NAG) 2014.

Methods: A retrospective audit was conducted between 1st September and 30th November 2015 at Sg. Buloh and Selayang Primary Care Specialist Clinics. Clinical records of patients who had received antibiotics were analysed. Fifteen criteria were set and the standards were agreed based on local practice.

Results: We identified 290 clinical records. Nineteen were excluded due to no documentations and prescription by proxy. Augmentin[®] was the most prescribed antibiotic. The highest prescription was seen for ear, nose and throat cases. Eight criteria met the standard, which were availability of onsite pharmacy, family medicine specialists, qualified medical officers, staff nurses, lab facilities and information technology, as well as completeness of antibiotic prescription (271/271, 100%) and documentation of indication for the antibiotic prescribed (257/271, 94.8%). Seven criteria did not meet the standard which include availability of all the first line antibiotics at pharmacy, documentation of allergy (70/271, 25.8%), correct writing of antibiotics prescription (name, dosage, frequency and duration) (26/271, 9.6%), seeking evidence of infection (55/271, 20.3%), prescribing the recommended antibiotics (first line or alternative) (129/271, 47.6%), prescribing the first line antibiotics (71/271, 26.2%), and treating positive cultures accordingly (10/27, 37%).

Conclusions: Within this setting, the presence of an electronic prescribing system allows achievement of complete antibiotic prescription. However, more comprehensive strategies are needed for improvement including clinical training on the NAG 2014 and having the recommended first line antibiotics available at pharmacy.

Poster Abstract 31

Socio-demographic and clinical profile of dengue death in Klang district

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Introduction: Dengue death is one of the major public health concern in Malaysia. It causes a significant encumbrance to our health care system. Therefore, this study was designed to determine the socio-demographic and clinical profile of patients who died from dengue infection in Klang district.

Methods: This was a retrospective cohort study performed by reviewing all dengue mortality cases registered in the vekpro online and e-dengue database in Klang district between 2010 and 2015. All socio-demographic and clinical data were analysed using SPSS version 22.0

Results: There were a total of 42 dengue death in Klang district from the year 2010 until 2015. Overall, dengue death rate was 0.15%. The patients' mean age was 35±14.6 years. About half of them (21/42) were females and only 6 (14.3%) were foreigners.

Many of the deaths occurred in the middle age group (36/42, 85.7%), with the youngest patient aged 9 months and the oldest patient 63 years old. The majority were Malays (24/42, 57.1%), followed by Indian (9/42, 21.4%) and Chinese (3/42, 7.1%). Approximately 52.4% (22/42) of them were unemployed and 35.7% (15/42) had at least one co-morbidity. About 71% (30/42) of the patients sought treatment at a primary care clinic at the onset of illness. The mean duration between the first contact with primary care and hospitalization was 1.4 days. Fever was the most common presenting symptoms among dengue deaths (41/42, 97.6%).

Conclusion: Dengue infection is a common disease encountered in primary care. Therefore understanding of clinical profiles is utmost important to manage dengue fever in appropriate and timely manner to reduce morbidity and mortality.

Poster Abstract 32

An open labelled randomised clinical trial of fluoxetine versus dapoxetine among men with premature ejaculation and its effect on marital satisfaction

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Introduction: Premature ejaculation (PE) results in reduced sexual satisfaction and quality of life for men and their partner. Fluoxetine and dapoxetine have been used to treat PE in which dapoxetine is the first-line selective serotonin reuptake inhibitor (SSRI) that has a short half-life. This study aimed to determine the mean differences on PE score and marital satisfaction score between patients receiving fluoxetine and dapoxetine.

Methods: This study was a two-armed open labelled randomized clinical trial. Forty-four consecutive men who met the inclusion and exclusion criteria were enrolled. They were prescribed with daily fluoxetine 20mg or dapoxetine 30mg on demand twice weekly for 8 weeks. Premature Ejaculation Diagnostic Tool (PEDT) and Dyadic Satisfaction-Dyadic Adjustment Scale (DS-DAS) scores were measured to assess PE and marital satisfaction respectively during pre and post intervention.

Results: Twenty-two subjects in the fluoxetine arm and twenty-one subjects in the dapoxetine arm completed the study. At baseline, there was a significant difference in the mean PEDT scores between both groups, which were significantly reduced post-intervention. In the fluoxetine arm, the score reduced from 11.41 to 5.45 ($p<0.001$) and in the dapoxetine arm, it decreased from 13.43 to 3.10 ($p<0.001$). The median reduction of PEDT scores in the fluoxetine arm and dapoxetine arm were -5.95 and -10.33 respectively ($p<0.001$). The mean DS-DAS scores were not significantly different between the groups at baseline (fluoxetine arm: 34.5 versus dapoxetine arm: 36.57, $p=0.260$). Significant increase in DS-DAS scores were observed in both groups. The DS-DAS score in the fluoxetine arm increased from 33.00 to 40.50 ($p<0.001$), whereas the score in the dapoxetine arm was raised from 36.57 to 44.33 ($p<0.001$).

Conclusion: Both fluoxetine and dapoxetine showed significant improvement in PEDT and DS-DAS score. Greater improvement in PEDT score was observed among those treated with dapoxetine.

Poster Abstract 33

Prevalence of premature ejaculation and its associated factors among men attending outpatient clinic, Universiti Sains Malaysia (USM) Hospital

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Introduction: Premature ejaculation (PE) is a common male sexual disorder. Several factors have been proven to be associated with PE namely erectile dysfunction, general medical condition and psychological illness. However, there is little data on the prevalence of premature ejaculation according to its four subtypes: lifelong PE, acquired PE, natural variable PE and premature-like ejaculatory dysfunction. This study aimed to determine the prevalence of premature ejaculation and its associated factors among men attending outpatient clinic in USM hospital.

Methods: A cross sectional study among men aged 18 to 60 years was conducted from January 2014 to January 2015. Premature Ejaculation Diagnostic Tool (PEDT) and 5-item International Index of Erectile Function (IIEF-5) questionnaire were distributed. Participants who were identified as having premature ejaculation were further assessed with the 21-item Depression, Anxiety and Stress Scale. Premature ejaculation was defined as PEDT score of 9 and above.

Results: A total of 294 men responded with the mean (SD) age of 46.3 (10.1) years. The prevalence of premature ejaculation was 21.4% ($n=63$). Among those with PE, 7.9% ($n=5$), 15.9% ($n=10$), 58.7% ($n=37$), 17.5% ($n=11$) were identified as lifelong, acquired, natural variable premature ejaculation and premature-like ejaculatory dysfunction respectively. Multiple logistic regression showed that only mild-moderate erectile dysfunction [*adj. OR* (95% CI): 8.2 (2.72, 24.46)] was significantly associated with premature ejaculation.

Conclusion: The prevalence of premature ejaculation in this study was comparable with other regions. Hence, screening regarding premature ejaculation among men attending outpatient clinic is recommended.

Poster Abstract 34

Exercise counselling by primary care doctors: Their practice, perception and relationship with their own level of physical activity

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Introduction: Sedentary lifestyle has caused an increase in the prevalence of non-communicable diseases (NCDs). Many efforts have been made to promote active lifestyle including exercise counselling by the primary care doctors. This study aimed to assess practice and perception of exercise counselling among primary care doctors, and its associations with sociodemographic characteristics and own level of physical activity.

Methods: This was a cross-sectional study involving 207 doctors working at 42 government health clinics under 6 randomly sampled Health District Offices in Selangor and Kuala Lumpur. Data was collected from June until September 2014 using a self-

administered questionnaire which assessed socio-demography, current practice, as well as confidence and barriers in exercise counselling. Personal level of physical activity was examined using the International Physical Activity Questionnaire (IPAQ).

Results: Only 32.8% of the respondents provided exercise counselling to 50% or more of their patients, although 75.2% of them desired to do so. The majority had seldom or never practiced giving education materials (94.6%), evaluating patients' practice of achieving target heart rate during exercise (90.1%), writing exercise prescription (84.9%), and recommended resistance training (84.9%). Many (48.6%) had low levels of physical activity. Alleged having poor knowledge and qualification, perceived ineffectiveness of own exercise counselling, inadequate consultation time, and lack of guidelines might hinder them from giving exercise counselling. Older respondents ($p=0.036$), non-Malays ($p=0.027$), and those with higher professional qualification ($p=0.001$) and longer working experience ($p=0.024$) practiced significantly more exercise counselling as compared to others. However, their counselling practice was not associated with own physical activity ($p=0.085$) although many were overweight or obese.

Conclusion: There are still rooms for improvement in the practice of exercise counselling. Strategies should include training young doctors to provide effective counselling. Provision of educational materials, written exercise prescription and exercise counselling by trained allied health professionals should be practiced as well.

Poster Abstract 35

Scoliosis screening programme for primary school children: Is it still relevant?

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Introduction: Adolescent idiopathic scoliosis remains the commonest type of idiopathic scoliosis. Routine screening for incidence of scoliosis among adolescents has been controversial in term of effectiveness, safety and cost efficiency. The objective of this study was to identify the incidence of scoliosis among primary school student in a suburban district in Borneo. We aimed to explore the feasibility for implementation of routine screening programme as part of the Malaysian School Health Service.

Methods: A cross-sectional descriptive study was conducted in 3 primary schools between February and March 2016. We recruited 1405 subjects after informed consent was obtained from the parents or guardians. Initial screening for scoliosis was done using Adam Forward Bending Test (AFB) and scoliometer for measurement of Angle of Trunk Rotation (ATR). Subjects with positive ATR of ≥ 5 degree were sent for radiographic assessment for confirmation of diagnosis. A Cobb's angle of >10 degree confirmed the diagnosis of scoliosis. Measurement of Cobb's angle was done separately by two qualified orthopaedic surgeons independently.

Results: Incidence of scoliosis in our study was 0.28% (4/1405), with 3 female and 1 male subjects, corresponding to the incidence of scoliosis in various studies done previously. AFB in our study demonstrated very high specificity of 97.71%, indicating a very effective and accurate method for initial screening of scoliosis.

Conclusion: Screening for scoliosis in primary school students is simple, safe and effective. AFB and scoliometer are reliable

screening methods. We recommend the implementation of this screening programme in all primary schools in Malaysia.

Poster Abstract 36

Reliability and construct validity of practice of medical doctors on smoking cessation guidelines

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Introduction: The number of active smokers in Malaysia is increasing despite the availability of stop smoking clinics and smoking cessation medications. Thus, the practice of healthcare professionals involved in providing smoking cessation intervention using evidence-based guidelines needs to be assessed using validated assessment tools. This study aimed to develop and validate a questionnaire to assess the practice of medical doctors based on national smoking cessation guidelines and factors contributing to the practice.

Methods: The 20 items with 5-Likert scale response of strongly agree, agree, don't know, disagree, and strongly disagree were created based on the domains of 5A's (ask, assess, advice, assist, arrange) and 5R's (relevant, risks, rewards, roadblocks, repetitions) of the national stop smoking guidelines. The questionnaires were distributed to 141 government primary care doctors. Reliability was determined using Cronbach's alpha for internal consistency while construct validity was assessed using factor analysis.

Results: A high degree of internal consistency was observed (Cronbach's alpha = 0.83). Factor analysis showed five meaningful components.

Conclusion: This study indicates that this questionnaire is a reliable and valid tool to assess the practice on stop smoking guidelines.

Poster Abstract 37

Prevalence of active smokers and their state of changes among outpatient attendees in Klinik Kesihatan Sekinchan

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Introduction: There is a high number of current smokers particularly among male adults in Malaysia. Unfortunately, referrals to the Quit Smoking Clinic of Klinik Kesihatan Sekinchan and the success rate of this clinic were found to be low. The objectives of this study were to determine the prevalence of active smokers and their state of change among outpatient attendees in Klinik Kesihatan Sekinchan.

Methods: This was a cross-sectional study involving the use of an interview-based check-list. This study was conducted in the outpatient unit of Klinik Kesihatan Sekinchan.

Results: A total of 561 outpatient attendees were enrolled via universal sampling. The prevalence of active smokers from our study was 22%, wherein 97% of them were adult males. These adult male smokers comprised 45% of all adult males. Among females, only 1% were active smokers and 5% had ever smoked

in their life. Unfortunately, 70% of all active smokers answered that they were not ready to quit. Meanwhile, only 13.9% of active smokers were referred to the Quit Smoking Clinic of Klinik Kesihatan Sekinchan during the study period.

Conclusions: The prevalence of active smokers in Klinik Kesihatan Sekinchan was approximately the same with the national prevalence. Unfortunately, the majority of the active smokers were in pre-contemplation stage. We recommend enhanced repeated and frequent screening of smoking status with improved health education and promotion.

Poster Abstract 38

Effect of environmental tobacco smoke exposure on blood pressure profile among women in Hospital Universiti Sains Malaysia

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Introduction: Exposure to environmental tobacco smoke (ETS) has been recognized as a strong predictor for cardiovascular mortality. The negative effect of passive smoking on vascular endothelium is similar to those of active smokers. The study aimed to compare the circadian pattern of blood pressure (BP) (mean daytime, mean night time and 24-hour) and proportions of dippers and non-dippers between subjects with environmental tobacco smoke (ETS) exposure and non-environmental tobacco smoke (non-ETS) exposure.

Methods: A total of 118 healthy female subjects (54 in ETS group and 64 in non-ETS group) aged 25 to 45 years were enrolled. Schiller BR-102 plus was used to assess mean of BP (daytime, night time and 24 hours). Non-dippers were defined as systolic or diastolic nocturnal drop of less than 10%. ETS group were those with exposure to environmental tobacco smoke at least for 15 minutes in two days per week for at least 3 years.

Results: The mean age of the respondents in ETS and non-ETS groups were 33.9 (SD: 6.73) and 33.9 (SD: 7.74) respectively. Their mean (SD) body mass index were: 24.8 (4.83) kgm⁻² in ETS group and 23.7 (4.04) kgm⁻² in non-ETS group. The mean BP (daytime, night time and 24 hour) was lower in the ETS group compared to non-ETS group. There were statistically significant differences between the groups in terms of their mean daytime diastolic BP ($p=0.026$) and mean 24-hour diastolic BP ($p=0.024$). Non-dippers among ETS group were 63.5% (systolic) and 42.3% (diastolic), while non-dippers among non-ETS group were 50% (systolic) and 31% (diastolic).

Conclusion: The circadian pattern of BP (mean daytime, mean night time and mean 24-hour) was lower among the non-ETS group compared to ETS group, but it was not significant statistically. The percentage for systolic non-dippers among ETS group was higher compared to non-ETS group.

Poster Abstract 39

Drug addiction rehabilitation centres in Japan: What we can learn from them?

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Introduction: Malaysia has been struggling to curb drug addiction. Amphetamine-type stimulants (ATS) have re-emerged and become the most common drug abused in Malaysia. This requires new approaches and interventions in order to help ATS-dependent patients. In Japan, the main drug abused involves ATS use. There are more than 70 Drug Addiction Rehabilitation Centres (DARCs) to help drug addicts to recover. The centres are managed by ex-drug abusers and funded by the government. This study aimed to learn about organising drug addiction rehabilitation programs and its effectiveness in Japan.

Methods: This was a qualitative study involving face-to-face interview with the founder of the centres and focus group discussions with two groups of people undergoing rehabilitation in Tokyo and Sapporo. Two Malaysian students studying in Japan were involved as translators.

Results: The main drug abuse in Japan involved the use of ATS. The drug abusers were from the young age group. A group of drug addicts were placed in a building and they were supervised by ex-drug abusers. The programme included group meetings in the morning and evening where they shared their stories with the others. They frankly discussed about how they got involved with the addiction which they had kept a secret before. Since many drug addicts had problems with personal relationship, communication with others had helped them to recover from their addiction and it forms a major component of the rehabilitation process. After their full recovery, they were voluntarily involved in programmes in new rehabilitation centres.

Conclusion: Drug addiction rehabilitation centres employing group meetings for frank discussion have been shown to be helpful for recovery of drug addiction in Japan.

Poster Abstract 40

Influence of parental smoking behaviour on adolescent smoking: A cross sectional study in Cheras, Kuala Lumpur

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Introduction: Parents play a significant role in influencing adolescent social behaviour including smoking as they may model the behaviour to adolescents. This study aimed to determine the prevalence of ever-smokers among form four students from two day-schools in Cheras, Kuala Lumpur and its association with their parents' smoking behaviour.

Methods: Universal sampling was used, involving students who lived with both or either biological, adopted or step-parents. Those who were absent or without written parental consents were excluded. A validated self-administered questionnaire was used to examine own and parents' smoking status and behaviour, including frequency of parent(s) smoking in the house or near respondents, and frequency of respondents buying cigarettes for their parent(s).

Results: In total, 246 students were involved. The prevalence of ever-smokers was 22% (54/246). Ever-smokers among males were 74.1%, whereas among females were 25.9%. The median age of smoking initiation was 13 (IQR 2) years old. Two-thirds of ever-smokers (36/54) had smoked over previous 30 days,

whereby 27.8% (10/36) of them smoked on daily basis. Among those who stayed with their fathers, 46.1% (95/228) and 12.3% (28/228) of them had fathers who were current smokers and former smokers respectively. However, only 3.3% (8/240) of respondents who stayed with their mothers had mothers who smoked and 1.7% (4/240) of them had ex-smoking mothers. Majority of the smoking fathers had smoked near respondents (95.8%), and in the house (89.5%). About 55.8% of respondents had bought cigarettes for their fathers. Only father's smoking status was significantly associated with adolescent smoking (Wald: 17.72, $p < 0.001$; OR: 5.33, 95%CI: 2.45-11.63).

Conclusion: Adolescent smoking was common and significantly influenced by father's smoking status. Thus, fathers who smoke should be informed that their adolescents are likely to smoke as well, regardless how they smoke around adolescents or whether adolescents are involved in purchasing their cigarettes.

Poster Abstract 41

Mental health status among patients on methadone treatment in Malaysia-findings from MyTOS

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Introduction: Addiction is a complex and challenging disease to treat due to involvement of the central nervous system that affects patient's mental health. Patients with mental health issues may end up taking drugs to alleviate their symptoms and likewise people with drug addiction may develop mental health issues. Hence, dual diagnosis is common among patients with substance abuse. Methadone maintenance therapy (MMT) together with the psychosocial intervention has been used as part of Medication Assisted Therapy (MAT) to treat patients with opiate dependency. This study was conducted to identify the mental health status of patients on the treatment.

Methods: A cross-sectional study was done in 103 MMT sites under Ministry of Health from October-December 2014 using stratified random sampling method and the Depression Anxiety Stress Score (DASS) questionnaire.

Results: There were 1234 respondents studied; mean age was 39.2 years old, 99.1% were male and 90.2% were Malay. The mean duration on MMT was 3.8 years (min: 1 year, max: 9 years) and the mean methadone dose was 54.8mg (min: 2.5mg, max: 120mg). At recruitment, 0.6% suffered from anxiety, 0.5% had past history of drug-induced psychosis, 0.8% had depression, and 0.6% had schizophrenia. The majority of respondents had normal DASS score after receiving MMT; 12.3% had mild depressive symptoms, 15.1% had mild anxiety symptoms, and 7.7% showed mild stress. The figures were very low for severe and very severe conditions (severe: 1.4% for depression, 4.8% for anxiety, and 0.3% for stress; very severe: 3.1% for depression, 3.7% for anxiety, and 2.2% for stress). Out of three conditions, anxiety appeared to predominate.

Conclusion: Most patients on MMT showed normal mental health and very few still had severe mental health problems. Therefore, MMT service should be expanded to assist in patients' lifelong recovery process. Patient care must include interventions on improving their status of mental health.

Poster Abstract 42

Acute lymphoblastic leukaemia in primary care: Reaching the diagnosis

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A 4-year-old boy was admitted to the general paediatric ward for initial diagnosis of bronchopneumonia. Prior to admission, he had been seen by several doctors for a constellation of symptoms over a period of more than two months. On further clarification, the main symptoms were bone pain, malaise and fever. Physical examination revealed palpable lymph nodes, joint pain and skeletal tenderness. Peripheral blood film showed significant circulating blast cells. Apparently, it was not until the eleventh hour that the parents consented for trephine biopsy of the bone marrow to confirm the diagnosis and deliberate a treatment regime.

Acute leukaemia is the most common form of cancer in children. Since 1980s, the five-year survival rate has markedly improved, currently estimated at greater than 85 percent. However, in developing countries, due to delay in diagnosis and treatment abandonment, one study reported a cure rate of less than 35%. This case study aims to illustrate the challenges in arriving at a diagnosis of acute lymphoblastic leukaemia. The issues discussed include the symptomatology and the work up for suspected haematological malignancies in childhood from a primary care perspective. Also, communication hurdles and psychosocial elements that interact with diagnosis process were discussed.

Often children with haematological malignancy can present to primary care service providers at any stage of the disease. Therefore, an awareness of the condition and appreciating the complexity of psychosocial interactions are essential. It is hoped that this case study could provide an insight into the role of primary care doctors in ensuring better quality of care for children with leukaemia.

Poster Abstract 43

Self-efficacy for coping and quality of life in women with breast cancer in Hospital Universiti Sains Malaysia

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Introduction: Breast cancer is the second most common cancer in the world and the commonest cancer in Malaysia. High level of self-efficacy for coping in breast cancer survivors has positive effects on health behaviours, symptom control, compliance with cancer treatment, and quality of life (QoL). The impacts on QoL and certain subscales of QoL have been identified to be significant in breast cancer survivors. This study aimed to determine the scores of self-efficacy for coping and QoL subscales (global, functional and symptoms) among breast cancer women. The correlations between self-efficacy for coping and the QoL subscales were assessed as well.

Methods: This cross-sectional study involved 168 women diagnosed with breast cancer between January 1, 2009 and December 31, 2012 who were recruited through universal sampling. A self-guided questionnaire was used to obtain the

socio-demographic and clinical characteristics. This study used the Malay-version of Brief Cancer Behavior inventory (CBI-B) to assess self-efficacy for coping and Malay-version of European Organization for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire (QLQ) (i.e. QLQ-C30 and QLQ-BR23) to assess QoL.

Results: The mean age was 51.4 (SD 10.8) years. Majority were Malay (91.7%) with no co-morbidities (56.5%). The mean score of self-efficacy for coping was 83.67, which was moderate. The mean global QoL score was 59.9 (95% CI: 56.7, 63.0). Based on the QoL functional scale, the mean score of physical functioning were the lowest (mean: 75.4, 95% CI: 72.2, 78.5). The global QoL ($r=0.407$, $p<0.001$) and functioning QoL subscales ($r=0.191-0.308$, $p<0.05$) had significant positive correlations with self-efficacy for coping.

Conclusion: The self-efficacy for coping mean score was moderate in breast cancer women. The global QoL mean score was slightly below average in this study and the functional QoL had a significant positive correlation with self-efficacy for coping.

Poster Abstract 44

Prevalence of chronic illnesses and geriatric syndromes in elderly attending a wellness program in Pandamaran

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Introduction: As age progresses, having good health ensures independence, security and productivity. Unfortunately, many older persons encounter challenges with chronic illnesses and geriatric syndromes such as iatrogenicity, incontinence, instability, immobility and impaired cognition which could lead to reduce quality of life. Therefore, this study was designed to estimate the prevalence of chronic illnesses and geriatric syndromes among elderly in primary care.

Methods: This was a cross-sectional survey conducted by face-to-face interview among individuals aged ≥ 60 years attending a wellness program in a health clinic. Measures taken were: (1) geriatric health screening using BSSK/WE/2008, and (2) mental health screening using Depression, Anxiety and Stress Scale-21 (DASS-21).

Results: Seventy older people volunteered in the program. Forty-six (66%) were females, with mean age of 67 ± 6 years. At the first screening visit, 50 (71.4%) were hypertensive with mean SBP 138 ± 22 mmHg and mean DBP 78 ± 11 mmHg, 38 (54.3%) were diabetics with mean RBS 9 ± 4 mmol/L. Less than 10% had history of ischaemic heart disease, stroke, respiratory problem and cancer. About 10 (14.3%) had sexuality dysfunction, 20 (28.6%) had oral health problems, 22 (31.4%) had visual impairment, 19 (27.1%) had hearing problem, 23 (32.9%) had at least one fall, 15 (21.4%) had incontinence, and 22 (31.4%) had cognitive impairment. More than 50% of the participants were physically inactive and had polypharmacy issues. Four participants (5.7%) had anxiety and 3 (4.3%) had stress, however none had depression.

Conclusion: The burden of chronic illnesses and geriatric syndromes in the elderly attending wellness program at

Pandamaran Health Clinic was high. A wellness program can support the elderly in maintaining their independence and function, thus improving their quality of life.

Poster Abstract 45

Fall profile among mobile elderly patients in a primary care clinic

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Introduction: With an increase in the elderly population, fall in the elderly is recognised as a significant problem. Primary care providers play an important role in addressing this issue, thus there is a need to understand the magnitude of the problem. This study was carried out to determine the prevalence of fall and the fall profile among mobile elderly patients at a primary care clinic in Selangor. The difference in timed up and go (TUG) test between fallers and non-fallers was also assessed.

Methods: This cross-sectional study was conducted in 2014 involving 302 randomly selected patients aged ≥ 60 years who were cognitively sound and able to mobilise. Sociodemographic data and their fall profile (history of fall(s), including timing and frequency) were obtained. The TUG test, a commonly used tool to assess mobility, was performed on all participants.

Results: Almost half of the participants (144, 47.7%) had fallen. They were mainly female (56.3%), Malay (51.9%), not married (59.8%) and lived alone (85.5%) with a mean (SD) age of 68.5 (6.7) years. About half of them (72/144) had fallen within the past 1 year whereby 40.3% (29/72) had fallen more than once with the maximum number of fall being 10 times. The median TUG test time was similar among fallers and non-fallers (p -value=0.06). However, it was significantly different between recurrent fallers and those who only fell once [recurrent falls: 13.26 (IQR 12.7) seconds vs single fall: 10.41 (IQR 3.0) seconds, p -value=0.014].

Conclusion: The prevalence of fall among elderly in this population was high with a number of them having recurrent falls. The mobility of fallers and non-fallers were similar in terms of their TUG time, however there was a difference when comparing those with recurrent falls, suggesting it may not be accurate to discriminate fallers and non-fallers in high functioning elderly. A more comprehensive risk assessment is needed.

Poster Abstract 46

Preliminary report on eating behaviour and body image perception among primary school students in Kota Bharu, Kelantan

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Introduction: The awareness of body image perception among children and adolescents has increased in recent years. The dissatisfaction of body image has always been correlated with unhealthy eating behaviour. The objective of this study was to identify eating behaviour and determine the body image perception among primary school students in Kota Bharu.

Methods: This study was a cross-sectional study conducted in 7 selected primary schools involving 776 students from standard 5

and 6. A guided self-administered questionnaire was used which assessed parents' socio-demographic data, as well as students' body mass index (BMI), eating behaviour using Adolescent Food Habit Checklist (AFHC), and body image perception using Children Contour Drawing Rating Scale. BMI was categorized as normal, underweight and overweight/obese according to the world health organisation (WHO).

Results: The mean age of the students was 11.2 year-old; 57.1% of them were females, whereas 42.9% were males. Majority of the females (75%) had still not attained menarche. Most of them had parents who completed secondary school (60%). The students' mean BMI was 17.8 and the majority (52.8%) had normal BMI. The mean AFHC score was 13.15 with 51.3% of them had less healthy eating behaviour. For the body image, about 30% chose body silhouette 3 and 4 as their body image look-like, however 41.1% chose body silhouette 3 as their desired body image. Overall, 466 students (60.1%) were dissatisfied with their body image, particularly among overweight students (80%). Females were also found to have higher dissatisfaction compared with males (66% vs 52%).

Conclusion: This study showed that the majority of the students were unsatisfied with their body image particularly among overweight students and females. This is despite most of the students having a normal BMI. Nevertheless, further exploratory analysis is needed to confirm these findings.

Poster Abstract 47

The validity and reliability of the modified Sexual Experiences Survey Short Form Victimization among tertiary students in Malaysia

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Introduction: The modified Sexual Experiences Survey-Short Form Victimization (mSES-SFV) has been used worldwide to assess sexual violence. However, it has not been validated in Malaysia. This study aimed to determine the validity and reliability of the mSES-SFV, the prevalence of sexual violence among tertiary students in Malaysia, and its associated factors.

Methods: Content validity was assessed by an expert panel, whilst face validity was determined in a pilot study. The mSES-SFV was administered at baseline and two weeks later to year two undergraduate students in one public university in Malaysia. Participants were asked to fill the questionnaire on their sexual experience based on two time periods: within the last 12 months and since the age of 14. Scoring was based on the type of sexual violence, and by the most severe experience(s) of sexual violence.

Results: A total of 341 participants were approached, of which 260 agreed to participate (response rate of 76.2%). The overall Cronbach's α of the mSES-SFV for both male and female participants for the two time periods ranged from 0.722-0.904, indicating adequate internal consistency. The kappa values at test-retest ranged from 0.661-1.000, indicating adequate reliability. The prevalence of the overall sexual violence experienced by both male and female participants was 8.1% (21/260) with 95% CI ± 3.32 (4.8, 11.4). A significantly higher proportion of students pursuing a pure science course and who have ever dated were found to have experienced sexual violence ($p < 0.05$).

Conclusion: The mSES-SFV is a potentially valid and reliable tool to assess sexual violence among tertiary students in Malaysia.

The prevalence of the different types of sexual violence, as well as the most severe experiences among males were higher than females for the two time periods. Students who have ever dated, or pursuing a pure science course were found to have experienced more sexual violence.

Poster Abstract 48

Knowledge and practice of acne management among primary care doctors in Penang

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Introduction: Acne is a common skin disorder seen in primary care clinics. Although there are many treatment options available, appropriate management is sometimes lacking due to the gap in knowledge. This study aimed to determine primary care doctors' knowledge on acne and their management practices.

Methods: This was a cross-sectional study among 118 doctors from 15 primary health clinics in Penang using self-administered questionnaires.

Results: The mean age of participants was 32 (SD: 5.26) years. More than one third (39.8%) of doctors had previous working experience in a dermatology facility. The median score for knowledge regarding acne was 33 (IQR: 7.25) with maximum possible score of 50. Domains with the highest score include those related to acne in general and quality of life, median score 5 (IQR: 1.0); domains with the lowest score were related to antibiotic resistance, classification, and overall management, median 3 (IQR: 1.0). Participants who had previous working experience in a dermatology facility appeared to have higher median knowledge scores compared to those without such experience [with experience: 35 (IQR: 6) vs without experience: 32 (IQR: 7), $p = 0.019$]. Most doctors performed acne severity assessment (67.8%) and preferred shared care approach (55.1%). Benzoyl Peroxide was the most popular topical agent (70.3%) while antibiotics were the most preferred systemic treatment (87.3%). Common advice by doctors includes good personal hygiene (94.1%), healthy lifestyle (92.0%) and stress avoidance (89.1%).

Conclusion: Primary care doctors had fairly good knowledge regarding acne especially those who had previous experience working at a dermatology facility. Their acne management practice was overall acceptable. Adequate exposure during undergraduate or housemanship may enhance primary care doctors overall knowledge on acne and its management.

Poster Abstract 49

Quality of life and its associated factors among knee osteoarthritis patients

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Introduction: Osteoarthritis is the commonest form of arthritis around the globe. The aims of knee osteoarthritis treatment are to alleviate pain, delay progression of osteoarthritis, as well as improve mobility, walking and quality of life. This study aimed to determine the quality of life and its associated factors among knee osteoarthritis patients.

Methods: A cross sectional study was conducted from 1st June 2014 until 30th October 2014 at the orthopaedic clinic in Hospital University Sains Malaysia (HUSM). A set of questionnaire which included a case report form and the Malay version of Osteoarthritis Knee and Hip Quality of Life (OAKHQOL) questionnaire was given to patients before determining their body mass index (BMI) and reviewing their latest knee radiograph.

Results: The mean scores for almost all domains of OAKHQOL were average. The worst domain was the social functioning domain with a mean score of 59.07 (SD 26.31) and the least affected domain was the mental health domain with a mean score of 35.7 (SD 22.42). Increasing BMI was consistently associated with worsening of almost all domains of OAKHQOL, except for social functioning. Social functioning was not associated with any studied variables. Variables that had association with at least

one domain of OAKHQOL were education status, grade of knee osteoarthritis, medication usage (glucosamine or NSAIDs), duration of knee pain, and knee involvement (unilateral or bilateral).

Conclusion: The quality of life among patients with knee osteoarthritis in this study was average. It may be significantly affected by BMI, education status, grade of knee osteoarthritis, medication usage, duration of knee pain, and knee involvement.

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