

Malaysian Family Physician

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Official Journal of the Academy of Family Physicians of Malaysia
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About MFP

The *Malaysian Family Physician* (MFP) is the official journal of the Academy of Family Physicians of Malaysia (AFPM). It is jointly published by the Family Medicine Specialist Association (FMSA) of Malaysia. Up to December 2022, the MFP published three issues per year. It also started an Online First section in January 2021, where accepted articles are published online ahead of the issue. Starting from January 2023, the MFP is adopting continuous publication as soon as each article is ready for publication. This is to ensure knowledge is disseminated in a timely manner.

Goal: The MFP is an international journal that disseminates quality knowledge and clinical evidence relevant to primary care. The journal acts as the voice of family physicians, researchers and other members of the primary care team on clinical practice issues.

Scope: The MFP publishes:

- i. Research – Original Articles and Reviews
- ii. Education – Case Reports/Clinical Practice Guidelines/Test Your Knowledge. We only encourage case reports that have the following features:
 1. Novel aspects
 2. Important learning points
 3. Relevant to family practice
- iii. Invited debate, commentary, discussion, letters, online, comment, and editorial on topics relevant to primary care.
- iv. A Moment in the Life of a Family Physician – We encourage submission of a short narrative to share perspectives, voice, views and opinions about a family physician's experience that has affected their practice or life.
Read our Information for Authors section to learn more about these article types.

Strength: MFP is the only primary care research journal in Malaysia and one of very few in the region. It is open access and fully online. The journal is indexed in Scopus and has a strong editorial team and an established pool of readers with increasing recognition both locally and internationally.

Circulation: The journal is freely available online.

Publisher: Academy of Family Physicians of Malaysia

All correspondence should be addressed to:

Professor Dr. Ping Yein Lee

The Editor

The Malaysian Family Physician Journal

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Publication Ethics

Ethics: Evidence of ethics approval from a recognised ethics committee and informed consent should be included in the manuscript for studies involving animal experiments or human participants. When manuscripts describe studies with vulnerable populations (refer ICH-GCP guideline) and there is a risk of coercion or incomplete consent, the manuscript will undergo further evaluation by an internal editorial oversight committee (Chief Editor, Deputy Chief Editor and Editorial Advisors). Consent is necessary for all personally identifiable data, encompassing biomedical, clinical, and biometric information. If requested, documentary proof of consent must be provided.

Competing interests: MFP requires authors to declare all conflicts of interest in relation to their work. All submitted manuscripts must include a 'competing interests' section at the end of the manuscript (before references) listing all competing interests.

Ethical Guidelines for Authors

Authorship credit should be based only on:

1. Substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
2. Drafting the article or revising it critically for important intellectual content; and
3. Final approval of the version to be published.
4. Agreement to be accountable for all aspects of the work ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Information for Authors

The Malaysian Family Physician welcomes articles on all aspects of family medicine in the form of original research papers, review articles, CPG review, case reports, test your knowledge and letters to the editor. The journal also publishes invited debate, commentary, discussion, letters, comment, A Moment in the Life of a Family Physician and editorials on topics relevant to primary care.

Articles are accepted for publication on condition that they are contributed solely to the Malaysian Family Physician. Neither the Editorial Board nor the Publisher accepts responsibility for the views and statements of authors expressed in their contributions. All papers will be subjected to peer review. The Editorial Board further reserves the right to edit and reject papers. Authors are advised to adhere closely to the instructions given below to avoid delays in publication.

All manuscripts must be submitted through the Open Journal System (OJS).

SUBMISSION REQUIREMENTS

1. The author must declare that the manuscript has not been previously published, nor is it being considered for publication in another journal concurrently.
2. **The Main Manuscript** should be submitted in electronic form only and in **Microsoft Word**.
 - The manuscript **contains all the sub-headings required** for the article type (refer below).
 - The manuscript uses a **single-spaced, 12-point font and uses italics rather than underlining** (except URL addresses).
 - **All figures, tables and illustrations are placed at the appropriate sections in the manuscript file** rather than at the end of the manuscript or submitted separately.
 - Use left-aligned paragraph formatting rather than full justification.
 - Follow the instructions in Ensuring a Blind Review (refer below).
 - Follow the referencing style provided in the References section below.
 - Provide URLs for references wherever available.
3. The **Title Page** must be uploaded separately from the main manuscript file in Microsoft Word. Please refer to the required sub-headings in the Title Page section below.
4. A **Cover Letter** must be signed by the corresponding author on behalf of all authors. This letter must include this statement “this manuscript is my (our) own work, it is not under consideration by another journal, and this material has not been previously published.”
5. All authors must sign the **Declaration Form** and submit it together with the manuscript and cover letter. Please download the form here.
6. Please enter **all authors' name and email address** in the submission portal.
7. When preparing your manuscript, please follow the Uniform Requirements for Manuscripts Submitted to Biomedical Journals recommended by the International Committee of Medical Journal Editors (<http://www.icmje.org/icmje-recommendations.pdf>).
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TITLE PAGE

For all types of manuscript, please include all the sub-headings below in the Title Page (you can use this template):

- **Article Type:** Original Research / Review / CPG Review / Case Report / Test Your Knowledge / Letter To Editor
- **Title:** Please state the title in detail to include the study design, particularly for original research.
- **Author(s):** The full names, professional qualifications and institutions of all authors.
- **Shortened name of author(s):** should be written in the style of surname or preferred name followed by initials, e.g. Abdullah KS, Rajakumar MK, Tan WJ, for future indexing.
- **Corresponding Author:** Corresponding author's mailing address, designation, institution and contact details (email, telephone and fax numbers)

MAIN MANUSCRIPT

For every article submitted, please follow the requirements according to the type of article.

Original Research (Including Clinical Audit Article)

The original research (including clinical audit) should be conducted in the primary care setting on a topic of relevance to family practice. Both qualitative and quantitative studies are welcome. The length should **not exceed 4500 words with a maximum of 5 tables or figures and 40 references**. Please include the following sub-headings in the manuscript:

1. **Title:** State the title based on PICO, including study design.
2. **Abstract:** Structured abstract (Introduction, Methods, Results and Conclusion) of no more than 250 words.
3. **Keywords:** 3-5 keywords, preferably MeSH terms.
4. **Introduction:** Clearly state the purpose of the article with strictly pertinent references. Do not review the subject extensively.
5. **Methods:** Describe the study in sufficient detail to allow others to replicate the results. Provide references to established methods, including statistical methods; provide references and brief descriptions of methods that have been published but are not well known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations. When mentioning drugs, generic names are preferred (proprietary names can be provided in brackets). Do not use patients' names or hospital numbers. Include numbers of observation and the statistical significance of the findings. When appropriate, state clearly that the research project has received the approval of the relevant ethical committee. For an RCT article, please include the trial registration number) and follow the CONSORT checklist. Other study designs must also follow a reporting checklist, which can be found at <https://www.equator-network.org/>.
6. **Results:** Present your results in logical sequence in the text, tables and figures. Tables and figures may be left at the respective location within the text. These should be numbered using Arabic numerals only. Table style should be “Simple” (as in Microsoft Word). Do not repeat table or figure data in the text.
7. **Discussion:** Emphasise the new and important aspects of the study and conclusions that follow from them. Do not repeat data given in the Results section. The discussion should state the implications of the findings and their limitations and relate the observations to the other relevant studies. Link the conclusions with the aims of the study but avoid unqualified statements and conclusions not completely supported by your data. Recommendations, when appropriate, may be included.
8. **Acknowledgements:** Acknowledge the people who have contributed significantly to the study (but do not qualify for authorship).
9. **Author contributions:** Describe the contributions of every authors in the study.
10. **Ethical Approval:** Please state if the study was approved; if so, by which institution and the approval ID.
11. **Conflicts of interest:** All authors must declare any conflicts of interest.
12. **Funding:** Please state if the study was funded; if so, by which institution and the funding ID.
13. **Data sharing statement:** Please describe your data sharing plan. State if your raw data is uploaded in publicly available databases, shared via controlled access repositories or only available upon request.
14. **How does this paper make a difference in general practice?:** This section should be written in bullet points (up to five points) and must not exceed 100 words.
15. **References:** Refer to the References section below for more details.

Review

All types of review articles, including narrative review, scoping reviews and systematic reviews are accepted for publication in MFP. A comprehensive review of the literature with a synthesis of practical information for practising doctors is expected. For a systematic review, the PRISMA checklist (<https://www.equator-network.org/reporting-guidelines/prisma/>) must be followed. For a scoping review, the PRISMA-ScR checklist (<https://www.equator-network.org/reporting-guidelines/prisma-scr/>) should be followed. The length should **not exceed 4000 words with a maximum of 5 tables or figures and 40 references**. Please include the following sub-headings in the manuscript:

1. **Title:** Include the topic and type of review in the title.
2. **Abstract:** Structured abstract (Introduction, Methods, Results and Conclusion) of no more than 250 words.
3. **Keywords:** 3-5 keywords, preferably MeSH terms.
4. **Introduction:** Describe the topic and objective of the review.
5. **Methods:** All types of review articles (including narrative review) must report the search strategy, database and keywords used to obtain the literature. The PRISMA and PRISMA-ScR checklists should be followed for systematic and scoping reviews, respectively.
6. **Results (*for systematic and scoping reviews):** This section is required for systematic and scoping reviews. Please follow the guideline in the PRISMA and PRISMA-ScR checklists.
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10. **Acknowledgements:** Acknowledge the people who have contributed significantly to the study (but do not qualify for authorship).
11. **Author contributions:** Describe the contributions of every authors in the study.
12. **Review protocol registration:** Please state where the study protocol was registered and the approval ID.
13. **Conflicts of interest:** All authors must declare any conflicts of interest.
14. **Funding:** Please state if the study was funded; if so, by which institution and the funding ID.
15. **How does this paper make a difference in general practice?:** This section should be written in bullet points (up to five points) and must not exceed 100 words.
16. **References:** Refer to the References section below for more details.

Case Report

Case reports should preferably be less-commonly seen cases that have an educational value for practising doctors. Only case reports that are **novel, have important learning points and relevant to family practice** will be accepted for publication in this journal. The case report must be written in a **patient-centred manner instead of a disease-centred focus**. The length should **not exceed 1500 words and cite no more than 20 references**. Before submitting the case report, the authors must ensure that the patient's identity is protected both in the text and pictures. This patient consent form must be signed and uploaded during submission. Please include the following sub-headings in the manuscript:

1. **Title:** Use an interesting title to show the new learning points and include the term "case report" in the title.
2. **Abstract:** Unstructured abstract between 100-250 words.
3. **Keywords:** 3-5 keywords, preferably MeSH terms.
4. **Introduction:** Describe the condition and aim of the case report.
5. **Case Presentation:** Describe the case in detail.
6. **Discussion:** Discuss the case with existing literature.
7. **Conclusion:** Provide the key learning point from the case report.
8. **Acknowledgements:** Acknowledge the people who have contributed significantly to the study (but do not qualify for authorship).
9. **Conflicts of interest:** All authors must declare any conflicts of interest.
10. **Author contributions:** Describe the contributions of every authors in the study.
11. **Patients' consent for the use of images and content for publication:** Was consent obtained from the patient(s)? Was the consent written or verbal? Has the patient consent form been signed?
12. **What is new in this case report compared to the previous literature?:** This section should be written in bullet points (up to five points) and must not exceed 100 words.
13. **What is the implication to patients?:** Describe any potential implication to patients based on the learning points from this case report.
14. **References:** Refer to the References section below for more details.

CPG Review

The CPG should be relevant to primary care. Its length should **not exceed 4000 words and 40 references**. An abstract is required (no more than 300 words) together with the keywords. The CPG review should be written with case vignettes to illustrate its application in primary care practice.

1. **Title:** State the scope of the CPG, include the latest version or year for revised CPGs.
2. **Abstract:** Unstructured abstract between 100-250 words.
3. **Keywords:** 3-5 keywords, preferably MeSH terms.
4. **Introduction:** Describe the condition and aim of the CPG review.
5. **Development process of the CPG:** Describe the development process of the CPG, e.g.: who are the team members involved, what methodology was used, how was the evidence gathered, how was the decision made on the recommendations, was the outcomes validated, how was the CPG disseminate and implementation, etc. Follow the AGREE Reporting Checklist (<https://www.equator-network.org/wp-content/uploads/2016/03/AGREE-Reporting-Checklist.pdf>) wherever possible.
6. **Key recommendations of the CPG:** Describe the key recommendations primary care doctors should know.
7. **Key changes in the CPG (only applicable for revised CPGs):** Describe the key changes or updates from the previous CPG.
8. **How to apply the CPG into practice in primary care?:** Explain how the CPG can be used in primary care practice.
9. **Case vignettes as examples of application:** Use case vignettes to illustrate the application of the CPG.
10. **Conclusion:** Summarise the key learning points.
11. **Acknowledgements:** Acknowledge the people who have contributed significantly to the study (but do not qualify for authorship).
12. **Author contributions:** Describe the contributions of every authors in the study.
13. **Conflicts of interest:** All authors must declare any conflicts of interest.
14. **Funding:** Please state if the work was funded; if so, by which institution and the funding ID.
15. **How does this paper make a difference in general practice?:** This section should be written in bullet points (up to five points) and must not exceed 100 words.
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Test Your Knowledge

A Test Your Knowledge article should be relevant to primary care and preferably be about less-commonly seen cases that have an educational value for practising doctors. The length should **not exceed 1000 words and no more than 20 references**. If the article involves a patient, the authors must ensure that the patient's identity is protected both in the texts and pictures; and this patient consent form must be signed and uploaded during submission. Please include the following sub-headings in the manuscript:

1. **Title:** State the title in a question format.
2. **Abstract:** Unstructured abstract between 100-250 words.
3. **Keywords:** 3-5 keywords, preferably MeSH terms.
4. **Case Summary:** Describe the case.
5. **Questions:** State the questions.
6. **Answers with discussion:** Provide the answers and discuss them with support from the literature.
7. **Acknowledgements:** Acknowledge the people who have contributed significantly to the study (but do not qualify for authorship).
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10. **Funding:** Please state if the study was funded; if so, by which institution and the funding ID.
11. **How does this paper make a difference in general practice?:** This section should be written in bullet points (up to five points) and must not exceed 100 words.
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Letter to Editor

A letter to the editor should be of relevance to primary care and in response to an article or topic published in previous issues of this journal. The length should **not exceed 1000 words and cite no more than 20 references**. Please include the following sub-headings in the manuscript:

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5. **Author contributions:** Describe the contributions of every authors in the study.
6. **Conflicts of interest:** All authors must declare any conflicts of interest.
7. **Funding:** Please state if the study was funded; if so, by which institution and the funding ID.
8. **References:** Refer to the References section below for more details.

A Moment in the Life of a Family Physician

We encourage submission of a short narrative to share perspectives, voice, views and opinions about a family physician's experience that has affected their practice or life. It could be about being a doctor, educator, administrator/management, researcher, student or even patient. This type of article should be a **reflective piece of about 500 words in length**, and can be accompanied with photo(s). The journal also accepts articles which anchor on the photo(s) as the main content, this can be accompanied with captions (not more than 100 words) that describe the photo(s) with author's reflection on it.

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3. **Photo:** If accompanied with photo(s), please ensure the resolution is at least 300 pixels per inch (ppi) and appear sharp, not pixelated.

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Please use the AMA reference style. Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables and legends by Arabic numerals (in superscript). **In AMA style, the reference number goes after a period or comma but before a colon or semicolon.** For indexed journals, the short forms for the journal names can be accessed at the PubMed website (search within Journal Database). Where possible, avoid citing abstracts, personal communication or unpublished data as references. Include among the references manuscripts accepted but not yet published and designate the journal followed by "in press" (in parenthesis). When referencing a website, please include the full title and accessed date. Notice article titles are capitalised in sentence case; book and journal titles are capitalised in title case. Include DOI if available. **Some examples of reference list entries:**

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- **Standard journal article-Corporate Author:** International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. *N Engl J Med.* 1997 Jan 23; 336(4):309-316. doi:10.1056/NEJM199701233360422
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- **Editorial Review:** When a manuscript is submitted to MFP, it will go through an initial screening by the associate editors. The associate editors assess the manuscript's alignment with the journal's scope and general quality. If there is disagreement between the associate editors, the Chief Editor/Deputy Chief Editor will be involved to make the decision. The first editorial decision whether an article can be sent for peer review will be made within one month.
- **Peer Review Assignment:** If the manuscript meets the basic criteria, one associate editor will be assigned to handle the manuscript and appoint two peer reviewers who are qualified experts in the field to evaluate the manuscript. The associate editor may consider the reviewers that authors nominated during the manuscript submission or invite other reviewers deemed suitable.
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- **Peer Reviewer Report:** Each peer reviewer provides a detailed report assessing the originality, methods, contents, conclusions, tables, figures and legends, language as well as strengths and weaknesses of the manuscript. They may suggest revisions or raise concerns about the methodology and interpretation of result.
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 - **References:**
 1. Nathan AM, Teh CSJ, Jabar KA, et al. Bacterial pneumonia and its associated factors in children from a developing country: A prospective cohort study. *PLoS One*. 2020;15(2):e0228056. Published 2020 Feb 14. doi:10.1371/journal.pone.0228056
 2. Author, 2019
 3. Author, 2016
 4. Hashim S, Ayub ZN, Mohamed Z, et al. The prevalence and preventive measures of the respiratory illness among Malaysian pilgrims in 2013 Hajj season. *J Travel Med*. 2016;23(2):tav019. Published 2016 Feb 8. doi:10.1093/jtm/tav019
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Plenary Abstracts

- 1 **The Past, Current and Future of Primary Health Care Landscape in Malaysia: Challenges, Changes, Champion**
Dr. Rohayah Binti Abdullah
- 2 **Lifestyle Medicine: Principal in Primary Care**
Dr. Faridah binti Mohd Zin
- 3 **Diabesity: The New Epidemic**
Datuk Dr. Zanariah Hussein
- 4 **Patient Safety In Primary Health Care**
Dato Dr Khalid Ibrahim
- 5 **Menopause: The Truth Behind The Myth**
Prof. Dr. Jamiyah Hassan

Symposium Abstracts

- 1 **A Deep Dive Into Cutaneous Reactions**
Dr. Latha A/P R Selvarajah
- 2 **IBS Vs IBD: A Spectrum Or Distinct Entities?**
Dr. Lee Soon Liang
- 3 **Healthy “SENIORSS” Strategy**
Dr. Sally Suriani Ahip
- 4 **Unlocking The Secrets: Behavioural Changes**
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PLENARY ABSTRACTS

Plenary Abstract 1

The Past, Current and Future of Primary Health Care Landscape in Malaysia: Challenges, Changes, Champion

Rohayah A¹

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The primary health care landscape in Malaysia has undergone significant transformation over the decades, shaped by evolving health needs, policy changes, and technological advancements. In this presentation, the exploration of the past, current status and future directions of primary care in Malaysia, highlighting the key challenges, changes and champions that have influenced will be briefly reviewed.

Recognizing the importance of having a robust primary health care system, Malaysia started its master training programme in Family Medicine in 1993. With the inception of the first batch of Family Medicine Specialists (FMS) in 1997, the country was able to provide specialist services at the primary care level. The field has evolved significantly, with subspecialties emerging to address specific aspects of patient care in 2018.

Family Medicine Specialists play an integral role to improve health service, health outcomes and ensure the quality of health care delivery. This is achieved through active involvement in training, clinical audits and also research. They have contributed extensively in the development of Clinical Practice Guidelines and are members of various technical working groups as subject matter experts in their field.

Family Medicine Specialists are highly sought in times of crisis and often given the mandate to head entourage. Some have received recognition and accolades not only within the country but internationally as well. Family Medicine Specialists have come a long way since their humble beginnings and shall continue to strive for champions and rise to the challenges of the changes in the future.

Plenary Abstract 2

Lifestyle Medicine: Principal in Primary Care

Faridah MI¹

¹*MSU Medical Centre, Selangor, Malaysia*

Primary care provides first contact accessibility, continuity of care, comprehensive services, coordination of services across levels of the health system while keeping a people-centered care approach. Lifestyle medicine focuses in six areas to improve health: healthful eating of whole plant-based food, increase physical activity, develop strategies to manage stress, avoid risky substances, improve our sleep, and form and maintain relationship. Many diseases, particularly the noncommunicable diseases seen in primary care, are being managed with the use of lifestyle interventions. However, several variables, including the demand for time and trained personnel, make it thought to be challenging to adopt comprehensive lifestyle treatments in our hectic setting. The American College of Lifestyle Medicine

(ACLM) has taken a significant step forward by publishing an expert consensus statement (ECS) titled "Lifestyle Medicine for Optimal Outcomes in Primary Care". The main aim of this initiative is to increase the awareness of primary care physicians about the remarkable benefits of lifestyle medicine in primary care settings. Furthermore, it combines the opinions of experts to assist healthcare professionals in incorporating lifestyle medicine into their practice, which eventually results in optimal patient outcomes.

Plenary Abstract 3

Diabetes: The New Epidemic

Zanariah H¹

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Diabetes describes the established close and direct link of weight excess and glucose intolerance. The central understanding is that obesity, commonly associated with sedentariness, results in ineffectiveness of insulin action. This persistent insulin resistance state at liver, skeletal muscles and peripheral tissues greatly disturbs peripheral glucose uptake and places a higher demand on pancreatic beta cells for insulin production and release. Chronic hyperinsulinemia in obesity contributes to beta cell exhaustion, chronic internal milieu of glucotoxicity and lipotoxicity further impacts on beta cell survival and cell death/ apoptosis, thus explaining the continuum of prediabetes to diabetes being prevalent in the overweight and obese individual.

The prevalence of overweight/obesity in Malaysia is evidently on the rise, latest being 54.4% in NHMS 2023. Further serious concern as central adiposity or abdominal obesity is equally on the rise, a similar figure of 54.5% in NHMS 2023. Prior NHMS 2019 has shown that among obese and overweight adult Malaysians, prevalence of diabetes was 27% and 21% respectively, compared to 14%, much lower in those with normal BMI. When reviewing, the phenotype of people with Type 2 diabetes (T2D) in the Malaysian National Diabetes Registry (NDR) 2022, a predominantly primary care cohort, the mean BMI was 27.9kg/m², with 84.2% having overweight/ obesity (BMI > 23kg/m²). For people with T2D attending tertiary diabetes care, similar pattern but more concerning statistics was reported in the Target-T2D study of 8 Klang Valley public hospitals, reporting a greater mean BMI of 30.2kg/m² and 88.2% having overweight/ obesity.

Weight loss of 5-15% has been highlighted as the primary approach to managing T2D in American Diabetes Association (ADA) treatment guidelines for T2D. Beyond the impact that weight reduction of 5-10% has to improve cardiometabolic risk in T2D, greater degrees of weight loss of 10-15% or more can have a disease-modifying effect and lead to remission of diabetes. There is now a wealth of strong evidence in different ethnicities and geographical regions in randomised clinical trials as well as real world studies and clinical service evaluations to show that structured lifestyle interventions, packaging medical nutrition therapy and physical activity interventions together with close HCP support will result in substantial weight loss and remission of diabetes in those with short duration of disease,

better metabolic control and reduce reliance on pharmacotherapy for the remaining with longer duration and higher complexity of T2D. Newer glucose lowering medications such as SGLT2inhibitors and GLP1-Receptor agonists are also becoming preferred treatments for people with T2D in Malaysia in view of strong evidence of cardiorenal protection and moderate glycaemic lowering benefits with the additional benefits of weight loss. More gut and pancreatic hormone analogues, the so called dual and triple agonists in the treatment pipeline for targeting obesity and diabetes are also most promising with results approximating that of bariatric / metabolic surgery.

Targeting obesity is certainly the key to changing the trajectory of diabetes in Malaysia, from preventing prediabetes/ diabetes to better glycaemic and cardiometabolic control, reducing multiorgan morbidity and saving lives, and predictably saving national healthcare costs in the long term.

Plenary Abstract 4

Patient Safety In Primary Health Care

Khalid I¹

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Patient safety is defined as “the absence of preventable harm to a patient and reduction of risk of unnecessary harm associated with health care to an acceptable minimum.” Within the broader health system context, it is “a framework of organized activities that creates cultures, processes, procedures, behaviours, technologies and environments in health care that consistently and sustainably lower risks, reduce the occurrence of avoidable harm, make error less likely and reduce impact of harm when it does occur.” Among safety issues that experienced by patient in primary health care:

1. Missed, delayed or incorrect diagnoses
2. Delays in treatment or preventive services
3. Medication safety issues
4. Issues of communication and coordination of care.

Ensuring patient safety minimizes harm, enhances care quality, and builds trust in healthcare systems

Plenary Abstract 5

Menopause: The Truth Behind The Myth

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Menopause is a natural part of ageing, whether it develops naturally or due to other causes. It can be very disabling to experience the reduction in ovarian oestrogen production that results in menopause-related physical symptoms such as night sweats and hot flashes, urogenital atrophy, sexual dysfunction, mood swings, bone loss, and metabolic changes that increase the risk of diabetes and cardiovascular disease.

The treatment options for menopause include medication, either hormonal or non-hormonal, as well as assessment and lifestyle adjustment. Women going through menopause must have access to excellent healthcare, as well as networks and communities that

can support them. Regretfully, most countries still significantly restrict access to and awareness of menopause-related material, especially the realities and myths related to the condition and its treatments. Therefore, primary healthcare practitioners need to be proficient and knowledgeable in treating menopause and its effects on women in order to give midlife women the best care and improve their quality of life.

SYMPOSIUM ABSTRACTS

Symposium Abstract 1

A Deep Dive Into Cutaneous Reactions

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A cutaneous adverse drug reaction (CADR) is defined as any undesirable cutaneous clinical manifestation resulting from administration of a particular drug. CADRs are common and can range from simple rash to severe reactions. Early recognition of CADRs enables early identification and withdrawal of offending drugs, thereby reducing morbidity and mortality. This talk will highlight the important clinical features of CADRs and provide an insight into early recognition and management of this preventable condition.

Symposium Abstract 2

IBS VS IBD: A spectrum or distinct entities

Lee SL¹

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Irritable bowel syndrome and Inflammatory bowel disease may share similar clinical symptoms but they do have distinct entities. Irritable bowel syndrome (IBS) is a functional gastrointestinal disorder with symptoms of chronic abdominal pain and altered bowel habits. IBS has a few clinical subtypes which are IBS-predominant constipation (IBS-C), IBS-predominant diarrhea (IBS-D) and IBS mixed. Uncontrolled IBS can severely affect the patient's quality of life though it doesn't lead to life-threatening situations. On the contrary, Inflammatory Bowel Disease (IBD) when uncontrolled poses a major threat to the patient's life. IBD which includes Ulcerative Colitis and Crohn's disease has a wide clinical spectrum and phenotypes. Earlier detection and aggressive management of IBD remain the keys to improving the patient's prognosis and quality of life.

Symposium Abstract 3

Healthy “SENIORSS” Strategy

Sally SA¹

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The demographic composition of Malaysia is experiencing an increase in the proportion of older adults. As individuals age, they experience biological and societal changes that increase their

risk of developing chronic illnesses and experiencing a decline in physical function, ultimately resulting in frailty. Older adults who experience frailty are particularly susceptible to mild stressors, have prolonged recovery periods from illnesses, and encounter challenges in performing daily activities. The main objective of healthcare provision for older adults in Malaysia should be to enhance the well-being of older adults who are vulnerable or experiencing frailty. The SENIORSS strategy is aimed at promoting awareness, assessment, and reduction of frailty risk factors among community-dwelling older adults. Its goal is to facilitate healthy aging and mitigate frailty in the country.

Symposium Abstract 4

Unlocking The Secrets: Behavioural Changes

Marina ARS¹

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Introducing Acceptance and Commitment Therapy (ACT) processes or context in fostering a sustainable lifestyle which is value-based. The values can be the guide for a person to live a meaningful life. Being mindful of the experience and willingness for change towards a workable action can be a strategy that can be adopted. A meaningful ageing can be achieved by allowing values to guide and be committed to the workable action.

Symposium Abstract 5

Penile Health: Do's And Don'ts

Shaiful Bahari I¹

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Sex and genitalia are always a taboo and sensitive topic. Many people talk about it only when they have sexual difficulties. For men, they start talking about it when they have erectile dysfunction, premature ejaculation and etc. It is important for men to know and taking care of their penis as early as possible, try to prevent from getting problems. Generally, men should know the strong relationship and effect of physical and mental health to their penis. Specifically, they need to take care of the hygiene of their penis either through circumcision and or regular cleaning and removal of smegma, and other substances under the foreskin. Circumcision is proven to reduce the sexually transmitted infections including HIV. Safe sex for example by using condom is a reliable method to prevent infection. Certain food including honey and nuts are potential 'testosterone boosters'. Nuts are nutrient-dense foods that offer a variety of vitamins, minerals, healthy fats, and antioxidants, which can support overall cardiovascular health and blood flow which is important for erectile function. Some nuts, like peanuts, almonds, and walnuts, contain the amino acid arginine. Arginine is a precursor to nitric oxide, a molecule that helps relax blood vessels and improve blood flow. Increased nitric oxide levels can enhance erectile function by promoting better blood circulation to the penis. There are also good evidences to suggest pelvic exercise for men to maintain and improve their erection. Kegel exercises are indeed beneficial for pelvic floor muscles, which can

indirectly improve sexual function, including erectile function and ejaculation control. Vacuum Erection Device (VED) is another good method for penile 'rehabilitation' and for sexual intercourse. However, it must be done with the guidance of the medical practitioners.

Some men believe that by having 'bigger' penis is associated with more sexual satisfaction to them and their partner. Many men opted for injecting paraffin to their penis and inserting foreign body under penile skin or wearing rings and etc. Most of these practices associated with detrimental effects to their penis and general wellbeing. It will also cause disharmony in their relationship with their spouse.

Symposium Abstract 6

When Sex Is Struggle: Female Sexual Wellness (Dysfunction) Unveiled

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When sex becomes a struggle for women, it signifies a multifaceted issue that requires a holistic and compassionate approach by healthcare professionals. This abstract outline the need to understand female sexual dysfunction and sexual response, and the essential steps that healthcare providers need to take to address women's sexual health concerns effectively. Primary care providers often face significant challenges in managing sexual dysfunction, including limited training, discomfort with the topic, and time constraints. To overcome these challenges, primary care providers must adopt a more proactive and educated approach.

The initial step, using the PLISSIT model, involves creating a safe, private, and confidential environment that fosters trust and encourages open communication. A comprehensive assessment, including detailed medical, psychosocial, and sexual histories, is crucial for identifying underlying causes. Providing accurate and relevant information, offering specific advice tailored to client's needs, and addressing more complex interventions are necessary steps. Education and counselling play pivotal roles in addressing misconceptions and providing psychological support. Physical health must be thoroughly evaluated, with attention to gynaecological health, mental health, and the management of chronic conditions if any. Reviewing and managing medications, promoting healthy lifestyle choices, and implementing stress reduction techniques are also essential. Collaboration with specialists and a multidisciplinary approach ensures holistic care. Regular follow-up and support will help in monitoring progress and adapting treatment plans.

By adopting these strategies, primary care providers can effectively manage sexual health issues, championing the cause even in the face of societal taboos. Ultimately, these efforts can significantly improve the sexual health and overall well-being of women facing sexual difficulties.

Symposium Abstract 7**Kidney Chronicles: Mastering CKD Screening and Diagnosis****Wong HJ¹**¹*Hospital Sultanah Aminah Johor Bahru, Johor, Malaysia*

Chronic Kidney Disease (CKD) is one of the leading causes of mortality and morbidity throughout the world. In Malaysia, CKD prevalence increased from 9.1% in 2011 to 15.5% in 2018. Local studies have shown that CKD has detrimental impacts on macroeconomics and health-related quality of life. Targeted early identification offers the potential to substantially reduce the morbidity and mortality from CKD and its related complications, including increased incidence of cardiovascular disease, hyperlipidemia, anemia, and bone and mineral disease. Evidence shows that the early detection of CKD based on the presence of proteinuria or reduced eGFR can prevent or delay the progression of the disease to advanced stages. The results of screening can inform treatment modifications, such as appropriate drug dosing and improved lifestyle changes. The benefits of screening extend beyond treatments that can slow or even halt the progression of CKD. Early detection and management reduce the burden of CKD by improving the quality of care and quality of life for all patients.

Symposium Abstract 8**Renal Nutrition: From Diagnosis to Dinner Plate****Kent Leong SK¹**¹*Hospital Pakar Sultanah Fatimah Muar, Johor, Malaysia*

Renal nutrition plays a pivotal role in managing the health and well-being of individuals with kidney disease. As the incidence of kidney disease continues to rise in Malaysia, it becomes imperative for healthcare professionals to understand the intricate relationship between nutrition and renal health. This presentation aims to provide an insightful journey through renal nutrition, from diagnosis to the dinner plate.

This presentation will delve into the nuanced dietary considerations necessary for each stage of kidney disease. Understanding the impact of macro and micronutrient intake on renal function will be elucidated alongside practical strategies for optimising nutritional status while mitigating further renal damage.

Furthermore, this presentation will address the challenges faced by individuals with kidney disease, including managing comorbidities such as diabetes, gout and dialysis while adhering to dietary restrictions. Particular emphasis will be placed on dietary modifications, including protein, sodium, potassium, and phosphorus restriction, to preserve renal function and improve overall quality of life.

Moreover, the session will highlight the importance of individualised dietary counselling and the integration of appropriate meal plans to facilitate adherence and promote sustainable lifestyle changes. Through case studies and interactive discussions, attendees will gain valuable insights into tailoring nutritional interventions to meet the unique needs of patients with kidney disease.

In essence, this presentation seeks to empower healthcare professionals with the knowledge and skills necessary to navigate the complexities of renal nutrition, ultimately paving the way towards better outcomes and improved quality of life for individuals with kidney disease.

Symposium Abstract 9**Innovative Practice in HIV Continuum****Ratna Wati R¹**¹*Klinik Kesihatan Batu Pahat, Johor, Malaysia*

Innovative practices to improve the continuum in HIV care is very important. The engagement of patients in the HIV care continuum and adherence to antiretroviral therapy (ART) play a vital role in the outcome of a successful viral suppression. These innovative practices exploring the journey of the Best Practice intervention of KK Model Klinik Kesihatan Batu Pahat, Johor.

The presentation begins by introducing KK Model of Klinik Kesihatan Batu Pahat and interventions to tackling and ensure service delivery that is non-stigmatizing and non-discriminatory. The interventions involved the training featured in group discussions, short videos on do's and don'ts, and role-plays showed a significantly higher reduction in prejudicial attitude towards People Living in HIV (PLHIV) among the Health care workers (HCW) and PLHIV.

The journey of presentation continues in highlighting its innovative practice with the recognition by virtue of its medical excellence and significant health care contributions. It has won the Best practice Oral Presentation in the Public health Johor Symposium and second place in the Johor Quality Assurance (QA) project in year 2022 and also the Best Practice awards for HIV care by KKM in year 2023.

Symposium Abstract 10**Pearls and pitfall: Developmental Delay in Primary Care****Chow SY¹**¹*IMU Medical Clinic, Kuala Lumpur, Malaysia*

Developmental delay refers to a condition in which the child fails to attain developmental milestones as compared to peers of the same age range. Developmental delays are common in childhood, occurring in 10-15% of preschool children. Globally, sensory impairments (hearing loss and vision impairment) are the most prevalent disabilities (13%) and cerebral palsy is the least prevalent disability (0.2-0.3%) among children below 20 years old.

Delay in development is impairment in any following domains i.e gross and fine motor, speech and language, cognitive and performance, social, psychological and activities of daily living (ADL). Developmental delay is not a diagnosis by itself rather a categorical, illustrative term used in the clinic. It can be isolated (involving a single domain), multiple domains (2 or more domains) or global (affecting most developmental areas). Not all children with developmental delay will have a developmental disability, which refers to having learning, ADL and adaptive skills were affected.

Developmental delays can be transient (phase of prolonged illness/hospitalization, extreme prematurity or lack of opportunities to learn) or persistent. A significant delay is defined as performance that is two or more standard deviations below the mean on age-appropriate standardized norm referenced testing.

Early identification of developmental delay is crucial to the well-being of children and will help to reduce long term disabilities. Developmental surveillance should be incorporated at every well-child preventive care visit and any concerns raised during surveillance by the parents or guardians should be promptly addressed with standardized developmental screening tests.

Assessment for developmental delay in primary care should include general and systemic examination including hearing and vision assessment. Baseline blood tests may be ordered if deemed necessary. For children with mild developmental delay, in the absence of red flags for development and no abnormal finding on clinical examination, advice on appropriate stimulation activities should be provided and a review to be conducted within 3 months' time.

Practical tips, simple developmental tools and algorithms that can be implemented in primary care setting will be highlighted in this presentation.

Symposium Abstract 11 ADHD In Classroom

Gan KL¹

¹Hospital Pakar Sultanah Fatimah Muar, Johor, Malaysia

ADHD is one of the commonest neurodevelopmental disorders in childhood. It is a condition characterised by developmentally inappropriate levels of inattentiveness, hyperactivity or impulsivity. In this talk, we will explore how does ADHD affect children in school and the treatment available.

Symposium Abstract 12 Autism Speaks: Get On The Floor

Nora H¹

¹Hospital Putrajaya, Putrajaya, Malaysia

Parent-Mediated Intervention (PMI) has garnered significant recognition in neurodevelopment but remains nascent in Malaysia. There is a need to shift of our focus of intervention to parent mediated in conjunction with small but closer parent support group adapted from Greenspan and Wieder's Developmental, Individual differences, and Relationship-based (DIR) theoretical framework. Coaching parents effectively reduced the intervals between paediatric outpatient occupational therapy follow-ups while maintaining the intensity of early intervention programs. This lecture aimed to enhance therapist-parent-child collaboration through twice-monthly for the initial three months, then monthly for the following three individual parent coaching session based on the DIR framework. The Functional Emotional Assessment Scale (FEAS) served as the outcome measure. The intervention showed a significant mean difference in social-emotional skills

with a large effect size ($F [1.674, 48.533] = 7.343, p = .003$), indicating enhanced social-emotional skills in children with ASD through PMI. The findings underscore the potential of parent partnerships "get on the floor" within occupational therapy, indicating a shift towards top-down approaches for positive ASD outcomes in Malaysia. Implementing evidence-based interventions like PMI is critical for improving the social-emotional skills of children with ASD, highlighting its significance in the therapeutic landscape.

Symposium Abstract 13 When Normal Is Not Normal: HFpEF

Lu HT¹

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In Malaysia, patients with heart failure are younger and often have multiple comorbidities compared to those in western countries. Heart failure is a serious and progressive condition with significant health and economic impacts. The understanding, definition, and classification of heart failure have evolved to improve treatment outcomes. While heart failure with reduced ejection fraction is well-known, heart failure with preserved ejection fraction is also common, often underdiagnosed, and easily missed in early stages.

Symposium Abstract 14 Beats by A-Fib: Turning irregular Rhythms into a Playlist

Ng KF¹

¹KPJ Kluang Hospital, Johor Bahru, Johor, Malaysia

Atrial fibrillation (AF) is the most common arrhythmia worldwide, with a growing prevalence attributed to aging populations, obesity, improved detection, and increased cardiovascular disease survival. In 2020, the global prevalence was estimated at 50 million. Effective AF management requires comprehensive, patient-centered care focusing on risk factor treatment and lifestyle changes. Key strategies include stroke risk assessment and management, optimizing modifiable risk factors, and symptom control. Latest guideline emphasizes a holistic approach to AF throughout a patient's life, using a staged classification to tailor interventions at different disease stages. It highlights lifestyle modifications to prevent AF onset and progression, the use of clinical risk scores for anticoagulation decisions, and early rhythm control. Catheter ablation receives a strong recommendation for selected patients, including those with heart failure. Updated recommendations also cover device-detected AF and left atrial appendage occlusion devices for patients contraindicated for long-term anticoagulation.

Symposium Abstract 15 Cardiovascular Nutrition: Facts and Fads

Foong PH¹

¹National Heart Institute, Kuala Lumpur, Malaysia

Medical Nutrition Therapy (MNT) is an integral component for the care of patients with cardiovascular disease. Most international nutrition guidelines recommend following a healthy eating pattern that emphasizes intake of vegetables, fruits, wholegrains, nuts, lean animal or plant protein, fish and minimizes intake of ultra-processed foods which contain high content of trans fats, added sugar and sodium.

In this age of social media, there are many confusing nutrition messages including extreme diet plans and unevidenced usage of food supplements. These dietary practices may lead to nutritional deficiencies and even medical complications in patients if it is done over a prolonged period of time without appropriate monitoring. In contrary, most patients would require individualized MNT to prevent and manage cardiovascular complications rather than relying on quick-fix methods. Healthcare professionals and patients are encouraged to check the evidence for popular diets and evaluate them against established guidelines. This session aims to address some of these popular diets and food supplements, discussing their pros and cons as well as effects on cardiovascular health.

In conclusion, cardiovascular nutrition should include balance, variety, and combination of foods for optimal health. Referrals to Dietitians are recommended to provide patients with evidence-based nutrition information and education.

Symposium Abstract 16

Emerging Infectious Diseases In Climate Change

Tuang WX¹

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Climate change is among the most significant global health threats of the century, with profound implications for infectious diseases transmission. The relationship between climate change and its environmental and social manifestations is complex and brings about diverse adverse risks to human health. Climate change has resulted in extreme weather events with increasing frequency and devastating effects. Climate change is predicted to increase zoonotic spillover events driven by novel mammal-virus interactions and crossspecies transmission. Temperature rise increases the duration of transmission season of many vectorborne diseases. Temperature rise and irregular rainfall influence pathogen propagation, dispersal and distribution, human behaviour and vector ecology, and thus can enhance disease transmission. Extreme weather events such as flooding increase new breeding sites for vectors, leading to higher risk of dengue, malaria, chikungunya, zika and Japanese encephalitis virus. There is also increase in food and waterborne diseases such as vibrio cholerae, shigella, salmonella, campylobacter and E.coli. Other Waterborne diseases may also increase with rainfall intensity and humidity. This includes those transmitted via contact, ingestion, inhalation, and skin penetration, such as leptospirosis, typhoid fever, melioidosis and schistosomiasis. Transmission of other emerging and re-emerging infectious disease such as tuberculosis and hand, foot, mouth disease are also observed to be increased in relation with weather patterns. In anticipation of climate change significantly straining health

systems and exacerbating global health inequities, it is crucial to address climate change from a health perspective with strategies recommended by WHO. Firstly, climate adaptation which focused on strengthening the resilience of health systems and supply chains against climate change, and secondly climate mitigation, which aims to reduce emissions of climate pollutants to safeguard environmental and social determinants of health. Malaysia is expanding the development of Health-National Adaptation plans on climate change. These adaptation strategies should involve all stakeholders including non-government organizations or the private sector to cooperate to help the government to prevent and deals with this challenge.

Symposium Abstract 17

Towards The Climate Resilient In Primary Health Care

Afiqah Syamimi M¹

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Climate change poses significant challenges to public health systems worldwide, necessitating proactive measures to enhance climate resilience, particularly within primary health care settings. Climate change can impact the delivery of health care services in both large and small hospitals and health clinics, as well as in high- and low-income communities. The increased frequency and intensity of natural hazards challenges the infrastructure, support systems and supply chains that health care facilities and their communities depend upon.

The presentation will focus on the framework for developing climate-resilient and environmentally sustainable health care facilities. The four most critical areas for climate resilience are health workforce; water, sanitation, and health care waste; energy and infrastructure, and technology and goods. It will cover both interventions for climate resilience and interventions for environmental sustainability

It is important to strengthen the climate resilience within primary health care to minimise the adverse health impacts of climate change. The goal of developing climate resilient health care facilities is to increase their ability to safeguard and promote the health of their target communities, as well as to empower resource use and reduce pollutant emission into the environment.

Symposium Abstract 18

Snake-Related Injuries: Championing Changes Amid Challenges In Modern Malaysia

Ahmad Khaldun I¹

¹*Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia*

This talk explores the diverse species of snakes in Malaysia and their impact on human health. This talk presents the rich biodiversity of venomous and non-venomous snakes found within Malaysia's tropical ecosystems, including land and marine species. It examines the composition of their venoms, highlighting unique adaptations for usage and clinical manifestations. The talk addresses the epidemiology of snake-related injuries (SRI) in Malaysia, analysing risk

factors, regional variations, and current clinical management/interventions. By integrating biological, ecological, and medical perspectives, this talk provides valuable insights into the complex interactions between snakes and human populations in Malaysia. Understanding these dynamics is crucial for effective SRI management strategies, healthcare preparedness, and conservation efforts in the region.

Symposium Abstract 19

Forum: All About Gender Dysphoria; Identifying A Chaos in Adolescent Mind : A Sharing Session

Rafidah Hanim M¹

¹Universiti Sains Islam Malaysia, Malaysia

The issue of sexual orientation and gender identity (SOGI) is an example of the imposition of the human rights ideology upon aspects of society where they contradict predominant moral values. Current healthcare issues include areas in which medicine confronts Islam with the unacceptable. A thorough and critical analysis may show that this is driven not so much by medical evidence but by the changing societal norms and the lack of pressure to resist the change in these norms. This is proven to be the case as already, a few studies of recent highlighted that after many years of promoting gender identity as an alternative to biological sex, and despite a growing number of request for sex- and gender-sensitive analyses in research applications, there appears to be lack of methodological clarity on how sex or gender should be analyzed in practice. Medical field still heavily focuses on the impact of biological sex on health and disease, which is more in line with religious and sociocultural positions, owing to the fact that gender is oftentimes operationalized as a somewhat fuzzy construct. In addressing the numerous health problems of the LGBT community, there seems to be a 'paradox of empathy' where religious approaches, including the implementation of religious law are regarded as discriminatory and oppressive when in fact, it contributes significantly to the betterment of health among gays, bisexuals and transgenders. Epidemiologically, UNAIDS Data in 2017 showed that in the Middle East and North Africa (MENA), where most Muslim countries are located, and where the majority uphold criminal law concerning to homosexuality, there were an estimated 230,000 people living with HIV (PLHIV) which gives an adult HIV prevalence of 0.1%. The US as a single country has 1.2 million PLHIV with 0.4 to 0.9% adult HIV prevalence in 2013. Closer to us, Thailand has 450,000 PLHIV with 1.1% prevalence There needs to be an objective re-examination of the concept of empathy towards the LGBTQ community. Puberty blockers for children, sex reassignment surgery, chemsex abuse, and sexual transmitted diseases are among the scores of health problems amongst the LGBT community. From the Western experience, it is clear that these compassion narratives are highly ineffective. A different direction is much needed and overdue in deploying empathy and concepts of non-discrimination.

Nor Rahidah AR¹

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Gender dysphoria in adolescents presents complex diagnostic challenges, particularly in Malaysia's multicultural context where gender issues are not widely accepted or discussed. This presentation will examine the diagnostic criteria for gender dysphoria, emphasizing the necessity of comprehensive psychological assessment. It will address the significant emotional distress experienced by these adolescents, including prevalent anxiety, depression, and social isolation. Additionally, the presentation will explore the broader societal challenges that adolescents with gender dysphoria face, where traditional values may conflict with their experiences. By sharing clinical insights and case studies, this session aims to enhance understanding and support for adolescents facing these challenges, advocating for a holistic and culturally sensitive approach to their mental health and well-being.

Nurainul Hana S¹

¹Universiti Putra Malaysia, Malaysia

Adolescence is a transitional stage of physical, cognitive, psychosocial, and emotional development. It is a period of rapid changes and may present to be chaotic and challenging, especially in a time where information and influences are very accessible through a global internet network of social media that plays an undeniable role in the above developmental milestones and current social norms. In this period, adolescents are attaining their independence from parents, have greater influences from peers, and develop their own identity or sense of self and values.

Gender identity and its surrounding contexts are complex, nuanced and rapidly evolving globally, in some countries, more than others. Gender dysphoria (GD) in adolescence is an area of ongoing study and debate. In areas where inclusive practices are widely acceptable, an affirmative approach has been shown to support gender-nonconforming youth in expressing themselves comfortably which favours better mental-health outcomes. However, even in areas adopting this approach, concerns have been raised about the potential risks of early social and medical transition, especially for adolescents experiencing rapid-onset GD. In the context of family, social norms and beliefs, especially locally, it poses conflicts and impacts their well-being adversely.

In this forum, I will share experiences from the perspectives of my training in practicing in Adolescent Medicine, both in Malaysia and overseas. There are differences in the area of gender diversity between these two countries in terms of legislation and law, social and cultural perspectives, policies, education and healthcare provisions. Healthcare providers must be equipped with skills and knowledge to support these vulnerable youth and optimize their long-term well-being, while navigating the conflicts between available medical evidence and therapies, societal norms and expectations, legal and ethical considerations, personal beliefs, and most importantly, advocating for the adolescent's best interest.

Symposium Abstract 20

Social Media Addiction: Is This A Disease?

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The internet is an extremely important tool for socializing and communication, integral to both our home and work lives. It has become a necessity rather than a luxury. Many technological advancements have eased our day-to-day tasks, though public reception varies, with both positive and negative responses. While some internet users develop problematic behaviours, whether this constitutes a standalone disorder or is a symptom of broader psychological issues remains debated. Regardless, recognizing it as a significant behavioural issue that can impair daily functioning is crucial, and developing effective treatment protocols is essential.

Symposium Abstract 21

Body Shaming to Body Shaping

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Individuals with obesity often lack access to effective treatments, leading to physical and psychological comorbidities. The Roczen[®] programme integrates clinical expertise with digital technology to virtually deliver lifestyle interventions using time-restricted eating (TRE), nutrition, movement, and behavioural science. Limited data exist on the impact of such a programme to a Malaysian cohort. The objective of this service evaluation was to evaluate the effects of the Roczen programme on weight, waist circumference, and mental health indicators, at 52 weeks.

224 patients were enrolled (mean age 41±10.9 years, BMI 30.4±4.7kg/m²). Anthropometric data included weight and waist circumference (WC), while mental health symptoms (n=218) were screened using validated questionnaires GAD7 (mean 1.9±3.2), PHQ9 (mean 2.7±3.2) and BES (mean 11.4±8.2). Patients attended monthly online consultations with doctors advising on personalised lifestyle optimisation. Net Promoter Score (NPS) was used to assess satisfaction. Completers' data were analysed at 52 weeks and reported as mean±SD.

At 52 weeks, patients' weight reduced by 7.4±6.2% (n=87). 67% lost >5% weight (n=58), and 32% achieved >10% (n=28). WC reduced by 8.7±7.8 cm (n=65). Mental health scores (n=52) also improved (GAD7=1.4±2.0, PHQ9=2.0±2.1, BES=5.1±5.6). NPS score is 53 with satisfaction due to support received (n=22) and overall health outcomes (n=26) reported.

Evaluation of the Roczen[®] programme within a real-world Malaysian population shows positive outcomes in weight, WC, and mental health outcomes.

Symposium Abstract 22

Combating Hyperthyroidism

Tai YT¹

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Graves' disease (GD) presents a significant challenge in treatment due to its autoimmune nature and the variety of treatment options available. The three main treatment modalities—anti-thyroid drugs (ATD), radioactive iodine (RAI), and surgery—each come with their own benefits and drawbacks. In this lecture,

we will discuss long-term ATD therapy, examining its remission rates, efficacy, safety, and indications.

Symposium Abstract 23

Diabetes: Can Remission Be Achieved Through Intermittent Fasting?

Ahmad M¹

¹*Newcastle University Medicine Malaysia/UK, Malaysia*

Intermittent fasting, also known as time restricted eating has been highlighted as a useful intervention for people with type 2 diabetes (T2D) to improve both their diabetes and general health. This presentation will provide a review and update on the evidence and clinical guidelines for the use of intermittent fasting in the management of T2D.

Symposium Abstract 24

Insomnia: Primary Care Approach

Siti Nor Fadhliha M¹

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Insomnia is one of the most common sleep disorders encountered in primary care. It may be temporary or persistent. In the presentation, the speaker will bring the participants to explore the types of insomnia, risk factors, common comorbidities, complications, differential diagnosis, and management. There are a few case vignettes prepared to further illustrate the complexities and ideal management of insomnia.

Symposium Abstract 25

Addressing Childhood Trauma

Sankari Ganesh N¹

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Addressing childhood trauma involves multiple approaches to promote healing and emotional well-being. Key strategies include therapy (such as Cognitive Behavioural Therapy and EMDR), building a supportive network of trusted adults and peers, and educating both the child and caregivers about the effects of trauma. It is crucial to emphasize creating a safe and supportive environment for the child, involving family therapy to improve dynamics, and integrating multidisciplinary approaches that include education, social support, and healthy coping strategies. Continuous monitoring and adjustments to the treatment plan are essential to support the child's healing and emotional resilience.

Symposium Abstract 26

The Traffic Lights of headache

Raymond Azman A¹

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Headache is one of the most common complaints presented to

the family physician, neurologist and emergency department. It is crucially important not to miss a potentially lethal cause of headache on the one hand, but also not to over-investigate the patient with a primary headache. Therefore, it is essential that the attending physician is able to recognize the signs of potential danger (orange and red lights), and subject the patient to appropriate investigations and referrals when they are present. One of the ways to remember these signs is to learn the mnemonic SNNOOP10, which is easily retrieved from the internet. The rule of thumb is that ANY additional symptom or sign not present in the diagnostic criteria of primary headache should raise concerns that a sinister etiology is present, and this include: fever, drowsiness, focal neurological deficits, meningism, papilledema, sudden onset, progressive and continuous pain, ear pain, jaw claudication and toothache. In addition, a history of head trauma or neoplasm, change in the pattern of an existing primary headache, pregnancy, underlying retroviral disease, unusual age of onset for a particular primary headache and chronic daily use of analgesics are also red signals. A careful history and physical examination are pivotal in establishing the exact diagnosis. In a patient with a sudden explosive headache, an urgent brain CT or MRI and early head and neck CTA or MRA are imperative.

Symposium Abstract 27

The Precious Unborn: Prenatal Screening

Dharmaraja N¹

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Welcome to the world of prenatal screening. The talk is aimed to bring a fresh look on different modalities of prenatal screening. After a brief introduction on the basics and novel prenatal screening methods, we shall explore different types of prenatal screening test and its Indications and the role of family medicine specialists in prenatal screening at large. Looking forward to explore the prenatal world in collaboration with Family medicine fraternity for the precious unborn.

Symposium Abstract 28

Two Hearts, One Mission

Azrina AK¹

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Cardiovascular disease (CVD) is a major cause of maternal morbidity and mortality in Malaysia. In the National Obstetrics Registry, CVD generally affects 0.2- 4% of pregnant women. Cardiac conditions during pregnancy include hypertensive disorder, valvular heart disease (VHD), congenital heart disease (CHD), cardiomyopathies, arrhythmias, anticoagulation in patients with mechanical heart valves, ischaemic heart disease and thromboembolic disease. CVD still accounted for significant pregnancy-related deaths. Contributing factors include barriers to pre-pregnancy cardiovascular disease assessment, missed opportunities to identify CVD risk factors during prenatal care, gaps in high-risk intrapartum care and delays in recognition

of CVD symptoms during the puerperium. A general understanding of CVD during pregnancy should be a core knowledge area for all cardiovascular and primary care clinicians.

Symposium Abstract 29

Breaking Barriers In Contraception

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¹Universiti Teknologi MARA (UiTM) Selangor, Malaysia

The Family Planning Programme is a crucial part of the Service Health Ministry of Health Malaysia (KKM), which was introduced early in the 1970s in line with the government's desire to ensure the quality of life of individuals and the well-being of a family. Acknowledge the significance of family planning: as part of the Millennium Development Goals, lowering maternal death rates is one of the Sustainable Development Goals (SDG) that Malaysia is working to achieve. It has been determined that one of the indicators of the health of pregnant women in Malaysia is family planning. This indicator seeks to ensure that all women, particularly high-risk women, have access to universal family planning services. In Malaysia, about 32% of married women use contemporary forms of birth control. Low contraceptive usage leads to a high incidence of unwanted pregnancies and their consequences, including unsafe abortions and mental health problems that affect physical health. Cultural differences, personal issues, and a lack of understanding about contraceptives are some of the barriers to modern contraceptive methods. Improving the counseling services program can help women choose and use the appropriate birth control methods on a regular basis. In order to prevent unintended pregnancies and unsafe abortions, it is imperative that women get the correct reproductive health education. It is vital that women receive education on effective and safe birth control methods, with particular attention to the benefits, accessibility, and mode of action of modern procedures, as well as any potential side effects and how to manage them with the assistance of their primary healthcare provider.

Symposium Abstract 30

Integrating Palliative With Primary Care: A Synergistic Mix

Teoh SW¹

¹Klinik Kesihatan Salak, Sepang, Selangor, Malaysia

Integrating palliative care with primary care creates a synergistic mix that represents a holistic approach to healthcare, addressing the complex needs of patients with serious or life-limiting conditions. This integration ensures a continuum of care that enhances quality of life, improves clinical outcomes, and optimises resource utilisation. The current landscape in both palliative and primary care reveals distinct challenges, including resource limitations, training deficits, and care coordination difficulties, necessitating a synergistic approach to patient management.

Case studies from various settings illustrate the tangible benefits of this integration, with outcomes showing enhanced patient

satisfaction, reduced hospital admissions, and better symptom management. Practical strategies for successful integration encompass interdisciplinary collaboration, comprehensive training programs, and robust policy support. Technological advancements, such as individualised help-seeking apps, play a pivotal role in facilitating seamless communication and care coordination.

Ethical and cultural considerations are paramount, emphasising the need for culturally competent care, ethical decision-making, and active patient and family engagement. Metrics for success in community-based palliative care by primary care physicians include improved home care utilisation, effective symptom relief, and patient and family satisfaction, underpinned by continuous improvement and quality assurance processes. This integrated approach not only meets the immediate health needs of patients but also supports their holistic well-being, aligning healthcare services with the evolving complexities of patient care in the community setting.

Symposium Abstract 31

Telehealth: Primary Care Is Changing

Muhammad Irfan Yassin AU¹

¹*Klinik Kesihatan Tanah Puteh Kuching, Sarawak, Malaysia*

In recent years, the landscape of primary care has undergone a profound transformation, catalysed by the integration of telehealth technologies. Telehealth has become increasingly important, especially in light of the COVID-19 pandemic, which accelerated the adoption of digital health solutions.

Telehealth involves the use of digital communication tools such as video conferencing and secure messaging to facilitate remote consultations between healthcare providers and patients. Telemedicine is a subset of telehealth that specifically focuses on clinical services delivered remotely. These have become vital for reducing in-person healthcare visits and minimizing the spread of infectious diseases especially during Covid 19 Pandemic. Overall, telehealth falls under the umbrella of digital health, which the current situation, refers to the use of digital technologies to support and enhance healthcare delivery, management, and accessibility.

Tele primary Care (TPC) is one of the systems that developed in Malaysia started from early year 2002 mainly in few states in Malaysia such as Johor and Sarawak. This electronic medical record was primarily limited to data entry and internet access. At that time, we had little awareness of the significance influence this would eventually have on the landscape of digital health. Our role as primary care doctors has shown significant involvement using the updated version of TPC known as Tele primary Care Oral Health Clinical Information System (TPC OHCIS). In the context of emerging Covid 19 Pandemic, the reliance on technology has been magnified. Various applications and video conferencing tools have become integral for remote consultations, addressing the challenges of face-to-face interactions.

This presentation will explore the dynamic shift in healthcare delivery as telehealth emerge as a cornerstone of modern primary care. By examining the key drivers, challenges and opportunities

associated with telehealth implementation in primary care settings, impact of telehealth on healthcare will produce better in term of accessibility, quality and patient outcomes.

The advent of telehealth has democratized healthcare delivery, transcending geographical barriers and empowering individuals to access primary care services remotely. Through virtual consultations, patients can now receive timely medical advice, diagnosis and treatment from the comfort of their homes, mitigating the need for in person visits and reducing healthcare disparities among underserved populations. Moreover, telehealth facilitates proactive management of chronic conditions through remote monitoring and real time data analytics, enabling healthcare providers to deliver personalized care plans tailored to individual patient care.

However, the widespread adoption of telehealth in primary care is not without challenges. Technical limitations, such as inadequate internet connectivity and digital literacy barriers, pose significant obstacles to equitable access to telehealth services, particularly in rural and low-income communities. Furthermore, regulatory complexities surrounding licensure, reimbursement and privacy regulations necessitate a cohesive policy framework to ensure the sustainable integration of telehealth into mainstream healthcare delivery.

In essence, telehealth holds promise in promoting patient engagement and empowerment through remote education, self-management tools, and visual support networks. By fostering a collaborative partnership between patients and providers, telehealth empowers individuals to take an active role in their healthcare journey, leading to improved health outcomes and enhance patient satisfaction. As part of the broader digital health landscape, telehealth represents a convergence point for healthcare, information technology, and artificial intelligence. It serves as a pathway innovative approach to healthcare delivery, efficiency optimization in primary care settings, and the attainment of superior patient care and satisfaction. In today's healthcare environment where technology plays a central role, the exploration of new solution targeting specific health issues or conditions is paramount. Looking ahead, these insights can be applied to enhance and modernize healthcare system in alignment with global standards.

The journey towards leveraging digital health technologies, including telehealth, has been enlightening guiding us towards the advancement of healthcare in Malaysia. Through continued exploration and implementation of telehealth solution, we are equipped positive change and improve healthcare delivery for all.

Symposium Abstract 32

Digital Healthcare Landscape: Trends, Innovation, Impact And Challenges

Goh CS¹

¹*Hospital Seberang Jaya, Pulau Pinang, Malaysia*

Artificial Intelligence (AI) has emerged as a transformative force in healthcare. This talk will highlight the latest developments and showcase a novel project setting the foundations for AI in Antimicrobial Stewardship.

The presentation begins by introducing AI and exploring key trends shaping the AI landscape in healthcare, including the integration of AI into clinical workflows. Next, we'll delve into how patients may use AI to search for health information.

The presentation culminates in the introduction of a project that has won second place the Ministry of Health Innovation Awards 2023, highlighting its innovative approach, impact on healthcare outcomes.

Symposium Abstract 33 Musculoskeletal Injury Risk Screening

Ibrahim A¹

¹Hospital Sultan Ismail Johor Bahru, Johor, Malaysia

Musculoskeletal injuries (MSIs) are prevalent across various populations, from athletes to office workers, leading to significant physical, economic, and psychological impacts. Early identification of individuals at risk can mitigate these adverse outcomes through timely intervention. This presentation, titled "Musculoskeletal Injury Risk Screening" delves into the methodologies and efficacy of various screening tools designed to predict MSI risk. We explore a range of assessment techniques, including physical evaluations, biomechanical analysis, and wearable technology, alongside their predictive validity and practical application. Through case studies, we highlight best practices and recommendations for implementing effective screening programs in diverse settings. Ultimately, this presentation aims to equip fellow healthcare professionals with the knowledge to proactively address MSI risk, fostering healthier and more resilient communities.

Symposium Abstract 34

Ouch, My Hands Hurt!

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¹Hospital Kuala Lumpur, Kuala Lumpur, Malaysia

Coinciding with the conference's theme which highlights 'Challenges, Change, and Champion', my presentation will focus on the common hand and upper limb conditions that are encountered in primary care setting.

'Challenges'

- diagnosing the various conditions and how to properly assess clinically
- in management of common hand disorder in primary care setting
- when to refer and indication of referral

'Change'

- referring with clear indication and the correct diagnosis
- not all need radiographs to diagnose, to minimize radiation risk
- what can be done in primary care setting especially patients not keen for intervention and how to follow-up these patients

'Champion'

- trained in ultrasonography to diagnose common hand conditions

- C&P for FMS to perform simple hand procedures eg Steroid injection, percutaneous release
- Combined clinic (primary care and hand surgery) to reduce number of referrals and subsequent daycare patient load

Symposium Abstract 35 New Insight in Tuberculosis Detection

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Tuberculosis (TB) is a preventable and usually curable disease. In 2022, TB was the world's second leading cause of death from a single infectious agent and caused almost twice as many deaths as HIV/AIDS. More than 10 million people continue to fall ill with TB every year. Focus and urgent action is required to end the global TB epidemic by 2030, a goal that has been adopted by all Member States of the United Nations (UN). One of the main pillars in the End TB strategy is early diagnosis of TB including universal drug-susceptibility testing, and systematic screening of contacts and high-risk groups and subsequent treatment of all people with TB including drug-resistant TB. Patient support with collaborative TB/HIV activities, and management of comorbidities including preventive treatment of persons at high risk. In 2023, WHO (World Health Organisation) published the standard on universal access to rapid tuberculosis diagnostics amongst the 4 key steps of identifying presumptive TB, accessing testing, being tested and receiving a diagnosis.

ORAL ABSTRACTS

Oral Abstract O01

Knowledge, Attitude and Stigma on Tuberculosis and Its Associated Factors with Stigma on Tuberculosis: A Cross Sectional Study Among Patients Attending Health Clinics in Seberang Perai Utara, Penang

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Introduction: The number of tuberculosis cases and deaths in Malaysia are increasing in trend. Eliminating stigma and discrimination associated with tuberculosis at all levels of society is one of the strategies to achieve the vision to end tuberculosis by 2035. This study aims to assess the knowledge, attitude and stigma on tuberculosis and its associated factors with stigma on tuberculosis among the patients in health clinics in Seberang Perai Utara, Penang.

Methods: This is a cross-sectional study recruiting all adult patients attending the outpatient departments in six health clinics in the district. They were selected via systematic random

sampling method to fill in the questionnaire containing demographic data, knowledge, attitude and stigma about tuberculosis. The data was analysed using descriptive statistics and multiple linear regression.

Results: Three hundred and eight participants were recruited into the study. The mean percentage score for knowledge, attitude and stigma on tuberculosis were 71.2, 79.7 and 67.6 respectively. For every RM 1 increase in household income, the mean percentage score for stigma increases by 0.001 (CI: 0.000 – 0.001, $p=0.044$). For every 1 mean percentage score increase in attitude, the mean percentage score for stigma increases by 0.28 (CI 0.13 – 0.42, $p < 0.001$). Married people have a lower mean percentage score for stigma compared to those single or divorce by 4.35 (CI 8.13 – 0.56, $p=0.025$).

Conclusion: Adult patients in the area have satisfactory knowledge and good attitude towards tuberculosis but have high stigma on tuberculosis. Addressing tuberculosis stigma requires comprehensive efforts to raise awareness, promote accurate information about tuberculosis and combat discrimination.

Oral Abstract O02

Therapeutic Response to Intravenous Iron Therapy for the treatment of Iron Deficiency Anaemia in pregnancy: a Retrospective study in health clinics in Rompin, Pahang (TRIIT)

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Introduction: This study intends to evaluate the therapeutic response to intravenous iron therapy for the treatment of iron deficiency anaemia in pregnancy, and to identify the optimal gestational period for administering intravenous iron therapy.

Methods: A retrospective chart review was conducted among all pregnant women who received intravenous iron therapy for the treatment of iron deficiency anaemia in all 10 health clinics in Rompin district, Pahang between January 2022 to December 2023. The analysis includes demographic attributes, haemoglobin level pre-infusion, 2-3 weeks post infusion, 3-5 weeks post infusion, 5-7 weeks post infusion, as well as pre-delivery haemoglobin level.

Results: The study included a total of 125 pregnant women. The majority of the respondents were Malay (78.4%) and aged 20 to 29 years old (51.2%). The mean haemoglobin level pre-infusion of intravenous iron therapy is 9.52g/dL (± 0.679). The mean haemoglobin level 2-3 weeks post infusion is 10.50g/dL (± 1.141), 3-5 weeks post infusion is 10.98g/dL (± 0.841), and 5-7 weeks post infusion is 11.26g/dL (± 1.124). The mean pre-delivery haemoglobin level is 11.20g/dL (± 1.124). Among patients who received intravenous iron therapy before 29 weeks of gestation, there is 4.3 times higher odds of achieving Hb ≥ 11 g/dL, (95% CI

(1.18-16.26). Multivariate analysis showed that primigravida (AOR: 17.14, 95% CI 2.18-134.34) and administering intravenous iron therapy before 29 weeks (AOR: 4.39 1.18- 16.26) were significantly associated with better outcome in achieving Hb ≥ 11 g/dL.

Conclusion: Intravenous iron therapy plays a crucial role in the treatment of iron deficiency anaemia in pregnancy. Clinicians should be aware that administering intravenous iron therapy before 29 weeks of gestation results in better outcome.

Oral abstract O03

Factors Influencing Inhaler Adherence Among Pregnant Women With Controlled Asthma Attending Primary Healthcare Clinics In Malaysia (IAP-CA)

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Introduction: Inhaler adherence is essential in pregnant women with asthma to improve symptom control. This study identified factors associated with inhaler adherence among pregnant women with controlled asthma.

Methods: Data from self-administered questionnaires and clinical audits were sampled among 369 pregnant women with controlled asthma in 16 government primary healthcare clinics in the Selangor, Kuala Lumpur, Perak and Johor states from December 2023 to March 2024. Binary logistic regression was used to determine the association between sociodemographic characteristics, clinical parameters, organisational support and patients' knowledge, perception and practices with inhaler adherence during pregnancy.

Results: Factors statistically significant associated with increased inhaler adherence were controlled asthma without depression (OR=3.73, 95%CI 2.78-7.79) and referral to pharmacists (OR=5.82, 95%CI 1.88-11.31). Factors associated with reduced adherence to inhalers were, wrong inhaler techniques (OR=0.77, 95%CI 0.30-0.96), unable to differentiate between inhaled corticosteroids and short-acting beta-agonists (OR=0.60, 95%CI 1.19-1.41), explanation not given on asthma action plan (OR=0.43, 95%CI 0.26- 0.49), explanation not given on asthma diary (OR=0.70, 95%CI 0.21-0.95), not referred to primary care physicians (OR=0.55, 95%CI 0.33-0.70), did not practice trigger avoidance (OR=0.20, 95%CI 0.05-0.79), lacking confidence in

using the asthma action plan (OR=0.62, 95%CI 0.33-0.58), and not using asthma diaries (OR=0.58, 95%CI 0.37-0.79).

Conclusion: Improving self-care practices for asthma and ensuring correct inhaler usage among pregnant asthmatics are essential to reduce the risk of adverse complications in both fetuses and mothers.

Oral abstract O04

Exploring the Prevalence and Risk Factors of Diabetic Retinopathy in Early Onset Type 2 Diabetes Mellitus: A Study in Kuantan, Pahang

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Introduction: The global prevalence of early-onset type 2 diabetes in adults has increased worldwide. Thus, it contributes large impact on the development of macrovascular and microvascular complications. Diabetic retinopathy is the major cause of adult blindness in developed countries. The main aim of this study is to ascertain the prevalence of diabetic retinopathy and its associated risk factor in patients with early onset type 2 diabetes mellitus patients attending primary care in Kuantan.

Methods: A cross-sectional study was conducted at 4 selected government health clinics in Kuantan, Pahang. A total of 180 early onset type 2 diabetes patients were randomly selected. Early onset type 2 diabetes mellitus was defined as patient diagnosed with type 2 DM before the age of 40 years old. Latest fundus was taken using digital retinal imaging technology. Data were collected on demographic, clinical parameter, cardiovascular risk factor with micro and macrovascular complication.

Results: The prevalence of diabetic retinopathy in early onset type 2 DM is 70.7% with 29.8% of it were mild NPDR, 27.6% were moderate NPDR, 8.8% were severe NPDR and 4.4% were PDR. 8.8% also had diabetic maculopathy. The duration of DM, HbA1c level and diabetic kidney disease were significantly associated with diabetic retinopathy in our study.

Conclusion: More than half of the people with early onset diabetes have diabetic retinopathy within 10 years of diabetes duration. Good glycaemic control along with regular eye screening can prevent visual loss due to diabetic retinopathy in early onset of Type 2 diabetes patient.

Oral abstract O05

Self-Assessment, Knowledge And Management Of Gout Among Primary Care Doctors

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Introduction: Gout is the most common treatable inflammatory joint arthritis globally. Primary care doctors diagnose and manage majority of gout patients. There is a lack of local data on the knowledge and management of gout among primary care doctors. This study aims to determine the self-assessment, knowledge and management of gout among primary care doctors and factors influencing gout management.

Methods: A cross-sectional study was conducted among primary care doctors in all public health clinics in Wilayah Persekutuan Kuala Lumpur, Putrajaya and Selangor from 18th October to 21st November 2021. Universal sampling was used. Primary care doctors responded to an online Google Form questionnaire. Pearson correlation analysis, Spearman's order rank correlation, Mann-Whitney U Test, Kruskal-Wallis H test and multiple linear regression were employed.

Results: A total of 395 primary care doctors participated in this study, consisting of 31 (7.8%) family medicine specialist (FMS), 134 (33.9%) medical officer (MO) with post-graduate training and 230 (58.2%) MO without post-graduate training. The mean total knowledge score was 12.02 (SD:2.823) out of a possible 18. The mean total management score was 8.33 (SD:2.097) out of a possible 12. Multivariate analyses showed that knowledge of gout management was the only significant predictor of the level of treatment practices for the management of gout ($\beta = 0.520$, $p = < 0.001$).

Conclusion: Knowledge of gout management was the only significant predictor of the level of treatment practices for the management of gout. Improvement of knowledge could be achieved through discussion and education on up-to-date recommendations on gout management, update of Malaysian gout clinical practice guideline and for primary care doctors to undertake post-graduate studies.

Oral abstract O06

Association Between Medication Adherence and Blood Pressure Control and The Factors Associated with Antihypertensive Adherence in Melaka Tengah District: A Cross-Sectional Survey

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Introduction: The burden of cardiovascular disease is exacerbated by hypertension. According to the 2019 National Health and Morbidity Survey (NHMS), 30% of adults in Malaysia had hypertension.

Methods: This was a cross-sectional study that was conducted on adults with underlying hypertension who had been under treatment at public primary health clinics under Melaka Tengah district. Data was collected using a validated MyMAAT (Malaysian Medication Adherence Assessment Tool) questionnaire and self-administered questionnaire. The association between blood pressure and medication adherence was analysed using multiple logistic regression, adjusted for all covariates.

Results: The rate of antihypertensive adherence is 74.1%. 51.4% of respondents had their blood pressure controlled. This study found that medication adherence is significantly associated with good blood pressure control (aOR 1.60, 95% CI 1.25, 2.05). Based on multivariate analysis, the determinants for antihypertensive non-adherence are Malay ethnicity (aOR 1.64, 95% CI 1.24, 2.17), secondary education (aOR 1.61 95% CI 1.12, 2.31), farther distance from the clinic (aOR 3.3, 95% CI 1.37, 7.97), experience of side effects from anti-hypertensive medications (aOR 1.63, 95% CI 1.10, 2.43), concern for long-term side effects (aOR 1.72, 95% CI 1.33, 2.24) and use of alternative medicine (aOR 1.93 95% CI 1.29, 2.88). Multiple antihypertensive medications is the only associated factor for uncontrolled blood pressure (aOR 1.46 95% CI 1.05, 2.04, $p=0.026$).

Conclusion: Factors associated with non-adherence should be closely monitored to improve blood pressure control and prevent adverse health outcomes. Single-pill combination antihypertensives are encouraged to reduce pill burden hence improving blood pressure control.

Oral abstract O07

Questioning the Questionnaire: Using Cognitive Interview to Improve the Long-acting Reversible Contraception Provision Questionnaire

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Introduction: Long-acting reversible contraception (LARC) has been shown to reduce unintended pregnancies, but its uptake is low in Malaysia. Healthcare workers (HCWs) greatly influence LARC uptake, highlighting the need for a valid tool to assess their knowledge, attitude and practice (KAP) towards LARC provision. This study aims to describe the use of cognitive interviews to validate an HCW's LARC provision KAP questionnaire.

Methods: Ten HCWs (6 nurses and 3 doctors) were selected using purposive sampling from two health clinics in Kota Bharu district. The focus group interviews utilised think-aloud technique, where participants verbalised thoughts while answering the questions, and retrospective verbal probing method, where a series of questions were asked after each section. These questions include interpretation, paraphrasing, recalling answers and suggestions to improve clarity. The participants then

rated item comprehensiveness and clarity using a 4-point Likert scale. The scores were used to calculate item-level FVI (I-FVI) and scale-level FVI (S-CVI/Ave).

Results: Following cognitive interviews, adjustments were made to the first section, focusing on participants' sociodemographic, experience, and facility information. Additionally, feedback from participants led to enhancements in the clarity and readability of the knowledge, attitude and practice sections. Suggestions included using simple annotations for LARC, incorporating English medical terms, bolding key terms, simplifying items and restructuring items. All sections met face validity criteria with excellent I-FVI and S-FVI/Ave values. The research team carefully evaluated expert comments and made necessary adjustments. No items were removed.

Conclusion: The qualitative evaluation of the questionnaire through cognitive interviews with participants provided valuable input to improve design, wording, accuracy, and relevance to local practice. The excellent FVI objectively determined the accuracy and representativeness of all items.

Oral abstract O08

Sexual dysfunction and its associated factors among pregnant women in Sabah, Malaysia

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Introduction: Female sexual dysfunction (FSD) encompasses a woman's capacity for sexual satisfaction and pleasure. Throughout pregnancy, both sexual and marital dynamics often shift due to various physical and psychological factors. This study aims to ascertain the prevalence of female sexual dysfunction (FSD) and identify its associated factors among women receiving care at antenatal clinics in Sabah.

Methods: This is a cross-sectional study involving pregnant women attending three antenatal clinics in Sabah, Malaysia between June 2022 and September 2022. Participants completed the Malay Version of Female Sexual Function Index-6 (MVFSFI-6) and a questionnaire gathering sociodemographic, clinical and interpersonal data.

Results: Among the 280 participants, 106 (37.9%) displayed sexual dysfunction, with a median age of 29 years (Interquartile range [IQR] 8). Hyperemesis gravidarum exhibited a positive association with FSD displaying an adjusted Odds Ratio (AOR) of 2.23 (95% CI 1.23 to 4.03). Additionally, FSD demonstrated a negative association with the age group 20-29 years (AOR=0.16, 95% CI= 0.03 to 0.89) and Malay ethnicity (AOR 0.33, 95% CI 0.12 to 0.92).

Conclusion: The prevalence of FSD among pregnant women attending health clinics in Sabah appears comparatively lower

than reported rates in previous studies. Various factors contribute to sexual dysfunction, encompassing biological elements, spousal influence, and the presence of hyperemesis. These findings underscore the potential to enhance counselling approaches for both prenatal and postnatal care.

Oral abstract O09

The Prevalence and The Associating Factors of Malnutrition Among Indigenous Infants in Sepang and Kuala Langat

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Introduction: Malnutrition is an emerging national issue in Malaysia for the past decade, especially in indigenous populations. The types of feeding exert an effect on infantile growth in early life. Detection of malnutrition in early life combined with the knowledge of their contributing factors is a critical step in handling this issue.

Methods: This is a cross-sectional study involving indigenous infant's follow-up in primary health clinics in Sepang and Kuala Langat districts, Selangor. The universal sampling method was used to recruit the study participants, and survey interview and health record review was conducted for data collection. Nutritional status was classified based on measurement of the growth parameters measurement infants (Z score for weight-for-age, height-for-age, BMI-for-age, weight-for-height) at 2nd, 4th and 6th months. Any abnormalities of the growth parameters measurement were classified as malnutrition.

Results: A total of 119 participants were recruited in this study. The percentages of indigenous infants with exclusive breastfeeding, formula feeding, and predominantly breastfeeding was 45.4%, 44.5%, and 10.1% respectively. The total indigenous infants with malnutrition at 6 months old was 16.0%. Multiple logistic regression analysis showed that male indigenous infants had 3.69 times the odd to have malnutrition (AOR=3.69, 95% CI= 1.14, 11.99) compared to female infants. Breastfed indigenous infants had 3.46 times the odd to have malnutrition (AOR=3.46, 95% CI= 1.01,1.0) compared to formula feed infants.

Conclusion: Exclusive breastfeeding practice among indigenous mothers are substantially low. Male and breastfeeding indigenous infants are at risk for malnutrition.

Oral abstract O10

Oral Health and Quality of Life Among Elderly Patients Attending Outpatient Primary Care Clinic in Kelantan

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Introduction: Older adults are at risk of oral health problems such as caries, periodontitis, tooth loss, oral candidiasis, and xerostomia. Elderly patients with co-morbidities, including type 2 diabetes mellitus, hypertension, and cardiovascular disease, may worsen their oral conditions, which affect their Oral health-related quality of life (OHRQoL). This study aimed to assess OHRQoL and its associated factors (sociodemographic, medical and oral characteristics) among elderly patients attending the outpatient primary care clinic at Hospital Universiti Sains Malaysia, Kelantan, Malaysia.

Methods: A cross-sectional study was conducted among 195 elderly patients aged ≥ 60 years, using a Malay Version of the General Oral Health Assessment Index (GOHAI). The 6-Likert scale GOHAI consisted of 12 items comprising three domains of OHRQoL. Descriptive and test for differences were used for analysis. The significance of p value was set at less than 0.05.

Results: The minimum and maximum scores were 8 and 60, respectively with the median score of the GOHAI was 47.0 (IQR17.00). Variables that associated with OHRQoL include sociodemographic characteristics (ethnicity, education level and household income), oral health characteristics (usage of denture, and oral condition) and general health characteristics (diabetes mellitus, cardiovascular disease and kidney disease).

Conclusion: Enhancing OHRQoL in elderly patients attending outpatient primary care clinics is vital. This can be attained through a comprehensive grasp of oral health concerns in the elderly and timely referral to an oral health team by primary care medical practitioners.

Oral abstract O11

The Challenges Towards Resilience in Diabetes Self-Care Among Older Adults in Kelantan: A Qualitative Study

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Introduction: The prevalence of type 2 diabetes in Malaysia has dramatically escalated over the past few decades and is one of the most prevalent diseases among older adults in Malaysia. Previous studies showed many older adults with diabetes were found to have low to moderate resilience levels in self-care and poorly controlled diabetes. Resilience in diabetes requires older adults' experiences in handling self-care challenges through perseverant effort. This study explores the experiences of challenges to gain resilience in diabetes self-care among older adults at the primary care clinic.

Methods: This is a qualitative research design using a phenomenological approach. In-depth interviews were conducted with older adults with diabetes at the primary care clinic. The interviews were recorded, transcribed verbatim and analysed thematically using NVivo 12 software.

Results: Four main themes obtained were 1) Endured self-care leads to negative emotions delved into being overwhelmed and demotivated with self-care, 2) Struggled with lifestyle

modification highlighted the scarcity of knowledge, food habits, and physical illness, 3) Cultural beliefs underlined local culture and traditional herbal medicine hindered consistency in self-care and 4) Lack of social support showed living alone and socioeconomic constraints deterred self-care.

Conclusion: This study helps to understand the difficulties of older adults with diabetes performing self-care. Integrated self-care management interventions are needed to address these challenges, including providing psychological health support and a comprehensive diabetes education program. Future research should focus on mental health intervention to empower resilience in self-care, particularly among older adults with diabetes in Kelantan.

Oral abstract O12

Factors Associated with Pre-hospital Delay Among Acute Coronary Syndrome Patients in the Central Region of Malaysia

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Introduction: Early arrival to hospital and initiation of reperfusion treatment is critical in improving patient outcomes during cardiac events. Pre-hospital delay is a major factor limiting early reperfusion among acute coronary syndrome (ACS) patients. There is lack of data on pre-hospital delay in Malaysia. Therefore, the aim of this study is to determine factors contributing to the pre-hospital delay.

Methods: A cross-sectional study was conducted in two governments hospital using universal sampling. This study recruited patients that had developed ACS outside of the hospital and had their time of symptom onset and time arrival at the hospital recorded. Multiple logistic regression was used to examine the factors associated with pre-hospital delay more than two hours.

Results: A total of 390 patients were recruited for this study. The overall median symptom-to-door time was 3 (IQR 1.72) hours. Of all patients, 301 (77.2%) delayed their arrivals. Pre-hospital delays of more than two hours were found to be significant among patients experiencing atypical symptoms (OR = 3.16, 95% CI: 1.67, 5.91, P = 0.001), using private transportation (OR = 2.69, 95% CI: 1.22, 4.86, P = 0.028) and patients who chose to have their first medical contact for their symptoms with private clinic (OR = 2.38, 95% CI: 1.26, 5.86, P = 0.031).

Conclusion: Majority of the ACS patients had experienced pre-hospital delay more than 2 hours. Intervention targets at public awareness about the symptoms of ACS and benefits of early presentation is important to improve emergency cardiac care in the country.

Oral abstract O13

The Prevalence of Erectile Dysfunction and Its Associated Factors among Non-Diabetic Overweight & Obese Patients Attending Government Health Clinics in Kuantan, Pahang

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Introduction: Erectile dysfunction (ED) is a significant issue that should not be ignored in the clinical setting and can negatively impact the quality of life of patients and their partners, especially among overweight and obese patients. This study aims to determine the prevalence of ED and its associated factors among non-diabetic, overweight, and obese patients who attend a government health clinic in Kuantan, Pahang, Malaysia.

Methods: Between February and May 2024, 221 males aged 18 to 59 who are overweight and obese participated in this cross-sectional study at 12 government health clinics in Kuantan. Information on sociodemographic data and medical history was obtained through a self-administered questionnaire that included a validated Malay version of the 21-item Depression Anxiety Stress Scale (DASS 21) and the International Index of Erectile Function (IIEF-5).

Results: The overall prevalence of self-reported ED among nondiabetic overweight and obese patients was 66.1%. Regarding severity, 47.1% had mild, 16.7% mild-to-moderate, 1.8% moderate, and 0.5% severe ED. Multivariate analysis showed that ED in nondiabetic overweight and obese was associated with dyslipidaemia (OR 2.82, 95% CI 1.19-6.65) and anxiety (OR 4.02, 95% CI 1.36-11.88).

Conclusion: ED was significantly prevalent in our overweight and obese patients who were nondiabetic. Dyslipidaemia and anxiety were significantly associated with ED.

Oral abstract O14

Development and Validation of SaPeIH-M©: an Educational Module on seat belt usage in pregnancy

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Introduction: Correct use of seat belt during pregnancy reduces

mortality and morbidity in road traffic accident. Alarmingly, the knowledge regarding correct use of seat belt in pregnancy is poor among the pregnant women in Indonesia. The need for an educational tool to enhance awareness and knowledge regarding the correct use of seat belts during pregnancy is imminent. Thus, we aim to develop an educational module, SaPeIH-M©, (Modul Sabuk Pengaman Ibu Hamil) to enhance the knowledge, the correct seat belt usage in pregnancy.

Methods: SaPeIH-M© is a video that was developed based on a literature review and the health belief model. The preliminary SaPeIH-M©, then underwent a validation process which included the educational module material assessment, learning design assessment and learning communication media assessment by six expert panels an obstetrician, two midwives, one public health specialist and one pregnant woman. In addition, it underwent the educational video module assessment by 10 pregnant women as users.

Results: SaPeIH-M© is a 3-minute and 15 seconds video that explains the types, advantages, and correct usage of three-point seat belts. It also explained the laws and the requirement of seat belts wearing while driving. Six expert panels rated the educational module content, learning design, and learning communication media as good, giving them an average score (out of 5) of 4.5, 4.2, and 4.5, respectively. Users also gave the instructional video module a good rating of 4.2.

Conclusion: SaPeIH-M© is an educational module that was successfully developed in the form of a video and is valid.

Oral abstract O15

Factors Associated with Modern Contraceptive Use Among Orang Asli Women in Kelantan

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Introduction: The prevalence of adverse birth outcomes especially low birth weight among Orang Asli in Kelantan is high yet there is limited knowledge regarding the practice of family planning among them. This study was done to determine modern contraceptive use among Orang Asli women in Kelantan and its associated factors.

Methods: A cross-sectional study was conducted among 311 Orang Asli women between March till November 2023 involving three districts in Kelantan. An interviewer guided questionnaire assessing socio-demographic characteristics, attitude towards family planning, spousal communication and accessibility to modern contraceptives was used.

Results: The prevalence of modern contraceptive use among Orang Asli women in Kelantan was 77.5% (n=311). Multiple logistic regression revealed that spousal communication on family planning (Adjusted OR 3.11, 95% CI 1.7 – 7.09), being married (Adjusted OR 3.25, 95% CI 1.07 – 9.87), and attitude towards

health benefits on family planning (Adjusted OR 1.14, CI 1.06 – 1.23) were significant predictors for modern contraceptive use among Orang Asli women in Kelantan.

Conclusion: The prevalence of modern contraceptive use among Orang Asli women in Kelantan is surprisingly high due to continuous effort by JKN Kelantan, specifically Pasukan Bergerak Orang Asli. This will be reflected in the health outcome of Orang Asli Kelantan in the next 5 years.

Oral abstract O16

A Retrospective Study Of Combining FIB-4 Score And Clinical Predictors Of NASH In Predicting Liver Fibrosis In NAFLD Patients In UMMC

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Introduction: The Fibrosis-4 (FIB-4) score is used to stratify disease severity in non-alcoholic fatty liver disease (NAFLD). FIB-4 \geq 1.3 was suggested to refer for Fibroscan measurement but it is not easily assessable. This study is to determine the liver enzyme abnormalities and to stratify the liver disease severity of NAFLD patients using FIB-4 score and clinical predictors of non-alcoholic steatohepatitis (NASH) to predict advanced fibrosis.

Methods: A retrospective cross-sectional study was done. Data were identified from Fibroscan database and patients' electronic medical records from 05.12.2017 till 30.11.2021.

Results: 253 NAFLD patients were recruited. The median age was 60 years old (IQR 18) with majority are females (55.3%) and Malays (44.3%). Common comorbidities include hyperlipidaemia (HPL) (75.9%), hypertension (HPT) (65.2%), and diabetes mellitus (DM) (54.9%). The prevalence of advanced fibrosis was 35.6%. A significant association was found between age \geq 50, DM, HPT and GGT $>$ ULN, AST and/or ALT $>$ ULN, platelet $<$ ULN with advanced fibrosis. Multivariate analysis showed DM, HPT and GGT $>$ ULN had 2-3 fold in developing advanced fibrosis. Further stratification of indeterminate FIB-4 score with clinical predictors of NASH (DM, HPT and/or GGT $>$ ULN) would better predict advanced fibrosis, but with a rather significant false-negatives.

Conclusion: FIB-4 score $<$ 1.3 was good in ruling out advanced fibrosis, but with rather significant false-negative when compared to Fibroscan. By combining FIB-4 score with clinical predictors of NASH, cases needed for Fibroscan assessment could be reduced. This would help primary care physicians to better predict advanced fibrosis in NAFLD patients.

POSTER ABSTRACTS – a) CLINICAL RESEARCH**Poster Abstract P01****Prevalence Of Menstrual Irregularities, Metabolic Syndrome And Psychological Impact And Its Association Among Reproductive Aged Obese Women Attending Primary Care Clinics In Kota Setar District**Kamaruddin M¹, Mohamad Mohsin A¹, Abidin A¹¹Pejabat Kesihatan Daerah Kota Setar, Kedah, Malaysia

Introduction: In Malaysia, the prevalence of female obesity was 38.8%. Obesity affects individual menstrual, metabolic and psychological conditions. The aim of this study was to determine the prevalence and associations of menstrual irregularities, metabolic syndrome and psychological impact among reproductive aged-obese women.

Methods: A cross-sectional study was conducted among 263 reproductive-aged obese women, aged 18 to 50 years, attending primary care clinics in Kota Setar District. Women who met the inclusion and exclusion criteria were sampled using universal sampling. Socio-demographic, menstrual, clinical, and psychological parameters using validated Patient Health Questionnaires (PHQ-9), Generalized Anxiety Disorder – 7 (GAD-7), and Rosenberg Self-Esteem Scale (RSES) were obtained. A Chi-Square Test of Independence was used to determine the significant association between variables.

Results: The respondents' mean age and BMI were 38.6 years \pm 6.7 and 33.0 \pm 4.8, respectively. The majority were Malays (98.1%), married (84.8%), employed (89.7%), received tertiary education (62.4%), and from B40 income group (58.6%). The prevalence of menstrual irregularities, metabolic syndrome and psychological impact were 20.5%, 45.6% and 8.0%, respectively. Most of the respondents (66.5%) reported low self-esteem. There was only significant association between menstrual irregularities and psychological impact showed a significant association ($p < 0.05$).

Conclusion: Menstrual irregularities, metabolic syndrome and psychological impact are common among reproductive-aged obese women in Kota Setar District. Therefore, intervention is needed to reduce obesity-related health risks. Further study on low-self esteem among this aged group is recommended.

Poster Abstract P02**Understanding the Evolution of Family Support in Opioid Addiction Recovery Journey: A Qualitative Study**Yafizah Y¹, Fathima Begum SM¹, Nizam B¹, Anu Suria G¹,
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Introduction: Methadone Maintenance Therapy (MMT) stands as a cornerstone in the journey of individuals battling opioid addiction, providing a pathway to recovery characterized by stability and better quality of life. However, most of them reported losing their families' trust and support, with some even getting rejected by their families. Meanwhile, the family members feel ashamed and stigmatised when there are individuals within the family associated with drug involvement. Therefore, this study aimed to understand better types of family support before and after their family members engage in the MMT programme.

Methods: A qualitative study was conducted from March to June 2023 at Masjid Tanah Health Clinic, Melaka, and Batu 9 Health Clinic, Selangor. Twenty family members of registered MMT clients were recruited using purposive samples, and in-depth interviews using semi-structured questionnaires were done. The audio recordings and verbatim transcriptions were thematically analysed.

Results: Two main themes of family support were identified before the MMT programme; 1) Family members' solidarity; 2) Motivation and encouragement for change. Meanwhile, three main themes of family support were identified after the engagement in the MMT programme; 1) Comprehensive support, empowerment, and guidance; 2) Active involvement and advocacy; 3) Effective communication and stress management.

Conclusion: Family support is vital for the success of drug addiction rehabilitation. Interventions to enhance family comprehension and acceptance of the process are essential. A supportive atmosphere boosts treatment effectiveness, resulting in positive outcomes for individuals, families, and communities affected by opioid addiction.

Poster Abstract P03**The Uptake Rate of Influenza Vaccines and Its Associated Factors Among Asthma or Chronic Obstructive Pulmonary Disease (COPD) Patients in Klang Valley: A Health Belief Model Study**Ainul BMA¹, A Nazmi Z², Aidi Z³, Yee CK⁴, Bavani P⁵,
Tong SF⁶, Maizatullifah M⁷¹Klinik Kesihatan Putrajaya Presint 9; ²Klinik Kesihatan Selayang Baru; ³Klinik Kesihatan Kalumpang; ⁴Klinik Kesihatan Taman Ehsan; ⁵Klinik Mediviron Cyberjaya; ⁶Universiti Kebangsaan Malaysia; ⁷Universiti Pertahanan Nasional Malaysia

Introduction: In Malaysia, the Ministry of Health has recently included patients with CVD risk or pulmonary disease as indication for influenza vaccine. Following this, the uptake rate of Malaysian patients for influenza vaccine is currently not known. The objective of this study is to determine vaccination rate for influenza and its association with sociodemographic factors, and health belief determinants among patients with asthma or chronic obstructive pulmonary disease (COPD).

Methods: We surveyed 200 adults with asthma or COPD undergoing follow up at 5 primary care clinics in Klang Valley. Demographic data, vaccination history and patient's vaccination beliefs recorded via questionnaires based on the Health Belief Model. Data were analysed using univariate and multivariate analysis.

Results: Overall, 200 patients responded to the questionnaire. Influenza uptake rate in the study population was 24%. Employed patients were more likely to have influenza vaccination compared to the unemployed (OR:3.675, 95% CI 1.091-12.378). Recommendations by health personnel increased the uptake rate of influenza vaccination (OR:4.036, 95% CI 1.94-8.4). On the other hand, fear of the side effects of influenza vaccine had caused patients to be less likely to undergone vaccinated (OR:0.408, 95% CI 0.179-0.927).

Conclusion: To improve influenza vaccination uptake among Asthma or COPD patients, individual health beliefs need to be taken into account. They need to be cued to take influenza vaccine and their fears of getting vaccine need to be addressed.

Poster Abstract P04

Knowledge, Attitude and Practices of Healthcare Providers in Putrajaya Public Health Clinics Regarding Management of Gestational Weight Gain

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Introduction: Inappropriate gestational weight gain (GWG) affected both mother and foetus both short-term and long-term. Pregnant women have regular contacts with healthcare providers (HCPs) throughout pregnancy, hence it is important for HCPs to have good knowledge, attitude and practices on GWG. The aim of this study is to determine the level of knowledge, attitude and practices of healthcare providers on GWG.

Methods: This was a cross-sectional study conducted at 4 public health clinics in the Federal Territory of Putrajaya. Ethical approvals were obtained from NMRR (NMRR-20-2961-57855) and MREC UMMC (MREC ID No: 2020623-8800). Self-administered questionnaires were distributed to 220 HCPs which include medical officers, family medicine specialists and nurses. Consents were taken prior to data collection.

Results: Total responders were 171 HCPs. Most participants (70.2%) were aware of GWG but only 45% had training on counselling of GWG. The mean overall score for knowledge was 5.17 out of 10 marks. Respondents have good attitudes towards GWG with a median (IQR) of 19(3) from maximum score of 23. Majority (>60%) have good practice of anthropometric documentation. Age and BMI were negatively correlated with knowledge, attitude and practices. Designation of participants was significantly associated with both knowledge and attitude while awareness of GWG guideline were associated with both knowledge and practices. In addition, frequencies of seeing antenatal patients were associated with knowledge while frequencies of seeing overweight or obese antenatal patients were significantly associated with attitude. Overall, both knowledge and attitude have statistically significant positive correlation with practices of GWG.

Conclusion: This study found good level of knowledge, attitude and practices of gestational weight gain among healthcare providers in Putrajaya health clinics.

Poster Abstract P05

The Quality of Life among People Living with HIV/AIDS in Sandakan District

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Introduction: Human Immunodeficiency Virus (HIV) infection is a global growing pandemic. This study aimed to determine the quality of life among people living with HIV/AIDS (PLWHA) in a resource limited east coast of Sabah.

Methods: This is a two-month cross-sectional study was conducted at a primary care clinic in Sabah. Ethical approval was obtained from NNMR. NNMR ID 23-02027-BQP. PLWHA attending their follow up in Sandakan Health Clinic (SHC) were offered to participate in this study. Written consents were taken from participants. Participants answered a self-administered questionnaire adapted from the Functional Assessment of HIV Infection (FAHI), which evaluated the sociodemographic characteristics, and quality of life for the past 1 week. Data were analysed using SPSS.

Results: A total of 62 participants were included, yielding a response rate of 84.9%. The study yielded a mixed result. Participants reported a good physical and functional well-being, with a mean score of 35.23 and 40.81 respectively. However, participants report lower scores in the domain of emotional and social well-being, with a mean score of 23.37 and 17.55 respectively.

Conclusion: PLWHA who are treated in SHC reported a good quality of life, with an average of total FAHI score of 126. However, many other factors that affect the emotional and social well-being need to be addressed. More research needs to be done to address the social stigma and acceptance of PLWHA in the community.

Poster Abstract P06

Factors That Influence Asthma Control In Pregnant Women With Asthma Attending Primary Care Clinics In Malaysia (FAC-PWM)

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Introduction: A prevalent chronic medical condition during pregnancy, asthma significantly impacts maternal and perinatal outcomes, emphasizing the importance of well-managed asthma.

We aimed to identify factors associated with asthma control during pregnancy

Methods: Medical records and data from self-administered questionnaire of 446 pregnant asthmatic women attending 16 primary care clinics in Selangor, Wilayah Persekutuan, Perak, and Johor were sampled. Using binary logistic regression, we analysed the association between asthma control and sociodemographic characteristics, clinical parameters, organizational support, and patients' knowledge, perceptions, and practices in managing asthma during pregnancy

Results: 82.7% (369/446) of women had controlled asthma, 31.6% (141/446) required treatment escalation while 18.2% (81/446) used SABA only during pregnancy. Participants without anxiety had 7.79 times higher odds of controlled asthma (OR=7.79, 95%CI 2.26, 8.76, $p=0.001$) compared to those with anxiety. Those who did not have exacerbation-requiring hospital admission had 2.16 times higher odds of controlled asthma (OR=2.16, 95%CI 1.88, 5.28, $p=0.032$) while those who did not have exacerbation-requiring out-patient visits had 2.31 times higher odds of controlled asthma (OR=2.31, 95%CI 1.16, 4.58, $p=0.017$). Pregnant women who did not require escalation of treatment had 5.78 times higher odds of controlled asthma (OR=5.78, 95%CI 2.94, 11.38, $p<0.001$). Those not referred to pharmacists were 48% less likely to have controlled asthma (OR=0.52, 95%CI 0.42, 0.89, $p=0.042$).

Conclusion: Our findings emphasize the importance of pre-pregnancy care among women with asthma and the timely escalation of treatment during pregnancy to maintain controlled asthma. Screening for anxiety should be considered for women with asthma.

Poster Abstract P07

Prevalence and Factors Associated with HPV Infection Among Screened Women in Muar Health Clinics

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Introduction: Cervical cancer is the second most prevalent cancer among women and the third leading cause of female cancer deaths in Malaysia. Human Papilloma Virus (HPV) is responsible for the development of cervical cancer. The objective of this study is to determine the prevalence of HPV infection among women in the Muar Health Clinics and its associated factors.

Methods: This was a retrospective cross-sectional study using a secondary record review of all women who underwent HPV DNA testing from 2nd December 2021 until 30th June 2023 in Muar government health clinics. Universal sampling method was used in this study and data was analysed using bivariate analysis to identify the associations of the variables with the prevalence of HPV infection.

Results: A total of 1362 women had undergone HPV DNA testing; of these, 87% of participants underwent self-sampling. Our study found the prevalence of HPV was 5.6%. There was no specific association found between socio-demographic characteristic and the prevalence of HPV infection.

Conclusion: This study has provided baseline information on HPV infection among the population of Muar, which is an essential information in maintaining an effective health screening program. As no single factor was found to be associated with higher prevalence of HPV infection, public health intervention and health education to all women, especially sexually active women are important to increase their participation in cervical cancer screening programs.

Poster Abstract P08

The Association And Predictors Of Disease Profile And Health-Related Quality Of Life (HRQOL) Among Primary Care Patients With Knee Osteoarthritis (OA)

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Introduction: Knee osteoarthritis remains a major cause of morbidity globally. The impact is not limited only to pain, but overall quality of life (QOL). This study aims to determine the mean level of QOL, associated factors, and predictors of QOL using a disease-specific instrument OAKHQOL to look at five domains of QOL; physical activity, pain, mental health, social functioning, and social support. To date, in local population, there is no disease-specific instrument used among primary care patients to assess their QOL.

Methods: This research was approved by MREC of MOH and Research and Ethics Committee of Universiti Kebangsaan Malaysia. Permission for using Malay version of OAKHQOL obtained from corresponding author. 114 knee osteoarthritis patients were involved in this cross-sectional study conducted in a primary health clinic in Hulu Langat District, Selangor. The mean score of OAKHQOL was analysed independently by five domains. Each domain's score was standardized on a scale from 0 to 100, with 0 as the best possible QOL and 100 representing the worst possible QOL.

Results: Physical activity had the highest normalized mean score of 34.41 (21.18) indicating the most affected domain, while social support had the lowest normalized score of 11.98 (16.90). There was a significant association between disease duration and physical health, pain, and social functioning domain of OAKHQOL ($p<0.001$). There was also a significant association between presence of bilateral knee OA and all domains in OAKHQOL ($p<0.001$). For treatment received, only analgesia was found to be associated with physical health and pain domains ($p=0.013$ versus $p=0.014$). Regression analysis revealed that presence of bilateral knee OA was a predictor for worse OAKHQOL in all domains.

Conclusion: Primary care patients with knee OA had poor QOL, particularly in the physical health and pain domains. Early treatment of knee OA following diagnosis, especially in patient education and managing pain is essential to prevent and delay worsening QOL.

Poster Abstract P09

Prevalence and Trend of Anaemia and Haemoglobinopathy among Pregnant Orang Asli Women in Malaysia: A Five-Year Analysis

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Introduction: Anaemia during pregnancy is a global health concern, particularly prevalent among indigenous populations such as the Orang Asli (OA) in Malaysia. Hemoglobinopathies further compound this issue. This study aimed to examine the prevalence of anaemia and hemoglobinopathy and their associated factors among pregnant OA women.

Methods: A retrospective observational cross-sectional study among pregnant OA women in Kuala Kangsar district was done. Medical records of all of pregnant OA women under the follow up in primary care health clinics from 1st January 2018 to 31st December 2022 were reviewed and data were collected using standardized data collection form. Those who were loss to follow up or care transferred to other clinics and those whose pregnancy ended at or less than 24 weeks of gestational age (miscarriage) were excluded. Descriptive, trend analysis and multivariable logistic regression were used for data analysis.

Results: A total of 766 women were included. The prevalence of anaemia during pregnancy was 44.6%, with 9.4% prevalence at term. Hemoglobinopathy was prevalent in 22.7% of pregnant OA women, with a significant increase observed over the past five years. The most common hemoglobinopathy identified was HbE heterozygous or trait (14.5%), while 7.2% were classified as HbE homozygous. HbE homozygous status (aOR=7.38 [95%CI: 2.74, 19.89], P<0.001) and parenteral iron dextran use (aOR=3.19 [95%CI: 1.30, 7.80], P=0.011) were associated with anaemia before delivery among pregnant OA women.

Conclusion: There is a high prevalence of anaemia and hemoglobinopathy among pregnant OA women. Identification of associated factors supports strategies for early screening with appropriate management of anaemia and hemoglobinopathy to improve maternal and foetal health.

Poster Abstract P10

A 5-year Evaluation Study On Retention Rate Among Patients Attending Methadone Replacement Therapy (MRT) In Kuala Selangor District, Malaysia

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Introduction: There is concerning trend of opiate users worldwide. In Malaysia, 25% of substance abusers were using opiates. However, the data on retention rate in Malaysia were scarce. Thus, this study was conducted to evaluate 5-year retention rate and factors associated with 1-year retention status among patients receiving MRT in Kuala Selangor.

Methods: This was a retrospective cohort study design and universal sampling was done. All 147 patients who received MRT in the Methadone Registry Database from January 2019 to April 2023 were included. The exclusion criteria were pregnant ladies and incomplete patient records. 34 records were not found and no missing data thus SPSS analyses were performed on 113 patients. 3-sets of questionnaires were used; patient's demographic, Opiate Treatment Index(OTI) and WHO Quality of Life(WHOQOL)-Brief.

Results: Retention rate of all patients in 2019 after a year of follow-up were 100%(81/81). Subsequent years as follows: 2-year 91.3%(n=74),3-year 85%(n=69),4-year 81.5%(n=66) and 5-year 76.5%(n=62). Factors associated with retention status at 1-year were WHOQOL-Brief physical domain(OR:0.615,CI:0.424-0.890) and two sections from OTI; social functioning(OR:0.857,CI:0.751-0.979) and health (OR:1.792, CI:1.046-3.070). Distance, education, employment and marital status were not significant in the study.

Conclusion: Retention rate was decreasing in trend over 5 years. Patients with poor physical perception of QOL and higher degree of dysfunction in the health were more likely to remain in the program. Poor social function leads to poor retention in the MRT. Knowing this, addressing their health condition and building up resources for social support during consultation is the key to ensure their continuity in follow-up.

Poster Abstract P11

Association of Adherence To Oral Anti-Diabetic Medication With Good Glycemic Control (HbA1c) Among Patients With Type 2 Diabetes Mellitus

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Introduction: T2DM patients with good adherence to oral anti-diabetic drugs (OADs) tend to be associated with better glycemic control as well as can reduce the risk of microvascular and macrovascular complications that can be life-threatening. This study aimed to evaluate the level of adherence to oral anti-diabetic medication associated with their level of glycemic control (HbA1C) among patients with type 2 diabetes mellitus at Klinik Kesihatan Rembia.

Methods: A quantitative cross-sectional survey was conducted by using the self-administered questionnaire as the research tool. The purposive sampling technique was used to recruit 160 T2DM patients. All the primary collected data were analyzed using the SPSS Version 25.

Results: Majority of respondents have high adherence to oral anti-diabetic medication (91.3%). More than half (60.6%) of respondents showed poor glycemic control having HbA1C

more than 6.5% or having diabetes. There is also a significant difference between the level of adherence and glycemic control ($p=0.057$) but there is no relationship between both variables. This study also found out that gender ($p=0.058$), race ($p=0.010$), occupation ($p=0.010$), and family history ($p=0.015$) influence the level of adherence to oral anti-diabetic medication while education level ($p=0.039$) and participant anti-diabetic therapy ($p=0.007$) give influence to glycemic control (HbA1C).

Conclusion: Even though the T2DM patients adhered well to the oral anti-diabetic medication, most T2DM patients still demonstrated poor glycemic control. Thus, appropriate health education should be provided to the patients to promote self-care behavior, which may enhance the T2DM patients' implementation of healthy lifestyles in promoting reasonable glycemic control.

Poster Abstract P12

Screening for Overweight and Obesity Utilizing Bioelectrical Impedance Analysis in the Health Clinic Setting

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Introduction: The prevalence of overweight and obesity are increasing worldwide. Malaysia CPG had suggested the use of body composition assessment, measuring body fat percentage using bioelectrical impedance (BIA) to complement standard BMI and waist circumference. A clinic based body composition screening was conducted in conjunction with World Obesity Day 2024. The aim was to look at the prevalence of obesity and study the association between BMI and BF% among participants.

Methods: A total of 161 adults consented and participated in the screening which included BMI measurement and BIA using Omron HBF375 Scan (2021). Measurement was performed according to standard protocol and the result was analyzed using SPSS version 27.0.

Results: The mean age is 38.70 + 11.28 years with 75.9% are female. The mean weight, BMI and BF% are 70.49 + 17.03 kg, 27.93 + 6.04 kgm⁻² and 33.84 + 6.69 % respectively. Based on BMI, 77.2% are overweight and 49.38% are obese while 74.07% have high BF%. The likelihood of having overweight and obesity (by BMI standard) are significantly eleven times (OR 11.26 [95% CI 4.46–28.39]) and fifteen times (OR 14.63 [95% CI 4.77 – 44.83]) higher among those who have high BF% as compared to those who have normal BF%. In addition, the mean visceral fat (VF) and skeletal muscle (SM) are 11.79 + 7.26 and 25.20 + 3.70.

Conclusion: BIA can corroborate the screening of obesity in clinic setting with the advantage of concomitant monitoring of VF and SM level in weight management program.

Poster Abstract P13

Knowledge and Attitude on COVID-19 Infection In Pregnancy And Its Associated Factors Among Pregnant Women In Kota Bharu, Kelantan

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Introduction: COVID-19 infection in pregnancy has a significant impact on maternal and fetal health. Understanding the knowledge and attitudes among pregnant women is important to determine strategies to prevent transmission of COVID-19. This study aims to determine the level of knowledge and attitude among pregnant women in Kota Bharu towards COVID-19 infection during pregnancy.

Methods: This was a cross-sectional study conducted among 274 pregnant women who attended antenatal clinic in Hospital Raja Perempuan Zainab II, Kota Bharu, Kelantan in March 2023. Data on their socio-demographics, pregnancy, medical history, COVID-19 infection, and vaccination status were taken. The main outcome was assessed using a newly validated Knowledge and Attitude on the Effect of COVID-19 Infection on Pregnancy (KACIP) Questionnaire. This questionnaire comprises three domains for knowledge and two domains for the attitude section.

Results: The proportion of pregnant women with good knowledge and positive attitudes were 47.4%, and 46.0% respectively. History of COVID-19 infection [adjusted OR 1.71 (95% CI:1.03-2.86)] and higher education level [adjusted OR 1.69 (95% CI 1.02-2.81)] were associated with good knowledge about COVID-19 infection in pregnancy. Meanwhile, a high education level [adjusted OR 1.96 (95% CI:1.14-3.38)] and good knowledge of COVID-19 infection in pregnancy [adjusted OR 2.81 (95% CI: 0.168-4.69)] were associated with positive attitudes among pregnant women towards COVID-19 infection.

Conclusion: Pregnant women in Kota Bharu still have inadequate knowledge and have low levels of positive attitudes towards COVID-19 infection in pregnancy. This highlights the need for aggressive health promotion among pregnant women in Kelantan.

Poster Abstract P14

Physical Activity Level and Sitting Time Between Esports Players and Non-esports Players

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Introduction: The number of esports players has been steadily increasing over the last decade. Esports' low levels of physical activity and prolonged sitting time increase the risk of non-communicable diseases. There are few studies on esports players' physical activity levels, sitting time, particularly in Southeast Asia. The objective of this study was to investigate the physical activity level and sitting time of esports players and compare with non-esports players.

Methods: This was a cross-sectional match control study. Twenty-six male esports players and non-esports players between age of 18 to 35 years participated. Physical activity level and the weekly physical activity time were assessed using the International Physical Activity Questionnaire–Short Form (IPAQ-SF) and a standardized clinical research form respectively.

Results: Esports participants reported no vigorous intensity physical activity per-week. The total duration of physical activity per week between the 2 groups was comparable. A significant association between playing esports and not fulfilling the WHO physical activity level recommendation ($p=0.024$) was noted. Esports participants reported significantly ($p=0.016$) longer sitting time per day compared to non-esports participants

Conclusion: Majority of esports players did not achieved the recommendation WHO physical-activity level and could be considered as physically inactive with prolonged sitting time. Identifying factors that could adversely affect esports players' future is important as much as instilling preventive measures.

Poster Abstract P15

Regional Variations in Postpartum Glucose Intolerance: A Retrospective Cohort Study in Terengganu

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Introduction: Postpartum glucose intolerance significantly impacts maternal health, yet regional prevalence data remain underexplored, especially in Terengganu's population. This study aimed to determine prevalence of postpartum glucose intolerance in women diagnosed with gestational diabetes mellitus (GDM) in Terengganu.

Methods: This epidemiological study utilized a retrospective cohort design, analyzing data from 600 women previously diagnosed with GDM between January 2021 and December 2022. Conducted in 16 primary health clinics across eight districts of Terengganu, the research focused on assessing the prevalence of postpartum glucose intolerance through secondary data sourced from Maternal Health Records (clinic copies). The data was analyzed using SPSS software Version 23 and was expressed as frequency and percentages.

Results: In this study, it was found that 19% (114 out of 600) of the women have postpartum glucose intolerance. The incidence rates varied significantly by district, with Setiu recording the highest prevalence at 18.4% ($n=21$), followed by Kuala Terengganu at 14.9% ($n=17$), and Kuala Nerus at 14.0% ($n=16$). Both Besut and Marang reported rates of 12.3% ($n=14$) each, Dungun at 10.5% ($n=12$), Hulu Terengganu at 9.6% ($n=11$), and Kemaman the lowest at 7.9% ($n=9$).

Conclusion: This data highlights regional variations in postpartum glucose intolerance within Terengganu. Further research is recommended to explore the predictive factors and to develop localized strategies for prevention and management.

Poster Abstract P 16

Delineating Epidemiological Features of Prediabetes and Its Progression Trends Among Adults in Terengganu Health Clinics

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Introduction: The growing diabetes epidemic highlights the importance of understanding prediabetes as an early stage of metabolic disturbances. This study investigates the sociodemographic, medical comorbidities and clinical outcomes of prediabetes patients in Terengganu.

Methods: In this retrospective cohort study, 705 adults who were diagnosed with prediabetes from 2019 to 2022, were evaluated at 28 health clinics in Terengganu. Utilising the patients' health records, variables collected at the point of diagnosis include race, age, sex, marital status, occupation, smoking status, and comorbidities. Their clinical outcome either reversion to normoglycemia, stable prediabetes or progression to diabetes was determined using HbA1c level taken within 6 months to 2 years of follow up in the health clinics.

Results: Of all the prediabetes patients, 98% ($n=689$) were Malay, majority were female ($n=485$, 69%) with a median age of 61 years (IQR 17). Majority were non-smokers ($n=628$, 89%). High prevalence of hypertension ($n=599$, 85%), dyslipidaemia ($n=580$, 82%), and obesity ($n=361$, 51.2%) were noted among the subjects. 35% ($n=249$) of them had family history of diabetes. Within 6 months to 2 years after the diagnosis, majority ($n=417$, 68.9%) remained in prediabetic state, and 18.5% ($n=112$) progressed to diabetes mellitus. Only 29.1% ($n=176$) of the prediabetes patients reverted to normoglycemia.

Conclusion: The high prevalence of prediabetes and its progression to diabetes mellitus in this study highlights the critical need for aggressive health strategies such as community-based interventions that focus on lifestyle modifications along with early therapeutic measures, are crucial to retard the progression to diabetes mellitus.

Poster Abstract P17

Hypoglycemia And Its Associated Factors Among Type 2 Diabetes Mellitus Patients In Primary Care Clinics In Petaling District, Malaysia During Ramadan

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Introduction: Hypoglycemia events (HE) among Type 2 diabetics (T2DM) is a common complication during Ramadan. Incidence of HE varies and mostly from tertiary centres. The

objective of this study is to determine the proportion of HE and its associated factors among T2DM attending primary care clinics in Petaling District, Malaysia during Ramadan.

Methods: A prospective cross-sectional study was conducted in seven government primary care clinics in Petaling District from March to July 2022, using systematic random sampling. Muslims adults with T2DM for > 3 months with medication were included with those pregnant excluded. Data collection via telephone interview using standardized questionnaires. Chi square and multiple logistic regression were used to identify associated factors for HE.

Results: 233 out of 260 respondents fasted. Among those fasted, 21% (n=49) experienced hypoglycemia with 77.6% having <6 episodes in which 44.9% were from the high-risk group. Bivariate analysis showed age group, insulin use, HbA1c level and fasting risk status associated with HE. Multiple regression analysis showed that those aged 60-69 who fasted during Ramadan have almost 70% lower risk of developing hypoglycemia compared to those aged <50 (aOR 0.30, p=0.01, 95% CI 0.12-0.75) whereas fasting risk group, insulin usage and HbA1c level were not associated with HE.

Conclusion: The incidence of HE in this study was higher than most studies worldwide. HE in this study was more likely to occur among those aged <50 compared to the elderly (aged 60-69). Further studies are needed to explore the reasons for HE among the younger ones.

Poster Abstract P18

Awareness, Attitude And Utilisation Of Social Media By Primary Care Doctors For Health Education In Malaysia

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Introduction: Social media use in healthcare is growing, affecting communication, patient engagement, and professional interaction. However, the extent of its use among primary care doctors (PCDs) in Malaysia is underexplored. This study aimed to investigate the awareness, attitudes, and utilization of social media for health education among Malaysian PCDs and explore the factors affecting its utilization.

Methods: This was a cross-sectional survey among 1072 PCDs in Johor Bahru and Kulai districts. A 33-item questionnaire was distributed via WhatsApp application and physical visits. It covers the participants' demographics, their awareness on using social media for public health education, their attitudes and utilisation towards that purpose. Attitude domain was gauged using a 5-point Likert scale. Descriptive and logistic regression analysis were performed.

Results: 326 responses were received at a response rate of 30.4%. 58.3% of PCDs utilised social media to provide health education to the public. Working in the private sector (OR=1.97, 95%CI [1.03, 3.08]), being aware of health-related information on social media via reading (OR=11.34, 95%CI [2.35,54.7]) and having a positive attitude (OR=2.18, 95% CI[1.32,3.6]) were significantly associated with utilisation of social media for health education.

Conclusion: PCDs are aware of using social media for health education, and half have a positive attitude towards this. Only half of the doctors in our study use social media to promote health education to the public, and majority are from the private sector. Future research should focus on exploring the facilitators and barriers to utilising social media for public health education among PCDs.

Poster Abstract P 19

“Unveiling The Hepatitis C Puzzle: What Drives Infection Among Inmates of Pusat Pemulihan Akhlak Muar?”

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Introduction: Hepatitis C Virus (HCV) infection is a significant global health concern, affecting millions worldwide, including a considerable segment of the undiagnosed and untreated population in Malaysia. Despite the high prevalence of risk behaviours, there is still limited information on the prevalence and associated factors of Hepatitis C infection among inmates in Malaysia. This study aims to evaluate the prevalence of Hepatitis C infection among inmates in Pusat Pemulihan Akhlak Muar, characterize the socio-demographic profile of Hepatitis C patients, identify transmission factors, and assess co-infections with Hepatitis B and HIV.

Methods: A cross-sectional study using random proportionate sampling was conducted among 294 inmates between 2021 and 2022. Data from patient records were analysed using IBM SPSS Statistics Version 24, with statistical significance set at p < 0.05. Independent T-tests and Chi-square tests were employed to assess variable associations.

Results: Out of 294 participants, 45 (15.3%) had Hepatitis C. Most infected were Bumiputera (82%, p<0.05) with primary education or below (23.7%, p<0.05). Among those infected with Hepatitis C, 81.6% (p<0.05) had a history of injecting drugs, and 3.8% (p<0.05) had tattoos. Both injecting drug use and having tattoos were found to be significantly associated with the infection.

Conclusion: This study reveals a high prevalence of Hepatitis C among inmates at Pusat Pemulihan Akhlak Muar, underscoring the urgent need for targeted prevention and screening programs, including education, testing, and treatment tailored for incarcerated populations.

Poster Abstract P20

Views And Experiences of Primary Care Doctors of Klang Valley In Conducting Travel Health Consultation.

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Introduction: The primary aspect of travel medicine is the pre-travel health assessment of travellers including risk assessment and vaccinations. This study aims to explore the views and experiences of Primary Care Physicians (PCPs) in conducting travel health consultations, and the barriers in establishing travel medicine in Malaysia.

Methods: A qualitative study was conducted among 15 PCPs across Klang Valley via semi structured interview at the respective clinics or via virtual platform. The participants with clinical experience were recruited via a snow-balling method, regardless of experience in travel medicine.

Results: 15 PCPs from the government health clinics, private sector and teaching hospitals in Klang Valley were recruited. Four themes emerged from this study: (1) variation in understanding travel health consultation; (2) limited awareness on travel health consultation among travelers; (3) lack of training and resources for PCPs; and (4) to establish travel medicine services in government healthcare facilities. Some of the PCPs addressed the importance of pre-travel itinerary specific consultation. Most PCPs shared that the low demand for travel medicine services are due to poor awareness among travellers and the lack of training among PCPs. The PCPs suggested to expand the services in government health clinics in view of larger pool of high-risk patients and the significance was seen during the Covid-19 pandemic.

Conclusion: This study reveals that travel medicine in Malaysia is at an early stage. PCPs should work with stakeholders to increase awareness among public and produce trained PCPs to mitigate the burden of public health.

Poster Abstract P21

Mammogram Screening Uptake and Its Associated Factors among Female Staff in Health Campus, Universiti Sains Malaysia, Kelantan, Malaysia

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Introduction: Mammogram is a proven, effective screening tools for early breast cancer detection. Nevertheless, there is a low prevalence of mammogram uptake among Malaysian women. Health staff plays an important role to increase and promote this mammogram awareness. Therefore, this study was done to determine the prevalence of mammogram practice and its associated factors among female staff in health campus.

Methods: A cross-sectional study was conducted among 260 female staff aged 50 years old and above in Health Campus, Universiti Sains Malaysia. The data collection was acquired by a self-administered questionnaire (sociodemographic, medical factors, knowledge and health belief) and the Viarad online system to trace the mammogram findings

Results: 135 staff (51.9%) had done the mammogram screening in the health campus. 105 (77.8%) of them were in category BI-RADS 0, 1 and 2. By using statistical analysis simple logistic regression (SLR) and multiple logistic regression (MLR), we found the most significant associated factors were age, clinical breast examination (CBE), level of knowledge and physician recommendation.

Conclusion: This study showed the prevalence of mammogram screening uptake among female staff was only 51.9% even though the service is free, readily available and accessible. Older age group, clinical breast examination (CBE), physician recommendation and knowledge were the main associated factors for mammogram screening uptake in female staff in this hospital. The education programme to improve knowledge and the role of a physician in promoting mammogram screening among staff should be addressed.

Poster Abstract P22

COVID-19 Vaccine Hesitancy among Parents of Children aged 5-11 years old in Klang Valley - A cross sectional study

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Introduction: At present, parents are hesitant to vaccinate their children against COVID-19 due to the circulation of conflicting information about the vaccine on social media. This has caused confusion among parents regarding childhood COVID-19 vaccination. This study aimed to assess the prevalence of parental COVID-19 vaccine hesitancy and its contributing factors.

Methods: We conducted a cross-sectional study from the 1st of February to 31st of March 2023. Convenience sampling was used to select participants. Data was collected using "JotForm", a self-administered anonymous online questionnaire, which has three sections with total of 54 questions.

Results: Of the total completed questionnaires, 45.9% participants (n= 371) were in the hesitant group. In the univariate analysis, general mistrust in vaccines, less perceived safety and efficacy of the vaccine as well as misconceptions about COVID-19 infections led to a higher vaccine hesitancy. After excluding the confounding factors, we found that age of children, parent's education level, knowledge about COVID-19 infection, perception of safety towards the vaccine, general mistrust in

vaccines and physician recommendations were significantly associated with vaccine hesitancy.

Conclusion: In conclusion, almost half of the participants were hesitant to have the vaccine administered to their children. A number of participants had misconceptions and mistrust towards the vaccine, and many had doubts about the safety and efficacy of the vaccine. Despite the challenges faced, health care practitioners together with government authorities should continue to create awareness and provide updated scientific information regarding the COVID-19 vaccine in order to reduce vaccine hesitancy.

Poster Abstract P23

Coping With Workplace Violence: A Qualitative Study Among Primary Healthcare Workers In Alor Setar

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Introduction: The incidence of workplace violence is high in both hospital and primary care settings, leading to emotional, psychological, physical, and work-related consequences that can impact organizational efficiency and the quality of patient care. This study aims to explore the coping experience of workplace violence among primary healthcare workers and the subsequent effects on their work.

Methods: A qualitative study utilizing in-depth interviews was conducted among primary healthcare workers, including medical officers (n=7), family medicine specialist (n=1), assistant medical officers (n=5), nurses (n=4), and community nurse (n=1) in Alor Setar. The interviews were transcribed verbatim and analysed using thematic analysis.

Results: Three major themes emerged: 1) internal coping, 2) external support, and 3) affect work outcome. Primary healthcare workers predominantly utilized emotion-focused coping strategies and sought superior support when personal coping was insufficient, or safety was threatened. Despite this, many perceived a lack of support from superiors. Underreporting of incidents was common, driven by fears of negative repercussions, beliefs that reporting would be futile, and limited knowledge of reporting procedures. While many healthcare workers managed to cope well, some struggled with emotional regulation, leading to decreased focus, and compromised quality of work and patient care. Conversely, some workers reported developing greater emotional maturity and positivity following such experiences.

Conclusion: Primary healthcare workers require training and education for effective coping and dealing with workplace violence. Increased awareness of workplace violence and reporting should be promoted. In addition, the reporting process and the management of reported incidents should be improved.

Poster Abstract P24

Comparing The Efficacy of the Timing of Intravenous Parenteral Low Molecular Weight Iron Dextran (LMWID) In Treating Iron Deficiency Anaemia in Antenatal Mother During Second versus Third Trimester in Pregnancy in Klinik Kesihatan Larkin Johor Bahru: A Retrospective Study

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Introduction: Iron deficiency anaemia (IDA) is the most common cause of anaemia in pregnancy and there are variations of local practice regarding the timing of parenteral iron given during pregnancy. This retrospective study aims to compare the efficacy of the timing of parenteral intravenous low molecular weight iron dextran (LMWID) in treating IDA during second or third trimester.

Method: All pregnant women with IDA treated with parenteral LMWID during second or third trimester in 2023 at our institution were included. The main outcome measured were resolution of anaemia at 36 weeks of gestation (hb>11g/dl)

Result: The study included 30 patients who received parenteral LMWID during second or third trimester in pregnancy. In total, 26.67% (n=8) received LMWID during second trimester versus 73.33% (n=22) in third trimester. Haemoglobin level was taken at the pre-parenteral LMWID, two weeks after completion and at 36 weeks of gestation.

The mean haemoglobin for pre-parenteral LMWID for second trimester is 9.17±0.78g/dL and for third trimester is 9.93±0.49g/dL. Mean haemoglobin after two-week completion of LMWID for second and third trimester is 10.61±0.51g/dL and 10.66±0.66g/dL respectively. The resolution of anaemia for second trimester is 62.50% (n=5) while for third trimester is 68.18% (n=15), however the difference observed is not statistically significant (p=0.085)

Conclusion: Within the limitation of this study, there is minimal difference in resolution of anaemia with regards to the timing of parenteral LMWID given, however the difference is not statistically significant. Therefore, further study should be done to ascertain the optimal timing of LMWID administration for IDA in pregnancy.

Poster Abstract P25

Prevalence Of Premature Ejaculation And Its Associated Factors Among Men Attending Government Health Clinics in Kuantan, Pahang

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Introduction: Premature ejaculation (PE) is a common sexual dysfunction affecting men globally, often under-diagnosed and untreated. Its prevalence varies across different socio-cultural and geographical settings. The study objective to determine the

prevalence of PE and its associated factors among men attending health clinics in Kuantan, Pahang.

Methods: A six-month cross-sectional study (March 2023 – August 2023) was conducted at twelve health clinics in Kuantan, Pahang. The selected respondents were sexually active men over 18 years old, excluding those with psychiatric illness or illiteracy. Data were collected using questionnaires on sociodemographic, medical history, the validated Malay version Premature Ejaculation Diagnostic Test (PEDT), and the Depression, Anxiety and Stress Scale (DASS-21). PE was defined as a PEDT score above 9. Descriptive analysis and simple and multiple logistic regression were performed using SPSS.

Results: Out of 300 eligible men, 287 responded (95.7% response rate). The prevalence of PE was 32.4% (n=93), with 17.8% (n=5) classified as probable PE and 14.6% (n=42) as PE. Logistic regression showed statistically significant associations of PE with stress [AOR (95% CI): 3.83 (1.33 – 11.00); p-value = 0.013] and anxiety [AOR (95% CI): 2.60 (1.29 – 5.25); p-value = 0.008].

Conclusion: The study revealed a high incidence of PE among men, potentially linked to stress and anxiety. Raising awareness among the public and healthcare providers could improve detection rates in primary care. Therefore, routine PE screening is recommended for men attending health clinics as well as for those exhibiting stress and anxiety. Such measures would facilitate early diagnosis and treatments.

Poster Abstract P26

MAwar Web Application to Increase Intention for Breast and Cervical Cancer Screenings in Three Primary Care Health Clinics in Klang, Malaysia

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Introduction: Regular screenings for breast and cervical cancers for early detection remains low in Malaysia. Digital health interventions offer promising solutions to enhance screening intention. We evaluated a MAwar web application to increase intention for breast and cervical cancer screenings.

Methods: A pre-post study design was conducted among women attending 3 primary care clinics in Klang, Malaysia. The intervention was a web-based application to Motivate and raise Awareness on screening of breast and cervical cancers (MAwar app). Women aged ≥20 years and sexually active, or aged 50-

75 years old, regardless of previous/current sexual activities participated in this study. We collected at baseline (socio-demographic, health information, knowledge on breast and cervical cancers' risk factors, barriers to screening and intention and uptake for breast and cervical cancer screenings) and at 3 month follow-up (knowledge on breast and cervical cancers' risk factors, barriers to screening and intention for breast and cervical cancer screenings). We analysed the data using Chi-square and McNemar tests with a significant level of p<0.05.

Results: We recruited 654 eligible women with 637 women completing the 3 month follow up (97.4% retention rate). At 3-month post-intervention, there was a significant improvement in screening intention for breast cancer (p<0.001) and for cervical cancer (p<0.001), knowledge of cervical cancer risk factors (p<0.001), and perceived barriers to screening (p<0.001).

Conclusion: The MAwar application showed significant improvement in the intention for breast and cervical cancer screenings, demonstrating the potential for user-centred digital health interventions in promoting health behaviours aimed at increasing cancer screening rates.

Poster Abstract P 27

Development of Pictorial Asthma Action Plan

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Introduction: Asthma action plans are used to support self-management and have been shown to improve clinical outcomes. Pictorial asthma action plans (PAAP) have the potential to benefit all patients regardless of their health literacy. We aimed to develop a culturally tailored PAAP to support patient self-management.

Methods: A literature review was performed to inform the content of the plan. The PAAP was then designed by a graphic designer. An expert panel consisted of two respiratory physicians and three family physicians was invited to assess the relevance and clarity of the PAAP contents and graphics using a structured questionnaire. The item content validity index (I-CVI) was used for the assessment. Public, patients and healthcare providers were also invited to review the PAAP.

Results: Two pictorial asthma action plans were developed: one for the preferred track (The use of combination budesonide and formoterol as preventer and reliever) and another for the alternative track (The use of inhaled corticosteroid as preventer and short-acting beta-agonist as reliever) according to GINA and Malaysia Clinical Practice Guideline for Management of Asthma. The contents and graphic designs of the PAAP had I-CVI ranging from 0.83 to 1.00 (satisfactory). The PAAP was amended based on the expert feedback and the revised version was presented to the public, patients and healthcare providers. Subsequently the wording was further refined for ease of patients' understanding.

Conclusion: The two PAAPs developed for the preferred and alternative track according to GINA and Malaysian CPG for asthma are valid with successful engagement from various stakeholders.

Poster Abstract P 28

The Practice Of Diabetic Retinopathy Screening In Relation To Knowledge And Attitude Of Diabetic Retinopathy Among Doctors In Primary Care Malaysia: A Cross-Sectional Study

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Introduction: Diabetic retinopathy is one of the treatable complications of diabetes mellitus. Knowledge and practice of primary care doctors are important to ensure early screening to prevent disease progression. We assessed the practice of diabetic retinopathy screening in relation to the knowledge and attitude of diabetic retinopathy of primary care doctors in Malaysia and the association of practice with sociodemographic characteristics.

Methods: This cross-sectional study was conducted among 390 primary care doctors throughout Malaysia using a self-administered online-based questionnaire. A set of 32 questions comprising three sections were used. Good knowledge, attitude, and practice levels were defined when the response rate was more than 80% of the correct response for the assessed domains. The association of sociodemographics and practice was tested with non-parametric tests using Mann-Whitney and Kruskal-Wallis, followed by Spearman correlation analysis. The p-value of <0.05 was taken as significant.

Results: Our survey found that 284 (72.8%) had a good level of knowledge, 350 (89.7%) had a good level of attitude and only 117 (30%) of respondents had a good level of practice. There was a moderate correlation between practice and attitude ($r_s = 0.7$, $p < 0.001$). However, practice and knowledge had no significant correlation ($r_s = 0.08$, $p : 0.87$).

Conclusion: Primary care doctors in Malaysia showed good levels of knowledge and attitude but not for good practice. An exploratory study is needed to look at the contributing factor and other barriers to good practice in diabetic retinopathy among primary care doctors in Malaysia.

Poster Abstract P 29

Effectiveness of Diabetic Retinopathy E-Module to Improve Diabetic Retinopathy Detection Rate Among Primary Care Doctors

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Introduction: Diabetic retinopathy (DR) is the leading causes of blindness in diabetic patients. Training efforts is an important component in improving DR screening. We aimed to assess the improvement in DR detection rates among primary care doctors after training with the online DRS e-module.

Methods: This pre and post intervention study involved 50 doctors from the Master of Family Medicine UKM program (2021/2022), selected via stratified random sampling. Sociodemographic data were collected, and participants completed a Google Form questionnaire with 35 funduscopy images, each representing different stages of DR- mild, moderate or severe non proliferative diabetic retinopathy (NPDR), proliferative DR, maculopathy, advanced diabetic eye disease and normal eye. Subsequently participants were trained with the Diabetic Retinopathy Screening module (DRS e-module), developed by the College of Ophthalmologists Malaysia, to be completed within 1 month. The same questionnaire was given 2 weeks post completion.

Results: 47/50 participants completed the study (94% response rate). Majority were clinic-based (59.6%) had mean (SD) of 9 (2.28) years of practice and 89.4% never received funduscopy training. There was significant improvement in the total mean (SD) score pre and post intervention [(17.64(5.95) vs 22.91(5.11)], out of a possible maximum score of 35, ($p < 0.001$). Detection of DR stages significantly increased post intervention for normal eye ($p = 0.001$), mild (NPDR) ($p < 0.001$), moderate NPDR ($p < 0.001$), severe NPDR ($p = 0.007$), PDR ($p = 0.028$) and diabetic maculopathy ($p < 0.001$).

Conclusion: The detection rate of DR among primary care doctors significantly improved post-intervention. Thus, the DRS e-module shows potential for improving the DR detection rate among primary care doctors.

Poster Abstract P 30

Prevalence of erectile dysfunction and its associated factors among male type 2 diabetes mellitus patients with chronic kidney disease in Hospital Universiti Sains Malaysia, Kelantan

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Introduction: Diabetes mellitus (DM) and chronic kidney disease (CKD) are factors that contribute to male sexual dysfunction. This study aimed to determine the prevalence of erectile dysfunction (ED) and its associated factors among male type 2 DM patients with CKD in Hospital Universiti Sains Malaysia (HUSM), Kelantan.

Methods: A cross-sectional study involving 240 randomly selected male participants with DM and non-dialysis dependent CKD from the family medicine clinic and nephrology clinic in HUSM was conducted from July 2023 to November 2023. Participants answered self-administered questionnaires comprising of socio-demographic and clinical characteristics, Hospital Anxiety and Depression Scale and International Index for Erectile Function 5.

Results: The overall prevalence of erectile dysfunction was 95% with a division of severe (19.6%), moderate (10%), mild-moderate (41.7%), and mild (23.8%). Multivariate analysis showed that taking metformin is 6.636 times more likely to get ED (CI = 1.544 – 28.525, $p = 0.011$). Patients with an increase in 1 mmol of serum urea are 1.567 times more likely to get ED (CI = 1.1 – 2.231, $p = 0.013$). The odds of developing ED in patients with a 1% increase in HbA1c is 1.75 times (CI = 1.085 – 2.824, $p = 0.022$) and patients with tertiary education are 0.214 times less likely to get ED compared to non-tertiary education (CI = 0.052 – 0.879, $p = 0.032$).

Conclusion: The prevalence of erectile dysfunction among DM with CKD patients is very high. Considering the high prevalence of ED in CKD patients, physicians should address their sexual health during consultation.

Poster Abstract P31

Are Medication Choices In Primary Care Enough? A Five-Year Analysis of Diabetes and Cardiovascular Disease in Perak

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Introduction: Secondary prevention medications (SPM) and effective control of cardiovascular risk factors (RF) are crucial to reduce the risk of recurrent cardiovascular events, particularly in high-risk individuals like those with diabetes. This study aimed to analyse the trends in SPM prescriptions and identify factors associated with RF control among patients with diabetes and cardiovascular disease in health clinics in Perak.

Methods: Data on patients with ischemic heart disease (IHD) and cerebrovascular diseases (CeVD) audited between 2018 and 2022 were extracted from the National Diabetic Registry, excluding those lost to follow-up. Descriptive and trend analyses were conducted. Multivariable logistic regression was done to identify factors associated with RF control

Results: 2307 patients were included, with a majority aged ≥ 60 years (76.7%) and of Malay ethnicity (62.3%) with IHD

(78.0%). 28.1% of them have CeVD. SPM prescriptions have increased significantly by 9.5-11.9% over the past five years. Among the three main RF controls, the least number of patients (10.6%) achieved lipid control, whereas the majority (63.3%) had good diabetes and blood pressure (BP) control. Statin was associated with BP control (aOR=0.64 [95%CI: 0.43, 0.95], $P=0.027$) but not lipid control [OR=1.11 (95%CI: 0.86, 1.44), $P=0.414$]. Good diabetes control was associated with two or three or more glucose-lowering drugs.

Conclusion: SPM prescriptions have increased over time, but the achievement of treatment targets, particularly for lipid control, has remained low and unchanged. The use of statins is not associated with lipid control. It is necessary to improve the availability of alternative lipid-lowering drugs to enhance overall RF and lipid control in very high-risk patients.

Poster Abstract P32

Frailty and Its Association with Quality of Life: A Cross-sectional Study Among Elderly Patients in A Primary Care Clinic

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Introduction: Frailty is a common condition among elderly patients that is characterised by a decline in physical function and an increased vulnerability to stressors. The quality of life (QoL) in elderly is affected by multiple factors, including their health. This study aims to determine the prevalence of frailty and its association with QoL among elderly patients attending a primary care clinic.

Methods: A cross-sectional study was conducted in a university primary care clinic between December 2023 and March 2024. Elderly patients aged 60 years and above were recruited. Sociodemographic data were recorded via face-to-face interview and clinical data were obtained from medical records. Frailty was assessed using the Fried frailty phenotype, and QoL was assessed using the validated 26-items WHOQOL-BREF questionnaire.

Results: A total of 230 patients were recruited. Mean age of the participants was 66.9 ± 5.05 years, with equal male and female participants (50%). Majority were Malays (80.4%). About one-third of the participants were frail (30.9%) and 52.2% were pre-frail. Overall mean QoL score was 73.62 ± 13.25 . Being frail is significantly associated with decrease in QoL score ($\beta = -17.87$, $p < 0.001$). This model explained 39% of the variance in QoL score.

Conclusion: This study found that one-third of elderly patients in the primary care clinic were frail, and frailty was significantly associated with a lower QoL. The results underscore the need for early identification and management of frailty to enhance QoL among elderly populations. Implementing targeted interventions in primary care settings could help mitigate the negative impact of frailty on QoL.

Poster Abstract P34

Retrospective Study On Treatment Outcome Of Direct Acting Antiviral (Daa) Among Hepatitis C Primary Care Patients From Year 2020 To 2022 In Sarawak

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Introduction: Direct-acting Antivirals (DAAs) had been started in primary healthcare clinics in Sarawak since 2020. This study aims to examine the socio demographic characteristics of patients treated with DAAs, their Hepatitis C Virus Sustained Virologic Response post-12 weeks treatment (HCV SVR-12) and factors associated with SVR-12 achievement.

Methods: This study examined Hepatitis C patients from 22 family medicine specialist (FMS)-led primary healthcare clinics in Sarawak, retrospectively from year 2020-2022. Non-cirrhotic (APRI score of ≤ 1.50) and non-Hepatitis B/HIV patients were enrolled, numbering 426. Their data were entered electronically into a secure MOH account. Prediction of socio demographic data and outcome factors were analyzed by using frequency data and multiple logistic regression model for association factors with HCV SVR-12.

Results: Of 426 samples recruited, 380 completed the entire 3-month DAA treatment with 365 (96.1%) achieving HCV SVR-12 and 15 (3.9%) failed HCV SVR-12. The remaining 46 dropped out due to adverse events (6) and defaulters (40). The majority were male (83.1%), Malays (59.2%), had secondary education (41.5%), employed (71.6%) and married (60.3%). Risk profile of Hepatitis C transmission were history of injectable drug use (56.3%), heterosexual (50.5%), bisexual (2.8%), homosexual (2.1%), tattoos (25.1%) and others (4.1%). Achievement of HCV SVR-12 was significantly associated with former use of injectable drugs,

conversely failure was associated with current drug use. Significant associations were also found between completion of DAA treatment with secondary education and employed status.

Conclusion: Hepatitis C DAA treatment at primary healthcare level is able to achieve high success with HCV SVR-12. The local risk profiles of transmitting Hepatitis C would be useful in fine tuning public health preventive and screening efforts.

Poster Abstract P35

Unveiling the Ministry of Health's Approach to Urban Disaster Response in Kuala Lumpur: A Document Analysis

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Introduction: Disasters exert significant impacts on public health and healthcare systems, underscoring the crucial role of the health sector across all stages of the disaster management cycle. This study aims to offer a comprehensive overview of Ministry of Health (MOH) documentation on the health response to urban disasters, particularly focusing on the coordination efforts in Kuala Lumpur, Malaysia.

Methods: Utilizing a qualitative approach, this study examines regulations, policies, and mechanisms governing public health responses to urban disasters and emergencies. Academic and professional experts in disaster management, with specific expertise in health response, formed the research team. Data collection involved a web-based search and obtaining physical copies of documents from the designated MOH officer. Document analysis followed the READ approach, comprising four steps: (1) ready your materials, (2) extract data, (3) analyze data, and (4) distil findings.

Results: Ten documents were scrutinized, revealing predominant themes such as coordination, command, communication, civil-military engagement, types of hazards, and provision of emergency medical services. The analysis highlighted a notable emphasis on emergency medical services and coordination in the MOH documents, while themes like command, communication, civil-military engagement, and types of hazards received relatively less attention.

Conclusion: The analysis revealed that only two out of the six identified themes received sufficient attention in the analyzed documents. To improve the health response during urban disasters, it is important to enhance the attention given to the remaining themes, which will ultimately help protect and support the well-being of affected individuals and communities.

Poster Abstract P36

Reasons for the late presentation among women with advanced breast cancer: A qualitative study in the north-eastern state of Peninsular Malaysia

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Introduction: The number of patients diagnosed with advanced-stage breast cancer diagnosed is still rising. Delays in getting medical consultations are one of the key contributing factors. This study employed the Theory of Planned Behaviour (TPB) to explore the reasons why women in north-eastern Peninsular Malaysia with advanced breast cancer delayed seeking medical care.

Methods: Face-to-face interviews were carried out between December 2021 and June 2022. Patients' opinions about breast cancer, breast cancer screening, and the obstacles preventing them from seeking early medical attention were explored. NVivo version 12 was used for thematic analysis, and the themes that were identified were mapped onto the TPB constructs.

Results: The study unearthed themes corresponding to attitudes, subjective norms, and perceived behavioural control within TPB. Attitudinal barriers included fatalistic views of breast cancer and fear or ignorance about the disease. Subjective norms included preference for traditional medicine and familial influences. In relation to perceived behavioural control, a lack of awareness, perceived discomfort of mammograms, limited access to facilities, and the impact of the COVID-19 pandemic on the healthcare system were among the factors involved.

Conclusion: Based on the TPB frame, normative effects (preferring traditional treatment and family advice), control barriers (such as screening unawareness and access concerns), and crucial attitudinal barriers (like fatalistic beliefs and fear) are among the reasons for the late presentation of breast cancer in North-eastern Peninsular Malaysia women. The necessity of implementing focused approaches to address obstacles to enhance early detection of breast cancer.

Poster Abstract P37

Adolescent health survey among Form 2 students in Kerian district, Perak, Malaysia

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Introduction: Adolescents face unique health challenges that require effective intervention strategies. This study aims to assess adolescents' health status and behaviours to address these challenges better.

Methods: This retrospective cross-sectional survey utilized data extracted from the Adolescent Health Screening Form (BSSK) conducted among Form 2 students in the Kerian district, Perak,

from August 14th, 2023 to September 14th, 2023. The mass screening was a collaborative effort involving 'Unit Kesihatan Kampus Kejuruteraan Universiti Sains Malaysia(USM)', 'Pertubuhan Amal Perubatan Ibnu Sina Malaysia(PAPISMA)', 'District Education Office(PPD) Kerian', and 'District Health Office(PKD) Kerian'.

Results: A total of 21 high schools participated in the study, and 2152 participants were included in the final analysis. Of these, 989 (46%) were male and 1163 (54%) were female students. Notably, 0.2% (n=5) reported sexual intercourse, 0.1% (n=2) history of abortion, 7.5% (n=161) smoking, 14.9% (n=319) suicidal thoughts, and 14.8% (n=318) history of mental or physical abuse. Significant associations were found between gender and smoking risk, mental health risks, and certain sexual behaviours. The majority of smokers were male students (90.0%), and they reported higher rates of viewing pornography (72.7%) and engaging in masturbation (90.0%). Female students reported experiencing sad moods (69.6%), suicidal thoughts (72.4%), and feels life were meaningless (74.8%). Participants who considered religion important in their lives were significantly associated with alcohol use ($\chi^2(1)=130.252$, $p<0.001$) and feels life were meaningless ($\chi^2(1)=4.289$, $p=0.038$).

Conclusion: The youth in Kerian district exhibit sexual and mental health risks. Therefore, targeted interventions focusing on sexual behaviour and mental health promotion should be considered in future programs.

Poster Abstract P38

Prevalence and Risk Factors of Falls Among Elderly Population in Kelantan: A Cross-Sectional Study

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Introduction: The arising incidence of falls among elderly represents a significant public health concern, posing considerable challenges to patients, their families, and the healthcare system. The purpose of this study is to identify the prevalence and determinants of falls among elderly population in Kelantan.

Methods: This was a cross-sectional study involving 385 elderly patients attending 39 primary health clinics in Kelantan. The

data was obtained from Borang Saringan Status Kesehatan Warga Emas, which was developed by the Family Health Development Division Ministry of Health Malaysia. Data was analysed using SPSS version 29.

Results: This study found a 27.3% prevalence of falls among the elderly participants. It demonstrated that living alone (OR adj 0.33, 95% CI: 0.19, 0.60; <0.001), having asthma/chronic obstructive pulmonary disease (COPD) (OR adj 4.10, 95% CI: 1.25,13.49; <p<0.05), initiating new medications within the last two weeks (OR adj 2.19, 95% CI: 1.06,4.52; <p<0.05), experiencing imbalance upon sitting (OR adj 4.22, 95% CI: 1.31,13.58; <p<0.05), and frequently stopping during walking with short steps (OR adj 14.07, CI:2.79,71.06; <p= 0.001) were associated with increased risk of falls.

Conclusion: This study has shown that falls remain a significant concern among the elderly in Kelantan, emphasizing the need for intervention targeting the factors associated with them.

Poster Abstract P39

Prevalence, Sociodemographic Characteristics And Risk Factors Of HIV/AIDS Among PLHIV At Mahmoodiah Primary Care Clinic, Johor Bahru

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Introduction: Malaysia is committed to the UNAIDS global vision of ending AIDS as a public health threat by 2030. Therefore, appropriate measures should be taken to eradicate HIV/AIDS. This study

is carried out to study social demographic characteristics and behavioral risk factors of HIV/AIDS among PLHIV at Mahmoodiah primary care clinic, Johor Bahru.

Methods: This study is a retrospective study PLHIV age d >18 year years who attended Mahmoodiah primary care clinic in Johor from 1 January 2005 to 31 December 2023. Data were obtained from the patients' clinical notes and data based using a structured questionnaire and analyzed by using the "Statistical Package for the Social Sciences (SPSS) version 21.

Results: A total of 1095 PLHIV registered in Mahmoodiah primary care clinic from 2005-2023. A total of 656 active patients were included in this study. The mean age of the participants was 31.68 years and male gender shows the highest PLHIV (n=626, 95.3%). The majority of the PLHIV were single (n=575, 87.7%) and homosexual (n= 411, 62.3%). The highest risk factors for HIV were being homosexuals, followed by being heterosexual, and bisexual.

Conclusion: The prevalence of HIV/AIDS in the singles with the age 20-30 years in Johor is high. The early HIV transmission pattern was characterized by injection drug use. Since the control of injecting drug use related HIV epidemic, the HIV transmission pattern has gradually changed from injection drug use to heterosexual contact, especially non-marital non-commercial heterosexual contact. It is necessary to take targeted health education and intervention measures to reduce/end HIV/AIDS.

Poster Abstract P40

The Avoidance Practice and its Association with Self-Efficacy, Knowledge, and Attitude among Mothers on Environmental Tobacco Smoke Exposure to their Children

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Introduction: Environmental tobacco smoke (ETS) is hazardous. Deaths and disability-adjusted life-years (DALYs) lost to passive smoking was tremendous. Avoidance practice is avoidance behaviour of an individual's being exposed to ETS, which related to one's knowledge, attitude, and self-efficacy. The aim is to determine the avoidance practice towards ETS and its associated factors among mothers with young children, in developing strategies to reduce ETS-related-risk to their children.

Methods: This was a cross-sectional study, multistage convenient sampling, involving mothers with children < 6 years old attended public health clinics. Malay SE-KAP-ETS questionnaire was used.

Results: A total of 321 mothers participated, with mean age of 33.4 (±5.5SD), majority was Malay (89.1%), with 61.7% had tertiary education, 30.5% was private employee and 61.1% in B40 socioeconomic group. Most were non-smokers (98.8%), 43.3% husband was a smoker, 48.4% claimed no smoker in the house and 64.8% had house smoking restriction. The mean score for avoidance practice: 28.33/30 (±3.27SD), self-efficacy: 36.41/50(±9.7SD), knowledge: 38.26/40 (±3.76SD) and attitude: 48.58/50 (±3.75SD). Multiple linear regression analysis, showed, having no smokers in the house ($\beta=1.477$, 95% CI:0.120, 2.834; <p= 0.033), higher self-efficacy ($\beta=0.054$, 95% CI:0.022, 0.085;<p<0.001), greater knowledge ($\beta=0.166$, 95% CI:0.045, 0.286; <p=0.007), and higher positive attitudes ($\beta=0.303$, 95% CI:0.186, 0.420; <p<0.001) were associated with higher avoidance practice. The R² of 0.39, indicating that 39% of the variance in the model explained by avoidance practice.

Conclusion: No smokers in households, having higher self-efficacy, knowledge and positive attitudes is salient in avoiding individuals to smoke near children at their home in avoiding detrimental effect of ETS.

Poster Abstract P41

Prevalence of Prediabetes Among Postpartum Gestational Diabetes Mellitus Mothers in Dungun and Associated Factors

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Introduction: Postpartum glucose intolerance is an adverse maternal outcome following gestational diabetes mellitus (GDM). While the majority of mothers with GDM usually resume normal glycaemic control after delivery, some women

continue in this hyperglycaemic state and progress to develop diabetes mellitus (DM) or prediabetes. This study was aimed to determine the prevalence of prediabetes among postpartum GDM mothers and examine the associated risk factors.

Methods: A retrospective cross-sectional study involving secondary data review was conducted among all postpartum mothers with history of GDM who had performed postpartum OGTT in all government health clinics in Dungun, Terengganu from January 2023 until December 2023. Data was analysed using descriptive analysis and logistic regression.

Results: A total of 332 cases were included in the study. Prevalence of postpartum diabetes and prediabetes was 0.9% and 12.7% respectively. The development of prediabetes in women with GDM after delivery was significantly associated with age (Adj OR = 0.10, 95% CI = 0.00, 0.02, $p=0.020$) and insulin usage (Adj OR = 0.23, 95% CI = 0.11, 0.34, $p < 0.001$).

Conclusion: The prevalence of diabetes and prediabetes among postpartum GDM mothers in Dungun district was consistent with previous studies done in Malaysia and other Asian countries. Pregnant mothers with increasing age and requiring insulin during the pregnancy are at higher risk of developing prediabetes. Thus they should receive focused management that aims at preventing and minimizing such risk even well beyond the postnatal period.

Poster Abstract P42

Breaking Ground: The Impact of Analog Insulin Initiation on Diabetic Management in Negeri Sembilan

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Introduction: Diabetes Mellitus is a prevalent issue in Malaysia, and initiatives to enhance diabetic care include the increased application of insulin analogs. Our research analyzed the safety and efficacy of these insulin analogs in real-world clinical practices, providing essential information for providing diabetes management strategies.

Methods: The study employed a retrospective longitudinal design with 111 diabetic patients from PKD Seremban who had used insulin analogs for at least six months. Data was gathered from consultations at 0, 6, 12, and 18 months, utilizing the TPC OHCIS medical health records system.

Results: The results indicated male predominant, with the majority falling within the 45-64 age range. Over time, there were notable reductions in HbA1c levels: at 6 months, 57% of patients experienced improvement with a mean reduction of 1.86% (± 1.73); at 12 months, 65% achieved a reduction of 1.67% (± 1.38); and at 18 months, 57% demonstrated a reduction of 2.08% (± 1.68). Both long-acting and premixed insulin analogs showed comparable glycemic control. However, adverse events such as hypoglycemia (7% of patients) and weight gain (41%, with an average rate of 0.14 kg/month) were observed. Most patients received oral glucose-lowering drugs and underwent insulin titration during clinical visits.

The total medical cost was RM 168,649.27, which translates to approximately RM 1,519.36 per patient.

Conclusion: Insulin analogs offer clinical advantages, such as improved glycemic and reduced hypoglycemia rates. However, it is essential to consider the financial implications for patients and healthcare systems when implementing these therapies.

Poster Abstract P43

Clinical Audit on Statin Usage to Achieve LDL Primary Target Among T2DM Patients in Simpang Kuala Health Clinic, Kota Setar District

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Introduction: Type 2 diabetes (T2D) and low-density lipoprotein cholesterol (LDL-C) are well-recognised risk factors for coronary artery disease (CAD). LDL-C level achieved by lipid lowering drugs had shown CV risk reduction.

Methods: A cross-sectional study from 13th to 23th November 2023 was conducted among T2D attending follow up in Simpang Kuala Health Clinic. The aim is to understand the clinical characteristics, control of cardiometabolic risk factors, type of statin used and whether LDL level is achieved among patients with type 2 diabetes (T2D). Using universal sampling, 336 cards were audited but only 261 cards fulfilled inclusion criteria. 75 cards were excluded mainly because unavailability of blood results.

Results: Among 261 patients, 54.4% were Malays, 53.3% female and 64% had duration of more than 10 years of T2D. For comorbidities, 90.4% had concurrent hypertension, 77.8% were overweight or obese and 11.5% were smokers. 70.9% had 3 or more cardiometabolic risk factors including 79.7% were in the very high risk group, 5% in the high risk group and 15.3% in the moderate risk group. Only 49 patients (18.8%) achieved LDL level based on guideline-directed medical therapy target (GDMT).

Conclusion: Managing diabetes involves not only achieving target glycaemic control but also reaching target levels of blood pressure and LDL-C. This study showed that among the very high risk and high risk patients with T2D, the attainment of treatment target and use of guideline-directed medical therapy (GDMT) were suboptimal.

Poster Abstract P44

Communicable Disease Trends in Cameron Highlands from 2019 to 2023: Implications and Recommendations for Family Medicine Practice

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Introduction: Cameron Highlands, a renowned tourist attraction and agricultural centre in Malaysia, has a significant prevalence of infectious illnesses. The objective of this project is to analyse the patterns of communicable diseases in Cameron

Highlands with the purpose of gaining valuable information to enhance actions for prevention and control.

Methods: This research, conducted in Cameron Highlands, Pahang, Malaysia, specifically examined the sub-districts of Ringlet, Tanah Rata, and Ulu Tenom. Analysed data from the e-Notifikasi System included all confirmed cases reported by hospitals and labs. An analysis of socio-demographic variables and trends of communicable illnesses from 2019 to 2023 was conducted using SPSS Version 23 for descriptive statistics.

Results: The prevalence of communicable diseases among children aged 0-10 years peaked at 55.5% in 2022, according to the data. Occasional cases predominated over clustered outbreaks. Prevalent among imported cases were local infections. Food poisoning, hand, foot, and mouth disease (HFMD), viral hepatitis, and tuberculosis were all prevalent in particular years. The distribution of diseases exhibited variation among sub-districts. Notably, HFMD was prevalent in Ringlet and Tanah Rata, whereas Ulu Telom witnessed a significant incidence of food poisoning and viral hepatitis.

Conclusion: In Cameron Highlands, communicable diseases persist across age groups, ethnicities, and sub-districts, according to the study. The findings emphasise the need for targeted interventions, improved surveillance, and community engagement to control communicable diseases in the region. Reducing the impact of these diseases on the population and local economy requires improving primary healthcare and public health.

Poster Abstract P45

Effect of a Multidisciplinary Diabetes Education Programme on Knowledge, Attitude, Practise, and Glycaemic Control

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Introduction: Diabetes mellitus is a chronic condition that necessitates empowerment of ongoing care and self-management. Empowerment of self-care and self-management through a comprehensive diabetes education initiative is vital for enhancing the glycaemic control of individuals with diabetes. This study aims to evaluate the effect of a multidisciplinary diabetes education programme on the knowledge, attitude, and practice of people living with type 2 diabetes and their glycaemic control.

Methods: This prospective cohort study was done among diabetic patients who attended a multidisciplinary diabetes education programme in district Kulai. 210 diabetic patients were recruited for the multidisciplinary diabetes education programme, which comprised five modules. The patient's glycosylated haemoglobin (HbA1c) result was taken before and repeated six months after. Self-administered questionnaire on knowledge, attitude, and practise was answered before and after the programme. A total of 77 diabetic patients with completed questionnaires and biochemical examinations were analysed using IBM SPSS statistic version 27.0, while the remaining patients were excluded from this study because they had not completed post-education questionnaires or had an incomplete biochemical examination.

Results: The overall finding shows overall improved glycaemic control, where the mean of HbA1c before education was 9.6%, and after education, the mean value fell to 8.8%. A paired t-test showed there was a significant difference between the mean of HbA1c before and after education ($p < 0.001$). Knowledge of the diabetic patient improved and showed a significant difference before and after education ($p < 0.001$).

Conclusion: In conclusion, this study reported that multidisciplinary diabetes education is associated with significant improvement in knowledge and glycaemic control among diabetic patients.

Poster Abstract P46

Knowledge and Attitude Towards Attention-Deficit Hyperactivity Disorder and Its Associated Factors Among Primary School Teachers in Kuala Muda/Yan, Kedah, Malaysia

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Introduction: Attention-deficit hyperactivity disorder (ADHD) is a common neuropsychiatric disorder among children which can impact both academically and socially in the long run if being undiagnosed and neglected. School teachers play important role in early detection and appropriate referral as they have regular interaction with the child. The purpose of this study is to determine the knowledge, attitude, and factors affecting the knowledge of primary school teachers about ADHD.

Methods: A cross-sectional study conducted in thirteen government primary schools in Kedah, Malaysia, involving 329 teachers. Data were collected by a self administered questionnaire that included demographic information, knowledge and attitude of teachers regarding ADHD and were analysed by descriptive and analytical statistics. Bivariable and multivariate logistic regressions were performed to identify factors associated with the knowledge of ADHD. Variables having a p-value < 0.05 at 95% CI were considered statistically significant.

Results: A total of 329 respondents (99% response rate) were enrolled in the study. Among them, 70.8% have good knowledge of ADHD. However, they were relatively lacking in terms of the causes, course and treatment of ADHD. Having prior information about ADHD (OR 3.89, 95% CI: 2.26, 6.70) and being keen to know about ADHD (OR 1.82, 95% CI: 1.04, 3.18) were associated with good knowledge. This study also found that teachers have positive attitudes towards children with ADHD.

Conclusion: There was a high proportion of teachers having good knowledge of ADHD. It was significantly associated with having prior information regarding ADHD and their interest towards ADHD. Generally, teachers showed a positive attitude towards children with ADHD.

Poster Abstract P47

Transforming Diabetes Care: Evaluating the Clinical Outcome of Diabetes Virtual Clinic in Primary care

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Introduction: The emergence of Diabetes Virtual Clinics (DVC) during the COVID-19 pandemic is transforming the management of diabetes by leveraging digital technology to provide continuous and personalized care. We aimed to study DVC's outcome on the clinical profile of diabetes patient.

Methods: A retrospective cohort study was conducted from September 2022 to October 2023 on forty type 2 diabetes patients enrolled in the DVC at Simpang Kuala Health Clinic. Patients completed a six-month DVC program with monthly virtual consultations with either a doctor, pharmacist, physiotherapist, or diabetes educator. Clinical profiles including Haemoglobin A1C (HbA1C), body mass index (BMI), blood pressure, and lipid profile before and after the program were analysed using paired t-test.

Results: The mean age of patients was 53.6 years, and the mean duration of diabetes was 6.6 years. A total of 87.5% of the patients were on oral glycaemic-lowering drugs, with the majority (52.5%) on monotherapy. Additionally, 42.5% had combined comorbidities of hypertension, dyslipidaemia, and obesity. Furthermore, 89.5% of the patients attended at least four virtual sessions. The mean HbA1c before and after the DVC program was 7.09% and 7.27%, respectively; however, the difference was not statistically significant ($p = 0.206$). Other clinical profiles, including weight, BMI, blood pressure, lipid profile, and renal function, showed no statistical difference before and after the DVC program.

Conclusion: The use of DVC has no effect on glycaemic management or other clinical variables. It is suitable for stable diabetes patients who have attained their metabolic targets to reduce physical clinic visits.

Poster Abstract P48

Oral Symptoms And Oral Health-related Quality of Life (OHRQoL) Among Patients With Diabetes Mellitus Attending Hospital Universiti Sains Malaysia

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Introduction: Oral health-related quality of life (OHRQoL) refers to the subjective perception of oral health-related symptoms that have an impact on an individual's well-being. Diabetic patients have decreased OHRQoL due to oral complications. This study aimed to determine self reported oral symptoms, OHRQoL, and the association between OHRQoL

and sociodemographic profile, diabetes profile as well as oral health-related symptoms among patients with diabetes mellitus attending Hospital Universiti Sains Malaysia (USM).

Methods: This cross-sectional study involved 202 diabetic patients. The Malay version of the short Oral Health Impact Profile [S-OHIP(M)] questionnaire was used to assess OHRQoL. A higher S-OHIP(M) score indicates greater oral impact and worse OHRQoL. An additional self-administered questionnaire was used to obtain sociodemographic information and perceived oral health symptoms and problems. The data were analyzed using descriptive analysis, independent t-test, and ANOVA.

Results: Nearly half of the respondents have at least one oral health problem (45.6%). The most common problem was bad breath (30.2%), a cavitated tooth (29.7%), and toothache (16.8%). The prevalence of oral impact was 33.7% and the total mean S-OHIP(M) score was 6.15 (SD=6.09). The mean of the S-OHIP(M) score was significantly higher in participants with toothache, cavities, sore gums, swollen gums, bleeding gums, mobile teeth, and bad breath.

Conclusion: The presence of oral symptoms is significantly associated with more severe oral impacts and poorer OHRQoL. Prevention or treatment of these problems will improve the patients' overall quality of life.

Poster Abstract P49

Clinical Experience In Initiation Or Switching To Insulin Degludec/Insulin Aspart In Adults With Type 2 Diabetes At Selected Government Primary Care Clinics In Malaysia

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Introduction: Diabetes Mellitus is an epidemic in Malaysia. The treatment approach begins with OGLD. However, patient eventually needing insulin as the disease progresses. Insulin degludec/insulin aspart (IDegAsp) is a fixed-ratio co-formulation of basal insulin degludec and prandial insulin aspart. The aim of this initiative is to explore the clinical outcome among diabetes patients after initiating or switching to IDegAsp treatment in government primary care clinics.

Methods: Clinical parameters were collected for the duration of at least three months, between November 2019 and August 2023. The prescription of IDegAsp was based on standard care and the clinical practice of FMS. The primary endpoint observed was the change in HbA1c and secondary endpoint collected were change in FPG, total daily insulin dose and body weight.

Results: After switching to IDegAsp, average HbA1c reduction was 1.3% and FPG reduction was 4.7 mmol/L. For total daily insulin dose, a reduction of 32% was observed. Daily prandial

insulin dose and basal dose, a reduction of 67% and a dose increment of 21% was reported respectively. A reduction of 1.24 kg of body weight was observed and the incidence rate of symptomatic and nocturnal hypoglycaemia also reduced.

Conclusion: In adults with diabetes treated at government primary care clinic settings, initiating, or switching to IDegAsp from previous glucose lowering treatment was associated with improved glycaemic control, reduced insulin dose, reduced body weight and lower rates of hypoglycaemia from baseline. IDegAsp is therefore feasible in primary care settings in optimizing diabetes care.

POSTER ABSTRACTS – b) CASE REPORT

Poster Abstract CR01

Angiotensin Receptor Blocker Related Burning Mouth Syndrome: A Case Report

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Introduction: Burning Mouth Syndrome (BMS) presents a challenge due to its complex nature, often causing a burning sensation in the oral cavity without visible abnormalities. This report details a case of BMS linked to Losartan, an angiotensin receptor blocker (ARB), highlighting its presentation, diagnosis, and management. Despite its prevalence, BMS is frequently overlooked by frontline medical professionals, impacting patients' quality of life.

Case presentation: A 70-year-old woman visited a primary healthcare setting in Brunei Darussalam, with hypertension and hyperlipidaemia, prescribed Losartan and Simvastatin. Subsequent follow-up visits revealed the emergence of persistent mouth discomfort specifically affecting the tongue, palate, and lips. Despite normal oral examination findings and blood tests indicating nutritional adequacy, no referrals to dental specialists were initiated. Switching to Amlodipine after discontinuing Losartan resulted in symptom improvement and complete resolution within two weeks.

Discussion: There are BMS case reports available reporting the onset of BMS after initiation of Captopril and Lisinopril treatment in hypertensive patients. Examining the patient's case, the manifestation of BMS symptoms appeared to coincide with the commencement of Losartan (ARB) administration for hypertension. Subsequently, the cessation of the Losartan (ARB) treatment led to a notable improvement in symptoms, within a span of two weeks.

Conclusion: This case underscores the importance of considering drug-induced aetiologies in the diagnosis of BMS, particularly when presented with atypical manifestations. Primary care physicians should realize that ARBs may contribute to BMS. The accurate diagnosis of this condition is crucial for disease recognition and for improving the patient's quality of life.

Poster Abstract CR02

Case Report: A Rare Case of Supraventricular Tachycardia in Pregnancy with Hypothyroidism

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Introduction: Supraventricular tachycardia (SVT) is usually associated with hyperthyroidism and rarely occurs due to hypothyroidism. This case study reported a rare event of SVT that occurred in a hypothyroid pregnant lady.

Case presentation: A 28-year-old pregnant lady in her 20th week period of gestation, presented in a clinic with palpitations and dyspnea. She had underlying hypothyroidism, post radioactive iodine suppression therapy for Grave's disease. She was initiated with high dose levothyroxine two weeks prior to the event. The electrocardiography showed SVT. Carotid massage was performed and reverted the rhythm. She was diagnosed with SVT due to thyroid storm and referred to the hospital. Her thyroid function test showed hypothyroidism. High dose levothyroxine dose was given until her thyroid status was stabilized. Her delivery outcome was successful and no SVT recurrences.

Discussion: The chronotropic and inotropic effects of elevated thyroxine level in hyperthyroidism will cause increase in heart rate and subsequently lead to tachyarrhythmias such as atrial fibrillation and SVT. The opposite effects of low thyroxine would cause bradycardia, and ECG changes such as prolongation of QRS complexes, flattened or inverted T wave and rarely ventricular arrhythmias such as "torsades de pointes". It is a rare event to see SVT in hypothyroidism as reported in the literature by Tomar et al (2015) and Mak et al (2018).

Conclusion: SVT in hypothyroidism is rare. The thyroid status must be determined before any intervention is taken. Vagal maneuver is performed in mild SVT. Pharmacological therapy and cardioversion maybe indicated if vagal maneuver fails.

Poster Abstract CR03

Role Of Point Of Care Ultrasonography (POCUS) In Primary Care: Case Report Of Paraneoplastic Syndrome Secondary To Renal Cell Carcinoma

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Introduction: POCUS is an useful bedside imaging tool which can add valuable clinical information and serves as complement to history taking and physical examination. Basic POCUS knowledge can be used to identify gross abnormality such as any abnormal mass/cyst which can aid in diagnosis, planning for management and expedite the referral process whenever relevant.

Case presentation: 35 years old man, being investigated for asymptomatic persistent polycythemia, was also newly diagnosed with hypertension. Primary polycythemia was ruled out via blood investigation, various causes of secondary polycythemia

were worked up in primary healthcare. POCUS being one of the workup showed a large right kidney mass 7x8cm, right kidney size 15cm x 10cm and left kidney size being 12cm x 5cm. Patient is suspected to have paraneoplastic syndrome secondary to right renal cell carcinoma. This is later confirmed by CT renal 4 phase, then patient was referred to surgical department and gotten an urgent appointment within 2 weeks, biopsy was arranged and result shown to be consistent with renal cell carcinoma. Patient is scheduled for follow up with surgical department to review and discuss on the definitive management for right renal cell carcinoma.

Discussion: Polycythemia is defined as an increase in red blood cell (RBC) mass, persistent polycythemia could be classified into primary and secondary based on etiology. Secondary causes of polycythemia includes chronic lung disease, sleep apnea, tobacco smoking, chronic carbon monoxide poisoning, cyanotic heart disease, or certain neoplasms such as renal cell carcinoma. 2 Patient was also recently diagnosed with hypertension, it could be part of paraneoplastic syndrome presentation along with polycythemia, hence the suspicion of underlying erythropoietin secreting tumour. 3 POCUS could serve as potential initial imaging to screen for any gross abnormalities and this can be done in any primary healthcare settings with ultrasound equipped. In this specific case, gross right kidney mass was noted during POCUS examination and expedited the referral to surgical department which lead to earlier confirmation of the diagnosis via biopsy and earlier definitive management.

Conclusion: With increasing availability of ultrasound machine in the primary healthcare settings, basic POCUS knowledge will be able to aid in early diagnosis, plan for next step of management and expedite referral process if necessary, overall leading towards better patient care.

Poster Abstract CR04

Abdominal Pain In Female Patients: Should We Consider Deep Vein Thrombosis?

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Introduction: Deep vein thrombosis (DVT) involves clot formation in deep veins, often in the lower extremities, with Pulmonary Thromboembolism (PTE) as a complication. We highlight an unusual presentation of extensive DVT and PTE in a female patient primarily presenting with abdominal pain.

Case presentation: A 27-year-old woman, with no relevant past medical history except for combined oral contraceptive (COC) pills use, presented with a 3-day history of severe lower abdominal pain and vaginal bleeding. She was discharged with a diagnosis of dysmenorrhoea following normal pelvic ultrasound, and negative pregnancy test. Two days later, she represented with similar abdominal pain, localised to the left inguinal region with new symptoms of left leg pain, heaviness, and discolouration of the limb with dyspnoea. She was referred for further management

at the Emergency Department in a tertiary centre. The Venous Ultrasound Doppler confirmed extensive left lower limb DVT involving the popliteal, superficial femoral, and common iliac extending up to the external iliac vein, whilst CT Pulmonary Angiogram showed bilateral PTEs. Angiogram-guided catheter thrombolysis and thrombectomy were successfully performed, and thrombophilia work-up advised.

Discussion: Limited studies have reported abdominal pain in DVT of the ovarian vein, mesenteric vein, and iliofemoral vein, especially during pregnancy and puerperium. Women on COCs have increased risks. More studies are needed to understand this association and the impact of specific risk factors.

Conclusion: DVT should be considered in patients presenting with abdominal pain and history of COC use. Safety net advice in primary care is crucial, especially encouraging return if persistent pain or new symptoms.

Poster Abstract CR05

Poncet Disease in A Patient with Smear Negative Pulmonary Tuberculosis

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Introduction: Pulmonary tuberculosis poses a diagnostic dilemma to clinician in the absence of typical presentation. We present a case of polyarthritis and erythema nodosum in a patient with smear negative pulmonary tuberculosis.

Case presentation: A 30-year-old woman presented with multiple joint pain over two months with weightloss. She denied having a fever. The affected joints were mildly swollen with tenderness. Radiographs of the joints were normal. CRP was raised with normal RF and negative anti-CCP. One month later, she developed painful skin nodules over bilateral shin. There were no other pulmonary tuberculosis symptoms. Multiple nodular lesions were noted over her shins which were tender and mildly erythematous. Skin biopsy revealed features consistent with erythema nodosum while the Ziehl-Neelsen stain for AFB were negative. Mantoux test was positive subsequently. Further investigations including HRCT thorax showed features suggestive of pulmonary tuberculosis while sputum AFB and Xpert MTB/RIF from bronchoalveolar lavage were negative. She was treated as smear negative pulmonary tuberculosis. Her joint pain and nodular skin lesions disappeared soon after and she gained weight. Repeated HRCT thorax showed improvement in lung findings.

Discussion: Poncet disease occurs when a patient with active visceral or disseminated tuberculosis develops non-destructive, para-infective and symmetric polyarthritis. It may be accompanied with episcleritis and/or erythema nodosum on lower or upper limbs. It can recover completely with anti-tuberculosis therapy.

Conclusion: Poncet disease is one of the clinical syndromes of musculoskeletal tuberculosis. A high level of clinical suspicion and detailed physical examination are pivotal for early detection of tuberculosis particularly those with atypical presentation.

Poster Abstract CR06**Wandering Spleen: An Unexpected Cause of Right Iliac Fossa Pain**Lena NS¹, Azidah AK², Lili HY², Dharmendra G³¹Padang Sebang Health Clinic, Alor Gajah, Malacca, Malaysia;²Department of Family Medicine, School of Medical Sciences, Health Campus, Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia; ³Department of Surgery, General Hospital Malacca, Malacca, Malaysia

Introduction: Wandering spleen is a rare clinical entity. It is caused by the absence or underdevelopment of ligaments that hold the spleen in place in the left hypochondrium. This spleen wanders freely in the peritoneal cavity and may get twisted, causing ischemia or an infarcted spleen.

Case presentation: A 12-year-old presented with severe right iliac fossa pain, mimicking the presentation of acute appendicitis, which was followed by an open appendectomy. Intraoperatively, the spleen was discovered at the right iliac fossa, and a splenectomy was performed as there was evidence of a splenic infarction.

Discussion: The clinical presentation varies from an asymptomatic incidental finding, as a movable abdominal mass, or as acute to chronic abdominal pain associated with a torsion, as seen in the current case. Clinically, a wandering spleen is suspected when the pain is associated with an abdominal mass. Among primary care physicians, bedside ultrasound is the most frequently used diagnostic imaging, with a 52% accuracy of a wandering spleen diagnosis. Identification of a mass in the abdomen and imaging showing the absence of the spleen at its usual location in the left upper quadrant should raise suspicion of an ectopic spleen.

Conclusion: Exposure of primary care physicians to this case report enables them to have a varied differential diagnosis of acute abdomen. High clinical suspicion and the use of bedside ultrasound can be extremely crucial in diagnosing a wandering spleen at an asymptomatic stage.

Poster Abstract CR07**Quetiapine-induced Hypokalaemic Periodic Paralysis In A Pregnant Woman: A Case Report**Muhammad Hafiz MP¹, Azidah AK¹, Dinsuhaimi SI², Wan Yusuf WN³, Zainab MY⁴¹Department of Family Medicine, School of Medical Sciences, Universiti Sains Malaysia, Kelantan, Malaysia; ²Department of Psychiatry, School of Medical Sciences, Universiti Sains Malaysia, Kelantan, Malaysia; ³Department of Pharmacology, School of Medical Sciences, Universiti Sains Malaysia, Kelantan, Malaysia; ⁴School of Dental Sciences, Universiti Sains Malaysia, Kelantan, Malaysia

Introduction: Quetiapine-induced hypokalaemic periodic paralysis (QIHPP) is a rare condition.

Case presentation: This is a case of a 31-year-old primigravida with bipolar II disorder who presented with bilateral lower limb weakness and numbness for two days. Her serum potassium was

2.5 mmol/L (moderate hypokalaemia). She was on quetiapine for three years and this is the first episode of hypokalaemia. She was suspected to have QIHPP and the quetiapine dosage was reduced. It led to serum potassium level normalisation and the resolution of her symptoms.

Discussion: Electrolyte imbalances such as hyponatremia and hypokalaemia are the rare adverse drug reactions of quetiapine. The potential mechanism is the drug's effect on the sodium-potassium-adenosine triphosphatase (Na-K-ATPase) pump, leading to the transcellular shift of potassium ions into the cell and causing hypokalaemia in the extracellular compartment. Quetiapine, being a dopamine receptor antagonist may enhance aldosterone release, leading to increased sodium and water reabsorption from urine and increased potassium excretion in the urine.

Conclusion: QIHPP is a rare but urgent reversible condition. The presented case underscores the significance of early identification of quetiapine as a cause of acute muscle weakness.

Poster Abstract CR08**From Fibroid in Pregnancy to Hypovolemic Shock Secondary to Ruptured Cornual Pregnancy - A Case Report**Choo Soon Y¹, Nur Hafizah A², Sarah Khoo YX²¹Seri Iskandar Health Clinic, Perak Tengah District Health Office, Perak, Malaysia; ²Obstetrics and Gynaecology Department, Hospital Seri Manjung, Perak, Malaysia

Introduction: Cornual pregnancy (CP) is the rarest form of ectopic pregnancy (2-4%) with a reported incidence of 1 in 76 000 pregnancies. CP tends to rupture at a later stage due to the greater distensibility of the myometrium hence higher mortality 2.5%.

Case presentation: This study presents a 34-year-old woman, G3P1+1 who was initially diagnosed with fibroid in pregnancy at 7w 4d POA. Three transabdominal ultrasounds scans (TAS) were done in government health clinic and hospital, but the diagnosis of CP was missed. At 15w POA, she presented with severe lower abdominal pain for 1 day, complicated with hypovolemic shock secondary to ruptured right cornual ectopic pregnancy with underlying bicornuate uterus. Postoperatively, the patient was stable and had received consultation on long term contraception.

Discussion: First-trimester transvaginal ultrasound scanning (TVS) is crucial for diagnosing ectopic pregnancy including CP. The sonographic criteria for CP are an empty uterine cavity, a gestational sac (GS) located eccentrically, thin myometrial layer (<5 mm) surrounding the GS, GS seen mobile and presence of a vascular pedicle adjoining the GS and the lateral aspect of the empty unicornuate. While scanning to confirm the location of GS, it is important to track the lining of the endometrium from vaginal plate to cervix and up to the fundus uteri.

Conclusion: Cornual pregnancy is a rare but life-threatening ectopic pregnancy. TVS is warranted if there is any suspicion on the location of the GS. A proper and structured TVS training among primary care doctors would help to identify early trimester anomalies and identify location of GS.

Poster Abstract CR09

Unveiling the Rectal Riddle: A Case of Rectal Prolapse in an Orang Asli Girl

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Introduction: Rectal prolapse, particularly in pediatric patients, can be associated with various predisposing factors, including malnutrition with faltering growth. Here, we present a captivating case of type II rectal prolapse in a five-year-old Orang Asli girl, emphasizing the clinical intricacies and diagnostic challenges of this rare presentation.

Case presentation: A five-year-old female Orang Asli, with a medical history including well-controlled asthma, faltering growth with malnutrition, and iron deficiency anemia, presented with a protruding mass from the anus, precipitated by straining during defecation and hematochezia. Initially misdiagnosed as hemorrhoids by the medical officer, she was re-evaluated upon referral, revealing type II rectal prolapse. Notably, physical examination confirmed complete extrusion of anal mucosa with circular mucosal folds. She displayed no abnormalities of other organ systems. She was subsequently referred to a tertiary hospital, where she underwent manual reduction and was discharged without any complications.

Discussion: Rectal prolapse in pediatrics poses diagnostic challenges due to rarity and overlapping symptoms with conditions like hemorrhoids. Initial misdiagnosis underscores the need for suspicion in uncommon presentations, particularly in patients with predisposing factors like malnutrition. Malnutrition, affecting pelvic floor muscles, contributes to rectal prolapse. Thorough physical examination, including identifying complete extrusion of anal mucosa with circular mucosal folds, aids accurate diagnosis.

Conclusion: This case emphasizes considering malnutrition as a predisposing factor for pediatric rectal prolapse. Comprehensive diagnostic approaches, including meticulous physical examination, are crucial. Maintaining suspicion for uncommon conditions, especially in predisposed patients, ensures timely diagnosis and management. Incorporating these considerations enhances diagnostic accuracy and optimizes outcomes for rectal prolapse patients.

Poster Abstract CR10

Submental Swelling: A Rare And Life Threatening Manifestation of Acute Epiglottitis in Adults

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Introduction: While acute epiglottitis is a well-known life threatening concern in children, it is infrequent in adults, leading to frequent misdiagnosis. This case report will further elaborate

on how thorough examination is vital in recognizing sore throat and submental swelling as a possible initial symptom of acute epiglottitis in adults.

Case presentation: A 52-year-old man with a known history of dyslipidemia presented to the primary care clinic with a two-day history of sore throat, odynophagia, and a submental swelling. He had progressive size increment of submental swelling with occasional saliva drooling. He had a history of accidental fishbone ingestion 2 weeks prior. Upon examination, the oral cavity displayed no palatal bulge, and the tongue and floor of the mouth appeared normal. However, the posterior pharyngeal wall showed signs of inflammation. Neck examination shows submental swelling 2x2cm, warm upon touch and tender on deep palpation. Suspecting Ludwig's Angina, the attending medical officer referred the patient to the tertiary medical centre for further evaluation. A flexible laryngoscope later revealed an erythematous, tubular and oedematous appearance of epiglottitis with pooling of saliva over bilateral arytenoids, vocal cords were unable to be visualised. An urgent contrast-enhanced computed tomography (CT) scan of the neck confirmed the diagnosis of an epiglottitis. The patient received immediate treatment including Intravenous Ceftriaxone, Intravenous Dexamethasone, regular adrenaline inhalations, and humidified oxygen. The patient's condition improved and he was discharged after three days of admission. He had a complete recovery and resolution of symptoms at one week follow up appointment.

Conclusion: Given the rapid onset and progression of this condition and the potential for fatal airway obstruction, this case highlights the importance of early symptoms recognition. A timely referral can be made, and early intervention can save a patient's life.

Poster Abstract CR11

An Unexpected Diagnosis: A Case of Hypothyroidism Presenting as Turner Syndrome in an Adolescent

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Introduction: Hypothyroidism and Turner syndrome are two distinct medical conditions. Turner syndrome is a sex chromosome disorder seen in females caused by loss of part or all of an X chromosome while primary hypothyroidism is an endocrine disorder caused by insufficient thyroid hormone production. These two conditions can present with similar symptoms in an adolescent.

Case presentation: A 13-year-old female presented to the primary care clinic with short stature and delayed menstruation. She had constipation and cold intolerance for a few years. Her developmental history and initial growth were normal. She has an average school performance. Physical examination showed short stature, webbed neck, no goitre, low set ears, and broad chest. Her height was 125cm (below the 3rd centile). The mid-parental height was 163cm. Tanner's staging showed stage 1 for breast development and pubic hair. These signs and symptoms are highly suggestive of Turner Syndrome. Further investigation revealed primary hypothyroidism and karyotyping was normal. She reported a significant improvement in her symptoms after 3 months of

L-thyroxine commencement. Her height increased by 3 cm in the first 6 months.

Discussion: Short stature is the most common presentation of Turner syndrome despite it being a rare genetic disorder. Hypothyroidism is a relatively uncommon cause of short stature but the diagnosis should not be missed as this is a treatable condition. Therefore, all adolescents presented with short stature should always be screened for hypothyroidism regardless if they present with features of genetic syndrome.

Conclusion: This case report highlights the importance of primary care doctors to consider the diagnosis of hypothyroidism in female adolescents presenting with short stature, to mediate early diagnosis and treatment.

Poster Abstract CR12

A Delayed Diagnosis of Disseminated Tuberculosis with Vertical Transmission - Too Many Missed Opportunities

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Introduction: Both disseminated tuberculosis (TB) and congenital tuberculosis (CTB) are rare. Typical presentation is non-specific which can lead to delayed diagnosis and poor outcome.

Case Report: This is a case report of a mother and her infant who were found to have disseminated TB which led to their demise a week apart from each other. The mother had presented on multiple occasions to both the general practitioner (GP) and emergency department (ED) with non-specific symptoms throughout the third month of her postpartum period. Her investigation results revealed a mixed clinical picture which led to different diagnoses during each visit and she was discharged home from the ED after the last consultation. A month after her symptoms started, she collapsed at home and was brought dead to hospital. On the other hand, her baby was admitted for respiratory distress prior to her presentation at 2 months old. His condition only deteriorated despite treatment with multiple broad spectrum antibiotics and unfortunately passed away after a month. The mother was diagnosed with disseminated TB during postmortem which led to positive TB workup for the baby.

Discussion: The case illustrates the challenges in diagnosing disseminated TB, the importance of considering a broad differential diagnosis and effective communication for timely diagnosis and treatment to avoid fatal outcomes.

Conclusion: While diagnosis can be challenging, disseminated TB is treatable with early diagnosis and treatment. Therefore it is important for all clinicians to maintain broad differential diagnoses and at the same time communicate well with patients especially those with multiple visits or not responding to treatment.

Poster Abstract CR13

α -Methyldopa-Induced Liver Injury In Pregnancy – A Case Report

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Introduction: α -methyldopa is known to potentially cause liver injury with an estimated risk of 1% in pregnancy. Only a few cases of α -methyldopa-induced liver injury during pregnancy have been reported in the literature, and none of them have been reported in Malaysia.

Case presentation: We report a case of a 34-year-old woman, G2 P0+1 at 10 weeks' gestation, with chronic hypertension and a history of uneventful use of α -methyldopa in the past. She was started on the same medication during current pregnancy but two weeks later, laboratory investigations revealed seven-fold-elevated serum aminotransferase levels with minimally elevated alkaline phosphatase. She was asymptomatic, no risks or stigmata for liver diseases. Further investigations exclude pregnancy-related liver diseases, viral, hemolytic, autoimmune and obstructive causes. α -methyldopa was discontinued and liver biochemistry rapidly returned to normal.

Discussion: Liver injury generally arises within two to 20 weeks of starting treatment. The clinical spectrum ranges from asymptomatic transaminitis to fulminant hepatitis and can be fatal. Biochemistry test typically shows hepatocellular injury with marked elevation transaminase (5- to 100- fold) and modest increase in ALP. Diagnosis primarily involves ruling out other causes of liver injury and improvement of liver function after discontinuation of treatment.

Conclusion: Liver injury induced by α -methyldopa is rare, but a high index of suspicion is critical for early diagnosis and management. Due to the unpredictable nature of liver injury, we advocate for monitoring liver enzymes at baseline and then intermittently throughout pregnancy.

Poster Abstract CR14

Uncommon Presentation of Diabetic Ketoacidosis in A Young Man With Enuresis: A Case Report

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Introduction: Enuresis, defined as intermittent urinary incontinence during sleep, is typically a paediatric condition. While it usually resolves during childhood, there are rare instances where enuresis is seen in adults. This report focuses on an unusual case wherein enuresis was the early sign of a severe and acute complication of type 2 diabetes (T2D) in a young adult.

Case presentation: A 22-year-old gentleman presented to our primary care facility with a two-week history of enuresis, increased urinary frequency, and significant weight loss. Despite the absence of the classic symptoms commonly associated with T2D, initial laboratory findings indicated hyperglycaemia, ketonuria, and metabolic acidosis, which are indicative of diabetic ketoacidosis.

Discussion: This case illustrate an atypical presentation of DKA, a critical, life-threatening emergency often linked with T2D. The patient's symptoms of enuresis and weight loss, along with the absence of classic diabetic symptoms, indicate the variability of DKA presentation. The importance of early recognition of non-classical symptoms of DKA is crucial to avoid delayed diagnosis and subsequent complications.

Conclusion: Enuresis in adults may be a red flag for serious underlying conditions, such as T2D with DKA, as demonstrated in this young patient. Healthcare professionals should be vigilant and consider a broader differential diagnosis when confronted with such symptoms. Early detection and timely management, which includes intensive fluid therapy, electrolyte correction, and insulin administration, are paramount to prevent morbidity and mortality associated with delayed treatment of DKA.

Poster Abstract CR15

Clonazepam-Induced Double Incontinence: Serious yet Rare Adverse Effects

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Introduction: Clonazepam, a benzodiazepine, is commonly used for its anticonvulsant and anxiolytic effects. We report the first documented case of concurrent bowel and bladder incontinence following short-term clonazepam use.

Case presentation: A 41-year-old female presented with a right calf spasm and was started on clonazepam. Within days, she developed nausea, fatigue, drowsiness, loose stools, and increased urinary frequency, which progressed to urinary and bowel incontinence. An adverse drug reaction to clonazepam was suspected after ruling out all other possible causes. Subsequently, She responded favorably to an antidote and supportive medical treatment, with complete resolution of symptoms upon discontinuation of the drug.

Discussion: Clonazepam's CNS depression likely contributed to the observed incontinence. While urinary incontinence with benzodiazepines is sporadically reported, bowel incontinence is poorly discussed. Pharmacokinetic interactions with other drugs are minimal, but toxicity can occur with overdose or combined use with CNS depressants. Through its enhancement of GABA activity, induces muscle relaxation in the pelvic floor and anal sphincter, potentially leading to bowel incontinence. Additionally, it may decrease bladder outlet resistance, disrupt central nervous system control of voiding, increase intravesical pressure, and cause overproduction of urine, all contributing factors to urinary incontinence.

Conclusion: The case stresses the importance of promptly recognizing and managing rare adverse effects of clonazepam, particularly in patients with underlying medical conditions. Clinicians should remain vigilant for such reactions, especially when initiating or administering benzodiazepine therapy, to ensure patient safety and optimal outcomes.

Poster Abstract CR16

Unusual False-Positive HIV Detection in a Rohingya Mother: A Case Report

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Introduction: Retroviral diseases diagnosed during pregnancy require careful management to prevent Maternal-to-Child Transmission. HIV-positive status carries a stigma and lifelong commitment, necessitating accurate diagnosis to alleviate the psychological impact. We present a case of an atypical false-positive HIV result in a Rohingya mother with no history of high-risk behaviour.

Case presentation: A 22-year-old Gravida 2 Para1 Rohingya woman presented initially at 24 weeks gestation with a negative antenatal HIV rapid test at booking. Postpartum, routine viral screening revealed positive results for both HIV ELISA and Particle Agglutination (PA). Repeat testing confirmed positivity. Immediate ART initiation for the mother and immediate referral for the infant to the paediatric team were made. Subsequently, HIV viral load pre-ART was not detected and CD4 tests showed normal levels. To rule out false-positivity, ART was withheld, and HIV RT-PCR was sent that came back later as negative, confirming the false-positive result.

Discussion: False-positive HIV tests in pregnancy are more common than in non-pregnant populations, despite ELISA's high sensitivity. These tests may identify other proteins as HIV-specific antibodies, leading to false positives.

Conclusion: Encountering HIV false positivity in pregnancy highlights the importance of confirming suspected cases with molecular techniques to ensure accurate diagnosis, crucial for both the mother and the infant.

Poster Abstract CR17

An Older Women with Uncontrolled Diabetes Mellitus Diagnosed to Have Hemichorea-Hemiballismus Syndrome at A Health Clinic: A Case Report

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Introduction: Non-ketotic hemichorea-hemiballismus was first reported in 1960 and was frequently observed among elderly females and individuals of Asian ethnicity. The diagnosis relies on clinical presentation and radiological findings. The movement disorder is reversible by optimising the glucose control.

Case presentation: A 62-year-old Malay woman with underlying diabetes mellitus, hypertension, dyslipidaemia, and history of ACE inhibitor-associated hyperkalaemia, presented with involuntary intermittent sudden violent and rapid movements in her right upper limb, which had been progressively worsening for a month, rendering her partially dependent for some instrumental activities of daily living (iADL) and house-bound to avoid social embarrassment. She did not experience facial asymmetry, slurred speech, dysphagia, incontinence, memory decline or polyuria. On examination, random blood sugar was 17.3 mmol/L, HbA1c 12.3%. Urine full examination showed negative results for ketone. Plain CT brain revealed mild bilateral basal ganglia calcifications with no other significant findings. After administration of anti-hypertensive agents and insulin, she achieved normotension, and her fasting blood glucose was decreased to 12 mmol/L. The abnormal movement and her iADL had improved since low-dose clonazepam was added.

Discussion: Hemichorea-hemiballismus is a rare manifestation

of uncontrolled hyperglycaemia distinguishable from other intracranial pathology through radiological investigations. It has been reported as a reversible condition by optimizing glucose control.

Conclusion: This case report highlights the uncommon presentation of uncontrolled non-ketotic hyperglycaemia. It emphasizes the importance of promptly identifying this condition and implementing stringent glycaemic control, alongside neuroleptic therapy, to expedite patient recovery.

Poster Abstract CR18

Unveiling Mirror Syndrome: A Case Report

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Introduction: Mirror syndrome is characterized by maternal edema, often with pulmonary involvement, mirroring the fetal hydrops. While typically associated with non-immune hydrops, it can also occur in immune-mediated cases. Symptoms may include rapidly increasing peripheral edema and progressive shortness of breath, resembling severe preeclampsia.

Case presentation: We present a case of a 38-year-old woman, G6P3+2, who presented Late at 17 weeks gestation with gestational diabetes managed through diet control. At 30 weeks, she was diagnosed with fetal hydrops and received co-management with obstetricians. By 34 weeks, she developed hypertension and excessive weight gain, but with a normal preeclampsia profile. Within three weeks, she gained an additional 13kg, experiencing reduced effort tolerance and generalized edema. During visit at 35 weeks, intrauterine fetal demise was detected, prompting referral to the hospital where labour was induced. She delivered a 2.08kg baby with a heavy placenta (1.5kg). The newborn exhibited edematous features and skin peeling. Diagnosis: Mirror syndrome with hydrops fetalis.

Discussion: Mirror syndrome, a rare and under-diagnosed maternal condition, shares Clinical features with pre-eclampsia but involves hemodilution instead of hemoconcentration. Due to literature heterogeneity in diagnostic criteria, more case studies are needed to establish differences. Management parallels preeclampsia, underscoring the importance of early detection to prevent severe maternal complications.

Conclusion: Elevating awareness and understanding of Mirror Syndrome among primary care physicians are imperative, addressing its under-diagnosis and enabling early intervention to safeguard maternal health.

Poster Abstract CR19

'Doctor, My Arms Are Aching' – An Infrequent Presentation of Parkinson's Disease

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Introduction: Parkinson's disease (PD) is a degenerative disease of nervous system, involving predominantly the brain, and peripheral autonomic nervous system as well.¹ Besides the

common motor problems of PD, non-motor symptoms (NMS) can also occur,² such as myalgia with fatigue which are the main symptoms depicted in this case, thus making the diagnosis more obscure.

Case presentation: A 58-year-old single man with hypertension, panic disorder and erythrocytosis JAK² negative, presented with upper limbs' myalgia, exacerbated by carrying heavy objects and chronic fatigue, with no tremor, fever or neuropsychiatric symptom. Sleep, urination and bowel opening were not affected. Vitals were normal and examination revealed a slow walking orientated man, full power over all limbs with intact sensation and no resting tremor. FBC, renal, liver and thyroid function, calcium, biohazards and CT brain were unremarkable. He initially opted for massage and refused neurology referral, but eventually agreed. PD was diagnosed and he was prescribed Madopar and Pramipexole, with subsequent improvement of symptoms.

Discussion: PD is a heterogeneous disorder with substantial variation in clinical presentations. NMS can lead to deleterious effect on patients' QOL, more than motor symptoms.³ As there is no single test which can definitely identify PD, it is more imperative to diagnose based on proper history and be aware of NMS of PD. When diagnostic and treatment options are not straightforward, referral to a neurologist is ideally recommended.⁴

Conclusion: Although the diagnosis of PD is based on presence of common motor problems, it is important not to overlook the existence of NMS experienced by patients.

Poster Abstract CR20

BCG-osis: A Rare Complication of BCG Vaccination Highlighting the Importance of Early Identification – A Case Report

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Introduction: BCG (Bacillus Calmette-Guerin) vaccination is globally administered to prevent tuberculosis and safe for patients with normal immune systems. A rare complication such as BCG-osis can arise posing diagnostic challenges in primary care.

Case presentation: We report a case of a 7-week-old, baby girl born term presented with swelling in her left axillary and supraclavicular regions. Upon evaluation, there was suspicion of BCG lymphadenitis thus she was referred to the paediatric team. The diagnosis was revised to BCG-osis supported by positive Gene Xpert from aspirated pus. The baby was started on anti-tuberculous drugs and monitoring involved a multidisciplinary team. Home visits ensured proper administration of anti-tuberculous medications and supportive care. The baby successfully completed 6 months of anti-tuberculous treatment. Contacts were screened for tuberculosis.

Discussion: Limited literature exists on BCG-osis, with a noted higher incidence in neonates and infants with serious immune deficiency problems. This case highlights the imperative need to recognize early that, following BCG vaccination

serious complications like BCG-osis can occur, urging heightened awareness and early referral to exclude underlying immunodeficiency problems.

Conclusion: While BCG vaccination is widely administered to prevent tuberculosis, rare complications such as BCG-osis can arise. As a primary care practitioner, promptly recognizing symptoms and making timely referrals are crucial to ensuring that patients receive a thorough evaluation by paediatricians. Additionally, offering ongoing supervision and support throughout the treatment journey is essential. Apart from that, diligent contact tracing efforts are pivotal in controlling tuberculosis within the community.

Poster Abstract CR21

Primary Nasal Tuberculosis: A Rare and Potentially Missed

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Introduction: Extrapulmonary tuberculosis involving nasal cavity is a rare finding. It accounts for about less than 1% of head and neck tuberculosis. Recent studies revealed that primary disease without pulmonary involvement contributed to only one-third of the cases.

Case presentation: A 74 year old male with background history of hypertension, dyslipidemia, type 2 diabetes mellitus, chronic kidney disease and Parkinson disease presented with bilateral nasal congestion associated with blood stained nasal discharge for 1 month. He visited a general practitioner clinic and received 2 courses of anti-histamine and antibiotics for rhinitis treatment but symptoms not resolved. No constitutional symptoms were reported. Physical examination revealed a swollen inferior turbinate of the right nasal cavity. Left nasal cavity appeared to be normal. He was referred to ENT for further management. Nasoendoscopy showed crusting at bilateral vestibule which easily bled on touch and irregular surface over medial surface of inferior turbinate and septum. Histopathology showed chronic histiocytic inflammation with acid fast bacilli seen. Screening for pulmonary tuberculosis was negative. Hence, the patient was diagnosed with primary nasal tuberculosis. He completed 9 months of anti-tuberculosis and recovered well.

Discussion: Presentation of nasal tuberculosis can mimic nasopharyngeal malignancy, therefore high index suspicion is needed by primary care physician for early referral to the ENT specialist.

Conclusion: Due to its rarity and diagnostic challenge, the diagnosis may be overlooked, causing delay in initiation of therapy and contributing to the disease's progression and rising morbidities related to tuberculosis.

Poster Abstract CR22

Cutaneous Gout

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Introduction: Gout is a disorder caused by monosodium urate crystal deposition in joint and tissues. The common cutaneous manifestation of gout are intradermal lesions or subcutaneous nodules which are called tophi. Other than the usual manifestation of gout in the joint space, it can be present as atypical dermatological manifestation of pustules.

Case Presentation: This case study presents the unique manifestation of cutaneous gout in a 24 years old lady with a history of chronic gouty arthritis. The patient presented with painful nodules on both her elbows, feet, finger, thigh and back. The diagnosis was established through clinical history and examination, and laboratory test revealed elevated serum uric acid levels of 764umol/l. Treatment consisted of a combination of lifestyle modifications such as weight reduction and reduced intake of high purine diet, pharmacological intervention with urate lowering therapy .

Conclusion: The patient showed significant improvement in symptoms and regression of cutaneous tophi over an 8 months follow up period. This case emphasizes the importance of considering cutaneous gout in patient with history of chronic gouty arthritis and illustrate the effective management strategies that can be employed to alleviate symptoms and improve quality of life.

Poster Abstract CR23

Primary Care Encounter: Acute Optic Neuropathy as A Presenting Symptom of Intracranial Meningioma in Pregnancy - A Case Report

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Introduction: Optic neuritis may manifest as the primary symptom of intracranial meningiomas, which can undergo enlargement during pregnancy due to hormonal changes. This case underscores the pivotal role of primary care in early symptom recognition, facilitating diagnosis, and timely referrals.

Case presentation: A 26-year-old primigravida at 37 weeks gestation reported progressive vision blurring in her right eye and severe ipsilateral headaches since her second trimester. Clinical assessment revealed significant right eye visual impairment without hypertension or proteinuria, instigating a provisional diagnosis of optic neuritis and urgent ophthalmological referral. Imaging studies unveiled a right frontotemporal mass, suggestive of an extra-axial meningioma. Following an emergency caesarean section, postpartum MRI confirmed the diagnosis. Managed by a multidisciplinary team, she received a comprehensive post-discharge follow-up plan.

Discussion: This case presents a diagnostic conundrum in

primary care due to symptom overlap. Visual disturbances and headaches during pregnancy can stem from diverse aetiologies. Discerning subtle differences through meticulous history-taking and comprehensive physical examination is imperative for accurate diagnosis. MRI and CT scans serve as essential imaging modalities for diagnostic confirmation. The management during pregnancy hinges on neurological stability, with surgical intervention reserved for severe cases.

Conclusion: The intricacies of managing optic neuritis secondary to an intracranial meningioma during pregnancy highlight the indispensable role of primary care in early symptom recognition, precise diagnosis, and prompt referral, all of which are fundamental for achieving favourable outcomes. Proactive primary care is paramount in facilitating multidisciplinary collaboration, thereby ensuring the health of both mother and fetus.

Poster Abstract CR24

Unintended & Unplanned Pregnancy with Unprecedented Implanon Failure?

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Introduction: Implanon®, a long-acting reversible contraceptive implant, has been popular due to its efficacy and nonuser-dependent advantage. The failure of subdermal contraceptive implants can be influenced by hepatic enzyme inducers such as anti-tuberculous drugs, which in this case, resulted in an unintended pregnancy.

Case presentation: This is a case of a 27 year old lady G2 P1 presented for early pregnancy booking with concomitant active tuberculosis on intensive phase in October 2023. She had Implanon inserted since August 2022. About a year after insertion, she was diagnosed with pulmonary tuberculosis with symptoms of prolonged cough in October 2023 and history of travelling to Thailand. Prerequisite urine pregnancy test done prior to chest imaging was negative. A month later, she presented with early symptoms of pregnancy and its viability confirmed. She was shocked and faced a dilemma of continuing the pregnancy before removal of Implanon® was done.

Discussion: Rifampicin increases the activity of CYP3A4, leading to enhanced metabolism of etonogestrel of the implant reducing active hormone in the bloodstream exponentially. In patients that require treatment with hepatic inducers, it is recommended that additional contraception with intrauterine devices be used simultaneously or changed into other methods.

Conclusion: All health care providers should be aware of the interactions of hepatic enzyme inducers on hormonal contraceptives and obtain details of current contraceptive methods from any women of reproductive age. This will ensure that such women can be offered alternative measures and can avoid the psychological trauma of a termination of pregnancy.

Poster Abstract CR25

Metronidazole-Induced Neurological Sequelae Following Treatment For Abdominal Abscess: A Case Report

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Introduction: Metronidazole, a widely used antibiotic, is generally safe and well-tolerated for treating bacterial and parasitic infections. However, this case underscores the rare yet concerning neurological sequelae associated with its use.

Case presentation: We report a 50-year-old male with diabetes mellitus and dyslipidaemia presenting with abdominal pain and fever due to an abdominal abscess. High-dose metronidazole treatment for 8 weeks yielded a good response, but subsequent peripheral sensory loss impacted his daily activities. Spinal issues were ruled out via X-rays, and nerve conduction study (NCS) showed symmetrical sensory axonal polyneuropathy, confirming the diagnosis of metronidazole-induced peripheral neuropathy. Despite vitamin B12 supplementation, minimal improvement was noted.

Discussion: Previous review of 36 case reports revealed metronidazole-related peripheral neuropathy in 40 patients, predominantly with cumulative doses exceeding 42 grams (>4 weeks). The incidence of peripheral neuropathy ranged from 0% to 50%, with higher cumulative doses and prolonged therapy correlating to increased risk. Metabolites of metronidazole are implicated in small nerve fibre damage, as evidenced by NCS findings of axonal degeneration in some studies. Recent recommendations suggest a multifaceted approach to managing metronidazole-induced peripheral neuropathy. This may include promptly discontinuing metronidazole upon suspicion of neuropathy, switching to alternative antibiotics, and initiating symptomatic treatment for neuropathic pain.

Conclusion: This case emphasizes vigilance among healthcare providers for neurological complications post-metronidazole therapy, particularly in prolonged or high-dose regimes. Monitoring, exploring alternatives, and patient education are pivotal. Prompt discontinuation of metronidazole upon suspicion of neuropathy is imperative for patient safety.

Poster Abstract CR26

Uncommon Urogenital Tuberculosis in Primary Care

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Introduction: Urogenital tuberculosis (UGTB) is a rare form of extrapulmonary tuberculosis that affects the urinary tract and genital organs. In the primary care setting, timely recognition and

diagnosis of UGTB are crucial to prevent long-term complications and improve patient outcomes.

Case presentation: A 64-year-old lady with a recurrent history of urinary tract infections presented with symptoms like lethargy, loss of appetite, and weight loss. Urine tests have revealed sterile pyuria and the presence of red blood cells. A renal ultrasound showed right hydronephrosis and hydroureter, but no calculi were seen. The patient was referred to a urologist, and a contrast-enhanced computed tomography of the abdomen was done, showing right hydroureteronephrosis with thickening of the right vesicoureteric region of the urinary vesicles. Urine culture detected *Mycobacterium tuberculosis*. The primary source for tuberculosis done; Mantoux test positive (13 mm) and IGRA positive. CXR and induced sputum AFB were negative for primary tuberculosis. The patient was started on antituberculous therapy for nine months and underwent stenting for six weeks to relieve the hydronephrosis.

Discussion: Diagnosing UGTB is often challenging due to its non-specific clinical features, which should prompt investigation for tuberculosis (TB). Sterile pyuria and recurrent urinary tract infections resistant to standard therapy are significant risk factors for UGTB.

Conclusion: Effective management of UGTB in primary care involves a combination of clinical vigilance, appropriate diagnostic testing, and prompt referral to Urologist. Understanding the epidemiology, clinical manifestations, and diagnostic approaches of UGTB enables primary care practitioners to contribute significantly to the early detection and comprehensive management of this condition.

Poster Abstract CR28

Unusual Presentation of Lyme Disease with Bilateral Optic Neuritis in a Non-Orang Asli Child in Malaysia- A Case Report

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Introduction: Lyme disease, caused by the spirochete *Borrelia burgdorferi*, has a relatively low incidence in Malaysia and is primarily surveilled among the Orang Asli population. This case report describes a rare presentation of Lyme disease in a 12-year-old non-Orang Asli girl, who developed the unusual complication of bilateral optic neuritis.

Case presentation: A 12-year-old non-Orang Asli girl presented to multiple primary care clinics with a two-week history of unresolving fever and disabling arthralgia. Her symptoms persisted, culminating in acute vision loss upon hospital admission. Ophthalmic examination revealed bilateral optic disc swelling. Serological tests confirmed the presence of *Borrelia burgdorferi* IgM. She was treated with a four-week course of intravenous ceftriaxone and subsequently recovered well.

Discussion: The clinical presentation of Lyme disease is often non-specific, making diagnosis challenging in a primary care setting. Initial symptoms may include fever, headache, malaise, arthralgia, and erythema migrans. In this case, the absence of erythema migrans did not prompt the primary care clinician to consider

tick-borne disease, leading to delayed referral and diagnosis. This underscores the importance of considering Lyme disease even when typical skin manifestations are absent.

Conclusion: Primary care clinicians should maintain a high index of suspicion for Lyme disease, even in the absence of erythema migrans. Thorough history-taking, including questions about tick exposure, is essential. Prompt referral for serological testing and early antibiotic treatment are critical for optimal outcomes. Patient education on risk factors and symptoms can aid in early detection and management of Lyme disease.

Poster Abstract CR29

Case report: Cutaneous Vasculitis (CV) As Initial Presentation Of Systemic Lupus Erythematosus (SLE): A Diagnostic Challenge

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Introduction: Cutaneous vasculitis is a group of disorders in which there are inflamed blood vessels in the skin. Screening tests are requested in most cases of vasculitis to identify any underlying cause.

Case presentation: A 28-year-old male, previously healthy, firstly presented with multiple petechiae with non-pitting and painless right foot swelling for two days, then progressed to ecchymosis with bilateral lower leg swelling. He was initially referred to a dermatologist and treated as Henoch-Schoenlein Purpura. He presented after one month with bleeding oral ulcer and facial swelling for ten days associated with weight loss and fever. Upon examination, malar rashes with generalized vascular rashes with normochromic normocytic anaemia and microscopic haematuria and proteinuria were noted. Further work up by physicians noted ANA positive, low C3/C4, positive dsDNA, full blood picture of microangiopathic haemolytic anaemia with positive direct coombs test. His echo showed pericardial effusion. His EULAR/ACR scoring criteria of 25 and then diagnosed with SLE, within four months of initial presentation.

Discussion: Patients with CV can have a broad spectrum of possible underlying causes and it is truly a challenge to confirm the diagnosis. In a study, only 11% patients diagnosed with SLE presented with CV and the diagnosis is often difficult or delayed and relies on keen clinical expertise to combine clinical and immunological findings.

Conclusion: It is important for early intervention and appropriate referral which are crucial to confirm the diagnosis. Hence an appropriate management plan can be initiated with the aim to minimise complications and for better outcome.

Poster Abstract CR30

Malignant Pertussis In Young Infant: A Case Report

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Introduction: Pertussis is a highly contagious respiratory tract

infection caused by *Bordetella pertussis*, gram-negative bacteria, which can be prevented with a vaccine. Malignant pertussis is a rare life-threatening disease characterized by severe respiratory failure, pulmonary hypertension and severe leukocytosis that finally results in death.

Case presentation: Herein we reported a case of a 2-month-old infant who first visited the primary care clinic after developing a fever for one day. The infant was referred to the emergency department, and received outpatient treatment for viral URTI. On day six of the illness, his condition worsened and required admission due to a persistent fever, cough, and poor feeding. His chest radiograph showed consolidation of both lung fields and a WBC count of $52.51 \times 10^9/L$. On the second day of admission, his condition rapidly deteriorated, necessitating invasive ventilation due to respiratory distress and severe hypoxemia. The patient received Azithromycin intravenously. There was also a seizure observed during admission. He continues to deteriorate with hypotension, desaturation and bradycardia despite inotropic support. He succumbed to death on day four of admission. *Bordetella Pertussis* was detected on PCR.

Discussion: Malignant pertussis is a serious, often fatal illness that goes undetected.¹ It affects unvaccinated children between the ages of 0.6 and 3, with a median age of 2.1 months.¹ Rapid leukocyte increase and leukocytosis with neutrophil predominance were linked to mortality.² These findings should alert HCP providers of the importance of careful white blood cell surveillance to identify infants who may be at risk from malignant pertussis at an early stage.² Pulmonary hypertension, refractory shock, and hypoxemia have been identified as the causes of mortality in cases of malignant pertussis.^{1,3}

Conclusion: We suggest pregnant women should receive pertussis vaccination in the third trimester of pregnancy with the aim of placental transfer of antibodies to the unborn child. Hence a child has protective antibodies immediately after birth.

Poster Abstract CR31

"Beyond the Surface-Squamous cell carcinoma Silent Transformation in Diabetic Ulcer of Lower Extremity"

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Introduction: Diabetic ulcers of the lower limbs are one of the significant complications in patients with diabetes mellitus, often requiring surgical intervention such as debridement to manage necrotic tissue and promote healing. This case report highlights the potential for malignant transformation in chronic non-healing wounds and the critical importance of thorough follow-up and early diagnostic evaluation.

Case presentation: A 71-year-old male with long-standing poorly controlled diabetes mellitus presented with a non-healing ulcer on his left calf. The ulcer persisted despite standard wound care, leading to a referral for wound debridement. Post-debridement, the patient was under regular follow-up for daily wound dressings. During these follow-ups, abnormal cell growth was observed at the wound site. The patient was then referred

for further evaluation. Biopsies of the abnormal tissue confirmed the presence of atypical squamous proliferation suggestive of squamous cell carcinoma.

Discussion: This case highlights the necessity of maintaining a high index of suspicion for malignancy in chronic non-healing wounds, especially in diabetic patients. Literature suggests chronic ulcers can undergo malignant transformation. Early detection and regular follow-up in primary care settings are crucial for early detection and referral for further management, aligning with existing literature emphasizing the need for vigilance and thorough diagnostic evaluation in managing chronic wounds.

Conclusion: Clinicians should remain vigilant for signs of abnormal cell growth in chronic wounds. Regular follow-up and prompt referral for specialist evaluation are essential for early detection of underlying malignancies to improve patient outcomes. This case underscores the importance of considering malignancy in the differential diagnosis of non-healing ulcers in diabetic patients.

Poster Abstract CR32

Shoulder Pain Unveiled: The Unforeseen Journey To Discovering A Pancoast Tumor

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Introduction: Shoulder pain is a common presentation in primary care. This case report highlights the importance thorough assessment to rule out serious non-musculoskeletal causes of persistent shoulder pain.

Case Presentation: A 60-year-old male, heavy smoker with underlying hypertension, presented to the pain clinic with a 7-month history of shoulder pain, initially diagnosed as frozen shoulder. The pain was sharp and burning, radiating from his right side of the chest to the arm, and eased when lying down. There was no history of trauma, cough, or dyspnea. Examination revealed mild tachypnea when sitting up and dilated veins over the right chest wall. There was no shoulder tenderness or deformities, and other systemic examinations were unremarkable. A chest X-ray showed reduced lung volume over the right upper lobe. CECT thorax revealed an irregular lung mass and calcifications at the right lung apex measuring 4.0x7.2x3.8 cm, extending from T1 to T3 vertebral level, eroding the 2nd rib and right T2 vertebrae with lymph node involvement. The biopsy confirmed adenocarcinoma. Palliative care was planned, with morphine for pain management.

Discussion: Shoulder pain does not typically raise suspicion of lung cancer. The patient's symptoms of chest pain and tachypnea strongly suggested cardiorespiratory pathology, despite the absence of cough or hemoptysis, which usually alerts clinicians to the possibility of lung disease. Pancoast tumor is often asymptomatic when confined to the pulmonary parenchyma and manifests as sharp posterior shoulder pain only once it invades underlying structures, a hallmark of the disease.

Conclusion: Diagnosing Pancoast tumor is challenging, and

the impact of earlier detection on outcomes remains uncertain. However, heightened suspicion for apical lung tumors is advised in heavy smokers presenting with shoulder pain and cardiorespiratory symptoms.

Poster Abstract CR33

When Lower Urinary Tract Symptoms (LUTS) Is Not Always Urinary Tract Infection (UTI): A Case Report Of Polycystic Ovarian Syndrome (PCOS) With LUTS

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Introduction: Lower urinary tract symptoms (LUTS) are commonly diagnosed with urinary tract infection (UTI). However, not all LUTS are due to UTI. Polycystic ovarian syndrome (PCOS) has been associated with various organic pathologies including urinary system. This is a case of PCOS presenting with LUTS at the initial consultation.

Case presentation: A 20-year-old single female presented with dysuria, incomplete emptying and increased frequency for a month. Physical examination showed obesity with hirsutism. Urine FEME and culture were negative. Blood investigations were normal except for increased androgens. Ultrasound pelvis revealed polycystic ovaries. Combined estrogen-progestin oral contraceptive (COC) was started with lifestyle intervention. Her LUTS resolved upon COC initiation and weight reduction. Her hirsutism, mental and physical health also improved within 3 months of treatment.

Discussion: Mechanism of LUTS in PCOS is not widely understood. It is believed that excessive androgen and estrogen deprivation decreases the bladder capacity and compliance. There is endothelial damage in PCOS leading to inflammation towards the urinary system. This induces disharmony between anatomy of the urinary tract system and the neuroendocrine pathway. LUTS is directly related to obesity, increased waist circumference and metabolic syndrome which are all commonly found in PCOS. Another plausible mechanism is the overactive sympathetic drive which increases muscle sympathetic nerve activity (MSN) of the bladder.

Conclusion: PCOS may present initially with LUTS and should be considered as a differential diagnosis among females with features of PCOS.

Poster Abstract CR34

The Hidden Culprit: Primary Hyperaldosteronism Masquerading as Essential Hypertension

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Introduction: Approximately 3 in 10 Malaysians have hypertension, with secondary causes making up 10% of these cases. Primary hyperaldosteronism (PHA) is often overlooked due to nonspecific symptoms, leading to a misdiagnosis of essential hypertension. This case report portrayed a case of hidden hypertension as a means to raise awareness of PHA among

primary care practitioners (PCPs), as it is a serious but treatable cause of secondary hypertension.

Case presentation: A 57-year-old Malaysian man, with a 21-year history of presumed essential hypertension, was managed at a rural health clinic in Perak. Despite four antihypertensives including diuretics, his blood pressure remained uncontrolled, indicating resistant hypertension. Other than an intermittent headache, obesity, and spontaneous hypokalemia, there were no other signs of secondary hypertension present. Subsequently, renin aldosterone ratio (RAA) screening revealed PHA. An urgent referral to the endocrine team was arranged for further management.

Discussion: PHA often presents with nonspecific symptoms or remains asymptomatic, posing challenges for timely diagnosis based solely on clinical presentation. Low rates and limitations of PHA screening in the healthcare setting contribute to misdiagnosis and diagnostic delays. Timely testing for conditions like PHA is crucial, as cardiovascular morbidity and mortality in PHA are higher compared to essential hypertension with the same degree of blood pressure elevation.

Conclusion: Increased awareness among PCPs is crucial to reduce misdiagnosis of secondary hypertension. A systematic approach to evaluate patients with suspected secondary hypertension is significant in identifying and treating the actual underlying cause.

Poster Abstract CR35

Chronic Cough With Leucocytosis: A Case of A Huge Anterior Mediastinal Mass

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Introduction: Anterior mediastinal masses are uncommon and comprise various entities, manifesting a spectrum of clinical and pathological attributes.¹ Leucocytosis is a common sign of infection and should prompt for identification of other signs of infection. Nevertheless, this case illustrates a man with chronic cough and leucocytosis, who eventually turns out having a malignant mediastinal mass.

Case presentation: A 64-year-old man, contract worker and 48 pack-years smoker, with no comorbidities, presented with chronic productive cough with no constitutional symptom. Vitals were normal and examination revealed clear lungs with no lymphadenopathy and organomegaly. FBC showed leucocytosis 42.7x10³/uL neutrophils predominance with normal haemoglobin and platelet count. Renal, liver, biohazards and TB workups were unremarkable. CXR showed left upper zone opacity and CECT thorax depicted a huge left anterior mediastinal mass with local infiltration. Patient was referred to respiratory team which proceeded with mass trucut biopsy, revealing squamous cell carcinoma (SCC), and given oncology follow-up thereafter.

Discussion: This patient was initially investigated for TB but TB workups were negative. Leucocytosis is frequently associated with infection, but can also occur in non-haematological malignancies. For a primary adulthood anterior mediastinal mass, the most

common aetiology is thymic lesion.¹ Nonetheless, mediastinal SCC is an uncommon entity. Combination of mediastinal position and histologic findings of SCC is peculiar, despite metastatic malignancy from unknown primary tumour is known to happen.

Conclusion: When a patient presents to primary care with chronic cough and leucocytosis, anterior mediastinal mass, though uncommon, is one possible cause to be considered and if present, referral to respiratory team is warranted.

POSTER ABSTRACTS – C) COMMUNITY PROJECT / QUALITY IMPROVEMENT PROJECT

Poster Abstract Q101

The effectiveness of KUFIT intervention to improve adolescent's obesity

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Introduction: The Kulim Fit and Intelligent Teenagers (KuFIT) intervention programme was developed to promote healthy lifestyle among adolescents in SK Sri Limau. This study aimed to evaluate the effectiveness of the KuFIT programme on body composition (body mass index z-score and body fat percentage) among adolescents.

Methods: This is pre-post cohort design study among 81 adolescents ages 10-12 years in SK Sri Limau, Kulim Kedah from July 2022 till January 2023. BMI and fat percentage measurements were taken at two time points: before intervention (Pre) and 6 months after intervention (Post). The intervention components included: health education, physical activities and psychological. The outcome measures included BMI z-score and body fat percentage.

Results: The dropout rate in this study is 9.6% (n=13). The post intervention BMI showed significantly high (M= 25.08, SD=4.30) compared to pre intervention BMI (M=23.72, SD=4.09); mean diff=1.36(CI 0.98-1.74) t(7.14), p <0.01. The post intervention body fat percentage showed significantly high (M= 31.84, SD=6.66) compared to pre intervention body fat percentage (M=30.34, SD=4.72); mean diff=1.49 (CI 0.56-2.43) t (3.19), p=0.002. There is significant difference of body fat percentage reduction among male M=0.34, (CI -1.06-1.73) compared to female M=2.83, (CI 1.81-3.85), F(8.05), p=0.006.

Conclusion: There was no significant reduction of body composition post intervention most likely due to small number of participants in this study and short intervention interval. Different impact toward male fat percentage measurement may be due to hormonal factors. Future studies should use more rigorous study design (randomised controlled trial), longer duration with larger sample size.

Poster Abstract Q102

Community project: Domiciliary and Palliative Service in Song district, Kapit, Sarawak

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Introduction: Song is a rural district located in Kapit, Sarawak. Accessibility of medical service is difficult for the people of Song due to challenges from difficult terrain, poverty, unreliable telecommunication and limited manpower. An effort was made to introduce good palliative care for the Song community alongside improved domiciliary care and other medical services.

Methods: Domiciliary and palliative care (DPC) team consisting of doctors, nurses, physiotherapist, pharmacists and medical assistants was set up in June 2023 after attending palliative care training provided by KKM. DPC of KK Song includes both home visit service and in-patient ward. In-patient ward provides accommodation for transit, medication adjustment and respite care. A long boat was acquired via fund-raising to reach interior patients accessible only by river. The DPC team covers whole Song district providing wound care, medication adjustments, physiotherapy, counselling and symptoms management. Necessary drugs were made available via collaboration with Kapit, Sibul and Sarawak General Hospital. Teaching sessions were given to wakil kampung to identify patients in need of attention in long houses. Nearby hospitals were alerted to availability of service for patient referral. The first Koperasi in health clinic in mid-zone of Sarawak was set up to generate funds for in-patient and domiciliary service.

Results: Domiciliary and palliative service Song has delivered good medical care for 10 palliative patients to date. Interior patients are visited using koperasi own long boat. Koperasi Klinik Kesihatan Song supplemented funds for the continuity of service.

Conclusion: The program has successfully delivered domiciliary and palliative care service for the past 10 months to the community of Song regardless of terrain restriction. In-patient ward provides convenience and transitional care. Continuous team building is important due to high manpower turn-over rate. The team aims for service expansion to include more NCD palliative patients (renal failure, heart failure, advance COPD).

Poster Abstract Q103

Lean Healthcare: Improving Lead Time for Patients at the Fever Tent in Klinik Kesihatan Chiku 3 (KKC3), Gua Musang, Kelantan

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Introduction: Since the Covid-19 pandemic, patients presented with fever were managed at the fever tent in Klinik Kesihatan Chiku 3 (KKC3), Gua Musang. The average lead time for fever

patients to get their treatment was 150 minutes which started from patient's arrival at the fever counter until the pharmacy counter. This long lead time affects the quality of care to patients. The main objective of this project was to reduce the lead time for fever patients in KKC3 to less than 90 minutes, based on the key performance index (KPI) by Kementerian Kesihatan Malaysia for outpatient department.

Methods: 30 patients with fever at KKC3 were selected for pre-kaizen analysis from November to December 2022. Kaizen burst was implemented, which was the creation of the fever counter nearby fever tent and the division of the pharmacy counter, both were exclusive for fever patients only. Post-kaizen were analysed from January to February 2023.

Results: 14 out of 35 (40%) wastes were identified and eliminated from patient's arrival at the fever counter until pharmacy counter. This led to reductions in lead time, distance, steps and waiting time from 150 minutes to 75 minutes (50%), from 320 metres to 180 metres (43%), from 680 steps to 270 steps (60%) and from 90 minutes to 38 minutes (57%), respectively.

Conclusion: The lead time, distance, steps and waiting time for patients at the fever tent were shortened by eliminating the wastes identified this lean healthcare project and thus improved the quality of patients' management at KKC3.

Poster Abstract Q104

Quality Improvement Initiative Study: Effectiveness of the Use of a Neonatal Jaundice Clerking Sheet to Improve Neonatal Jaundice Management in Primary Health Clinics in Gombak District

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Introduction: Comprehensive assessment of infants with neonatal jaundice (NNJ) is essential in primary care to detect other comorbidities such as congenital heart disease besides managing hyperbilirubinemia. This study aims to evaluate the effectiveness of a NNJ clerking sheet to improve management of infants with NNJ in public health clinics in Gombak.

Methods: NNJ clerking sheet was developed based on literature review and underwent face to face and content validation with doctors from two health clinics and pediatricians from tertiary hospitals in the Klang Valley. A retrospective pre-intervention

audit was conducted between September – November 2020 in eight clinics in Gombak. Prior to the intervention, medical officers had undergone a video recorded lecture on NNJ management. NNJ patients were assessed using the NNJ clerking sheet from Jan – June 2021. Post-intervention audit was done from September till November 2021. 40 medical records were selected randomly for pre- and post-intervention audit in each clinic.

Results: Descriptive analysis was used. Pre-intervention audit showed that only 42.95% of the infants were examined by the doctors, 5% of medical officers attended NNJ refresher training and 54 % of cases were properly documented. Post intervention audit revealed an improvement of 83.5%, 100% and 85.8% respectively.

Conclusion: There is poor documentation on physical examination, serial bilirubin level and weight monitoring. There is lack of continuation of care across weekend NNJ and weekdays clinic. The implementation of NNJ clerking sheet shows an improvement on the assessment of NNJ management in primary health clinics in Gombak.

Poster Abstract Q105

Multi-agency Collaboration - Key Towards Successful Community Engagements: The Health Outreach Program & Education Carnival (HOPE-C)

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Introduction: A health carnival, HOPE-C, was co-organised by the Family Medicine Specialists (FMS) of Port Dickson (PD), the Department of Primary Care Medicine Universiti Malaya Medical Center (PCMUMMC), the PD Polytechnic (PDP) and the PD District Health Office (DHO) on 3-4 October 2023. This collaboration between health and education sectors aimed to promote and educate healthy lifestyles, disease prevention and access to specialist care to the community.

Methods: Planning began in June 2023 with remote coordination via Whatsapp and zoom meetings. Responsibilities were distributed, with PDP hosting the event, managing logistics, publicity, and the opening ceremony. Funding and event activities were jointly planned by PCMUMMC and DHO, coordinated by the FMS. Participants included adolescents, young adults (students and staff), and the general

public. Educational topics focused on hypertension, diet, mental health, and vaping and smoking cessation. DHO provided various booths such as occupational therapy, Wellness Hub's fitness assessment, mobile dentistry, vector control and food safety. NGOs such as LPPKN and ROSE provided education for teens, mammogram and HPV testing. Health screening and consultations were provided by medical officers and the FMS.

Results: A total of 1169 attendees was recorded, with 856 screened. High-risk cases received consultations and continuity of care planning. Collaboration, dedicated team leaders, and excellent facilities contributed to success. Challenges included managing large crowds, task delegation, and data sharing complexities.

Conclusion: HOPE-C successfully screened and educated young adults, demonstrating the feasibility of multi-agency partnerships for future initiatives.

Poster Abstract Q106

Clinical Audit on ultrasound usage in Klinik Rawatan Keluarga, Hospital USM

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Introduction: The primary healthcare provider has benefited from the use of point-of-care ultrasounds (POCUS) in patient management. The use of POCUS as a screening has the potential to improve patient satisfaction, clinical decision-making, early identification, and cost reduction. POCUS has enabled general practitioners and primary healthcare providers to grow into new roles and improve their practice.

Methods: From January 2022 to December 2023, we audited Klinik Rawatan Keluarga, Hospital Universiti Sains Malaysia, for the use of POCUS and ultrasound equipment. In 2020, we trained POCUS to four of our medical officers. The purpose of the training was to increase their understanding and self-assurance when handling ultrasounds and practising POCUS.

Results: Over a two-year period, we were able to scan 1012 patients. The mean age was 45 years old and the majority were female. The maximum age was ninety-five years old, and the minimum age was fifteen. The primary race was Malay followed by Chinese and others. Six patients received scans on average each day. Additionally, we saw that from July to September, both years' scan trends rose. Gynecology represents the largest portion area of scanning region (44%), followed by the kidney and bladder (KUB) (26%), gallbladder (25%), deep vein thrombosis (2%), thyroid (2%) and musculoskeletal and soft tissue (1%).

Conclusion: POCUS is a valuable tool that enhances patient care by enabling rapid diagnosis, guiding interventions, and improving clinical outcomes across various medical specialties especially in gynae and KUB cases

Poster Abstract Q107

Setting Up Speech and Occupational Therapy Services in Nilai, Negeri Sembilan: From Services to Centre

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Introduction: Speech and occupational therapy play crucial roles in helping individuals with communication and functional difficulties in the community. About 38.7% of registered people with disabilities in Malaysia are represented by those with learning disabilities (LD). In sync with the higher detection of LD conditions in the community, establishment of such services is crucial. This abstract aims to report the set-up of speech and occupational therapy services at a medium-scale private health centre in Nilai, Negeri Sembilan.

Methods: Basic equipment was prepared to allow for the minimum running of these services beginning July 2022, with part time therapists. Marketing materials were blasted through mediums such as clinic board displays and online platforms.

Results: Starting with less than 10 clients, there are now 60 active clients enrolled, with 44 male clients versus 16 females. There is significant increase in client rehabilitation services utilization since its inception. About 65 percent currently receive speech therapy, whilst 35 percent receive occupational therapy. Their age range is between 2 to 18 years old, with the majority of clients falling within 3 to 7 years old. A substantial number of clients are categorised as developmental disorders, with the remaining having no past medical problems.

Conclusion: The evidence from this report can be translated into the establishment of a centre with a multidisciplinary team in a one-stop centre that is convenient for users in the Nilai region. This can help to improve the quality of early intervention while reducing the burden of referrals to tertiary care.

Poster Abstract Q108

Effectiveness of a System-based Intervention in Reducing Uncontrolled Diabetes Among Type 2 Diabetic Patients In Klang District: A Quality Initiative Study

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Introduction: Diabetes Mellitus (DM) is a prevalent chronic condition with significant morbidity and mortality. Uncontrolled DM defined as HbA1c > 8%, has been increasing from 35.4% (2019) to 47.6% (2022) in Klang district. This study aimed to assess effectiveness of a system-based intervention in reducing uncontrolled DM among type 2 diabetic patients (T2DM) in Klang district.

Methods: This study was conducted from October 2022 till June 2023 involving 12 government health clinics in Klang District. Stratified random sampling was employed to select participants consisting of T2DM patients with HbA1c levels > 8%. The six-month intervention included the utilization of diabetic assessment tool, dietary pattern assessment, insulin review checklist, workshops for medical officers and a revised follow-up protocol. Demographic data, risk factors, pre and post intervention clinical parameters were collected.

Results: A total of 401 T2DM patients were recruited with 385 completed the follow-up. The majority were Malay (57.9%) and female (56.6%), with mean age of 52.8+10.5 years. Baseline comorbidities included hypertension (82.9%), chronic kidney disease (11.2%) and ischaemic heart disease (10.1%). Following the intervention, significant reduction was observed in HbA1C (-1.1%, 95%CI -0.8% to -1.3%; p<0.001), systolic blood pressure (-3.3mmHg, 95%CI -1.6mmHg to -4.9mmHg; p<0.001) and diastolic blood pressure (-3.0mmHg, 95%CI -1.8mmHg to -4.9mmHg; p<0.001). Notably, 18.4% of patients achieved HbA1c <8 % post intervention with 46.5% experiencing a reduction in Hba1c levels by more than 1 %.

Conclusion: The system-based intervention implemented in Klang district was effective in reducing uncontrolled DM and significantly improving blood pressure parameters among T2DM patients.

Poster Abstract QI09

Community Paediatric Palliative Services In Our Nurture (COMPASSION) programme in Klinik Kesihatan Salak

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Introduction: The COMPASSION programme, was a pilot collaboration between Klinik Kesihatan Salak and Paediatric Palliative Unit of Hospital Tunku Azizah aimed to provide comprehensive paediatric palliative care through community health clinics.

Methods: The programme was conducted from March 2022 to December 2023. KK Salak received referrals from several hospitals within Sepang District. The parents of patients were invited to complete Family Caregiving Activation in Transitions (FCAT) tool to evaluate their self-efficacy in caregiving, and Zarit Burden Interview (ZBI) to evaluate their burden. These tools were administered during initial visit and at 6 months.

Results: A total of 16 patients were referred, aged between 3 months-old to 17 years-old. The overall FCAT score decreased from a mean of 41.94 (SD = 10.70) to 57.64 (SD = 4.83) at 6 months (p = 0.001). The ZBI score reduced from 38.19 (SD = 17.71) to 10.21 (SD = 8.51) at 6 months (p<0.001). A total of 5 out of 6 patients died at their preferred place of death. Lessons learned involve the need to improve awareness, referral and dealing with challenges in resource allocation. Solutions included

education programs, streamlined referrals, and integrating the service into daily practise.

Conclusion: COMPASSION programme showed promising results in the feasibility of providing palliative care for children and families with life-limiting illnesses in community setting. It showed success in improving the family caregiver's confidence in providing care for their child, reducing caregiver burden, and achieving death at preferred place of death.

Poster Abstract QI10

Feasibility and Acceptability of the CKD-CHECK toolkit in Managing Patients with Chronic Kidney Disease Rapid Progression

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Introduction: Monitoring of eGFR trend among chronic kidney disease (CKD) patients is important in early detection of rapid progressors. However, not all laboratories in Malaysia include eGFR trends in their report. A toolkit was developed and tested to assist doctors in calculating and monitoring eGFR trend of their CKD patients.

Methods: The CKD-CHECK is a toolkit created utilising Google sheet. It automatically generates patients' eGFR values and its trend over a year, visually represented in a line graph. Additionally, it prompts the doctors to order appropriate tests and assists in decision-making regarding continued monitoring or referral to a nephrologist. Using a pre and post intervention study design, the toolkit was piloted among medical officers (MOs) practicing in a university-based primary care clinic treating patients with eGFR<60 ml/min/1.73m². The feasibility and acceptability of the toolkit was assessed at the end of the study period.

Results: A total of 25 MOs used the toolkit on 60 CKD patients. More than 90% of MO liked it, found it to be appealing, met their approval and welcome it. For feasibility of CKD-CHECK toolkit, all MO agreed that this toolkit seems possible and easy to use. Only 8% felt neutral on whether it was doable. There is a significant improvement in appropriate referrals to a nephrologist post intervention (p=0.016).

Conclusion: CKD-CHECK toolkit shows potential and is acceptable and feasible in primary care. Further larger scale studies need to be conducted before this tool can be used in clinical practice.

Poster Abstract QI11

Trimming Trends: Unveiling the Impact of a 3-month Virtual Behavioural and Nutritional Intervention on Weight Loss

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Introduction: The 2023 National Health Screening Initiative (NHSI) report reveals that 53.5% of adults in Malaysia are overweight or obese, presenting a pressing public health challenge. In response, the Angsana Weight Management Patient Support Program (PSP) focusing on behavioural and nutritional interventions was initiated as a pilot intervention from December 2023 to April 2024, targeting individuals with BMI exceeding 27, irrespective of comorbidities, and prescribed liraglutide.

Methods: Recruitment strategies involved collaboration with general practitioners and a bariatric surgeon, resulting in the enrollment of 12 patients by January 2024. Participants engaged in three virtual consultation sessions with a nutritionist and two motivational counseling sessions to address psychosocial aspects. Biweekly behavioural prompts and an electronic journal facilitated self-monitoring and encouraged adherence to the program.

Results: Among the 12 recruited patients, eight successfully completed the program. All participants were female, with an average age of 43 and average BMI of 30.7. Post pilot, participants demonstrated an average weight loss of 6.5% over the 12-16 week period. Using a 4-point Likert scale, all participants reported satisfaction with weight loss and overall confidence across social, emotional, and physical dimensions. 80% reported increased energy levels.

Conclusion: Limitations of this study include a small sample size, as only a limited number of patients were prescribed liraglutide by the collaborating doctors, and all patients who completed the program were females. Nonetheless, the virtual PSP emerges as a positive initiative, transcending mere facilitation of weight loss to impact participants' holistic well-being through behavioral, nutritional, and psychological support.

Poster Abstract Q112

The Blue Button Protocol: Managing Adolescents In Crisis In Klinik Kesihatan Peringgit

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Introduction: Study has shown that adolescents were more satisfied with the health services provided by adolescent-friendly clinics than conventional clinics and Klinik Kesihatan Peringgit is one of the clinics recognised practising PKMR (Perkhidmatan Kesihatan Mesra Remaja). Stigmatisation, embarrassment, poor knowledge regarding adolescent health issues and longer waiting time hinder adolescents from seeking help to clinic. An added value to this service known as the blue button protocol was introduced in September 2023. The objective of this blue button protocol is to provide fast and friendly lane in managing adolescents in crisis in view of their vulnerabilities and unique characteristics.

Methods: A button was made available at the main entrance together with criterias for adolescents' health crisis particularly abusive, mental health problems and reproductive issues.

Adolescents who attended the clinic and fulfilled the criteria can press the button, thus bypassing the registration counter. They will be attended immediately by medical staff and were brought directly into a designated room and a trained medical officer will entertain them. There were about 40 adolescents have been using this service till date.

Results: This blue button protocol had been proven successful in reducing stigmatisation and waiting time to the adolescents.

Conclusion: This protocol is an added value to the current practise of PKMR and thus can be expanded to other health clinics with PKMR services.

Poster Abstract Q113

Beyond Enforcement: Insights from a School-Based Vaping Intervention Project

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Introduction: The Control of Smoking Products for Public Health Act 2024 (Act 852) was slated for enforcement on Feb 2 but remains inactive, hindering progress toward the generational end game (GEG). NHMS Adolescent Health Survey 2022 findings underscore a concerning shift from traditional smoking to vaping among Malaysian's youth, posing notable social and health risks, including substance abuse. Our initiative in a local secondary school aims to empower vaping students as advocates, addressing this urgent public health concern.

Methods: Following the Henti, Elak, Basmi, Asap Tembakau (HEBAT) workshop by Universiti Malaya medical students in June 2023, our project continues this effort. HEBAT, a one-day program led by final-year medical students, educates students on smoking and vaping dangers. Identifying vaping students during the workshop, we provided ongoing support over one year, employing various behavioral interventions during monthly visits, including brief counseling and group sessions using the Visual in Participatory Program (VIPPP) approach and Motivational Interviewing.

Results: Ten students engaged in our program, with eight successfully quitting vaping for at least six months. Challenges like sustainability, limited intervention, parental consent and adapting to adolescent behavior were evident, yielding valuable insights for future modules targeting vaping school-going adolescents.

Conclusion: Given the notable differences in behavior between adolescents and adults, conventional smoking cessation methods are less effective for youth. Acknowledging adolescents' unique behavior and influential role among peers, we aim to create comprehensive, tailored intervention programs for wider adoption of tobacco control programs in achieving the Endgame 2040.

Poster Abstract QI14

Intervention Study Measuring the Effectiveness of Structured Clerking Form at Emergency Unit Health Clinic in Pejabat Kesihatan Daerah Mersing, 2019 until 2023

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Introduction: The emergency unit in a health clinic is primarily intended to provide rapid medical attention and resuscitation for seriously ill patients. Emergency response cases from 2019 until 2023 showed that 200 patients per month came to the clinic outside office hours to seek treatment. Short of record-keeping standards, potentially putting patients at risk if they are not adequately assessed. This study aims to measure the effectiveness of structured clerking form towards improving emergency medical care.

Methods: A retrospective study was done to look at the use of structured clerking form from January 2019 until December 2023. All documentation underwent two layered analyses. First analysis done by medical officer in charge for completeness of reliable documentation, time consumed during responded cases till cases referred to hospital. Second analysis measured the difference between conventional old clerking form and new clerking form. Analysis involved descriptive analysis and bivariate outcome.

Results: We found that the use of the structured clerking form significantly improved the documentation standard. The pre- and post-implementation data are compared to evaluate the impact of the structured clerking sheet. Statistical analysis showed that over 95% improved after implementation, rather than only 55% in pre-implementation after analysis with audit forms.

Conclusion: Implementing a structured clerking form at the Emergency Unit of the Pejabat Kesihatan Daerah Mersing has resulted in considerable improvements in patient care and operational efficiency. This standardised technique guarantees that critical patient information is collected systematically, lowering the possibility of errors and oversight in challenging situations.

Poster Abstract QI15

Risk Evaluation & Screening for Cancer (RESCAN) Programme: Early Detection Save Lives-Sharing Of Experience

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Introduction: Cancer is the fourth leading cause of death in Malaysia and the incidence in Malaysia is predicted to double

by 2040. Data in 2019, had shown that in Klinik Kesihatan Tenggera, the screening for the three main cancers, namely colorectal cancer, breast cancer and cervical cancer, is still low and, thus a systematic and comprehensive programme for early cancer risk assessment and screening was started in September 2020.

Methods: This programme focused on public empowerment by targeting the public to have knowledge of the risk factors of this three main cancers, thus encouraging them to do screening for cancers. The strategies used are through engaging the public as RESCAN Ambassador, dissemination of posters and pamphlets and giving public talks during outreach activities. Other strategies were developing Google form, QR code, Official Facebook page and self-risk assessments screening form for the public. The other focus was on strengthening the cancer screening service in the Klinik Kesihatan by establishing a dedicated RESCAN Clinic and Cancer Information Centre.

Results: There was an improvement for all 3-cancer screening at the end of 2020 as compared to previous years. There is 2.35% increase rate for pap smear screening, 19.2% for colorectal screening, and 533% increase rate for mammogram. This shows the effectiveness in cancer screening with RESCAN strategies.

Conclusion: The strategies used in RESCAN programme is able to provide early cancer screening for colorectal, breast and cervical cancer, thus early detection is possible to save lives.

Poster Abstract QI16

Community Empowerment for Cardiovascular Disease Screening and Monitoring

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Introduction: Targeted community-based screening programs and interventions are needed to address the cardiovascular risks. The aim of this project was to empower the local community on cardiovascular risk screening.

Methods: This project was carried out at a remote village in Kuala Krai. We developed a cardiovascular risk monitoring module and recruit volunteers from the local community. The volunteers were educated on cardiovascular risk and trained on the use of glucometer, digital sphygmomanometer and BMI calculation. They were tasked to perform screening on the villagers and charting their findings in a logbook. The screening progress was monitored at 3, 6 and 12 months.

Results: A total of 10 female volunteers were recruited. At 3 months follow up, almost 40% of the adult population had been screened. Thirty-five villagers detected to have abnormal screening results were referred for further assessment and management while 20 patients with poorly controlled diabetes and/or hypertension were also monitored by the volunteers and encouraged to be compliant to their treatment. By the end of 12 months, only 6 of the volunteers were still active and continued to monitor individuals with poorly controlled diabetes and/or hypertension and around 60% of the adults in the community had been screened.

Conclusion: Community members empowered with knowledge and skills can be a useful aid to health professionals to screen those with undiagnosed cardiovascular risk in the community and to provide support to patients. This targeted community-based screening program should be expanded to more communities especially those located in the remote areas.

Poster Abstract QI17

Improving Referral Time Of Children Less Than 5 Years Old With Undernutrition In Sentul Health Clinic

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Introduction: Children aged below 5 are most susceptible to undernutrition. Late assessment and intervention worsen their nutritional status, impair catch-up growth and will progress to stunting. Stunting reduces cognitive and mental development. This clinical audit aimed to improve the referral time for assessment upon detection of undernutrition children to prevent stunting.

Methods: Total of 55 Child Health Records were retrospectively audited using convenience sampling from January 2022 to December 2023 among children who met the inclusion criteria. A standard of 80% was agreed upon to measure compliance to the national guideline for timeliness of referral and assessment. The records were audited based on: (1) immediate referral by nurse upon detection of undernutrition, (2) prompt assessment by doctors, and (3) timeliness intervention by nutritionist. The strategies included: (1) referral checklist for nurses, (2) clerking aid for doctors, (3) training workshop and continuous education, and (4) giving e-book on balanced nutrition.

Results: Number of immediate referrals improved from 16.7% to 41.9%. All cases were referred for assessment. 67.8% of cases were assessed on the same day of referral. However, longer appointments are given due to increased number of referrals. Average nutritionist intervention was 6 months upon referral and the longest time remained at 20 months. These were likely due to increased workload but shortage of staff.

Conclusion: We successfully improve the referral time and reduce the number of children progressing to stunting. Subsequently is to identify promptly the causes of undernutrition for multidisciplinary care. Further studies should be conducted at other clinics within the district to evaluate the nutritionist service.

Poster Abstract QI 18

Glycaemic Control in Newly Diagnosed Type 2 Diabetes and Chronic Poorly Controlled Type 2 Diabetes Patients Attending One-Stop Diabetes Mellitus (OSDM) Clinic: A Retrospective Descriptive Study in Klinik Kesihatan Jasin, Melaka

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Introduction: Type 2 Diabetes Mellitus (T2DM) remains a global challenge for healthcare systems. Delays in achieving HbA1c targets in newly diagnosed T2DM patients and those with poorly controlled diabetes associated with higher risk of cardiovascular disease over time. Effective glycaemic control management can help to prevent long-term adverse outcomes. This study aims to describe the efficacy of multidisciplinary team approach in improving glycaemic control in diabetic patients.

Methods: 163 patients who newly diagnosed with T2DM and those with poor diabetic control were recruited in OSDM Clinic. All patients were managed by a coordinated multidisciplinary diabetes care team consisting of doctors, diabetic educators, pharmacists, dietitian and physiotherapist from September 2023 until April 2024. Retrospective descriptive analysis was conducted on data obtained from 92 patients who met the study's inclusion criteria. Analysed variables includes HbA1c, LDL cholesterol, systolic blood pressure (SBP), diastolic blood pressure (DBP) and body weight.

Results: Overall reduction in HbA1c was seen in 80 patients (86.9%) with a mean reduction of 1.62%. There was also improvement in other parameters. 48 patients (52.2%) achieved reduction in LDL cholesterol level with a mean reduction of 0.83mmol/L. 59 patients (64.1%) had a mean reduction in SBP of 12.97mmHg, while 49 patients (53.3%) had a mean reduction in DBP of 8.4mmHg. A mean reduction in body weight of 1.48kg was seen in 51 patients (55.4%).

Conclusion: The OSDM Clinic implementation has been found to be effective in attaining HbA1c reduction and overall favourable outcomes due to improved patient empowerment achieved through multidisciplinary approach.

Poster Abstract QI19

Enhancing Primary care Pain Management through Implementation of a Clinical Pathway and Provider Education: A Quality Improvement Project

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Introduction: Pain is one of the leading causes of primary care visits. However, pain management remain suboptimal and with poor adherence to guidelines leading to decreased quality of life amongst patients and increased burden on the health care system. Through this study we aimed to assess the adherence of doctors of our clinic to the clinical practice guideline of pain management and to enhance the quality of pain management through a structured quality improvement (QI) intervention.

Methods: A cross-sectional study was conducted over the months of February 2024 till May 2024. The intervention included: 1) Training sessions for doctors on pain assessment and management guidelines, 2) Introduction of a pain management algorithm, 3) Modified WHO analgesia ladder pre-and post-intervention data were collected from patient records and audited using a 3-part checklist. Statistical analysis was performed to assess the significance of observed changes.

Results: Post-intervention, there was a significant increase in the documentation of pain score (65.2% to 99.1%, p<0.001).

The amount of analgesia used for each patient also decreased from a mean of 1.39 to 1.14 ($p < 0.001$). The mean audit score improved from 55.74 (95% CL 53.52, 57.95) to 60.18 (95% CI 58.11, 62.25) ($p < 0.001$) analysed using T-Test.

Conclusion: Adherence to clinical practice guidelines were poor, resulting in suboptimal pain management provided by the doctors. The implementation of a structured QI intervention significantly improved pain assessment, documentation, and management. Enhanced provider education, use of pain management algorithm and the modified WHO analgesia ladder were key components in achieving these improvements.

Poster Abstract Q120

The Effectiveness Of A Multidisciplinary Intervention In Weight Management Clinic (WMC) For Obesity Treatment In Perlis

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Introduction: Obesity has emerged as a critical public health threat, with numerous nations witnessing a staggering surge in prevalence over recent decades. The role of a multidisciplinary team with anti-obesity medications (AOMs) to support patients through their weight loss journey should not be neglected. Multidisciplinary management of obesity has been recognized as an effective means to improve weight loss and associated health outcomes.

Methods: Two health clinics in Perlis were involved, with selected patients receiving treatment. Optimal treatment involved a multidisciplinary team following the Chronic Care Model of healthcare delivery for 6 months period of time. Combined treatment programs included: 1) a low-calorie diet individualized to patients' preferences, 2) structured exercise for patients, 3) psychotherapy, and 4) the use of anti-obesity medication (AOM). At the end of intervention, patients who did not have weight reductions will reassess again for continuation of treatment.

Results: Out of a total of 29 patients, 58.6% had weight reductions in total with mean of 4.1%, 6.9% had weight that remained static, and 34.5% had weight increments with target of minimum 5% from initial body weight in 6 months. A sub-analysis of bioelectrical impedance analysis (BIA) in the groups with static weight and weight increments showed that 50% experienced an increase in body muscle mass and 50% had a reduction in fat mass. Additionally, the usage of AOMs was 17.2% in this group and mean of durations was 3 months.

Conclusion: A multidisciplinary approach has shown high impact and effectiveness in managing obesity in individuals. Positive outcomes from supporting investigations, such as BIA and the introduction of AOMs, have changed perspectives on obesity management in primary care setting.

