Abstracts: JPBS

SYMPOSIUM - ICPRP 2019-ERA OF BIG DATA

ID 1. Investigating Self-medication Practice among Pregnant Women in Kuantan, Pahang

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Introduction: Pregnancy has been associated with discomfort and several health issues that may prompt self-medication. Although various reasons and types of self-medication among pregnant women have been reported worldwide, little is known whether this practice is common among pregnant women in Malaysia. **Objectives:** The study aimed to investigate the practice and factors of self-medication among pregnant women in Kuantan, Pahang. **Materials and Methods:** A cross-sectional survey was conducted by distributing a validated self-administered questionnaire among pregnant women who attended prenatal check-up at the International Islamic University Malaysia Medical Centre Kuantan, Pahang. Data was analysed using Statistical Package for Social Sciences version 22. **Results:** A total of 80 pregnant women participated in the study over a period of five months which accounted for 80% of total sample size. The range for age was 23–45 years and gestational age was 12 – 39 weeks. Most of them had experienced their symptoms such as fever and flu at home but only 32.5% (n=26) practiced self-medication, whereas 67.5% (n=54) did not agree without consulting doctors. Participants took modern medicines (18.75%, n=15), health supplements (76.2%, n=61) and herbal products (5%, n=4). Self-medication was practiced by women who took modern medicines (n=3), health supplements (n=19) and herbal products (n=3). Factors that influenced self-medication were information from the internet (70%), friends (53.75%), articles/books (40%), family members (41.25%) and media (33.75%). **Conclusion:** Self-medication occurred among pregnant women and involved various types of products. Intervention to improve this practice is required to prevent associated risks of adverse outcomes in pregnancy.

KEYWORDS: *Factors, pregnant women, practice, self-medication*

ID 4. Antibiotic Prescribing in an Intensive Care Unit: Findings from a Public Malaysian Setting

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Introduction: Data on antibiotic prescribing together with its knowledge and perception in Malaysian ICU is lacking. **Objectives:** To explore knowledge, perception, and antibiotic prescribing among specialists and advanced trainees in Malaysian ICU. **Materials and Methods:** A cross-sectional survey was employed which consisted of three sections namely knowledge, perception, and practice. Three case vignettes consisted of hospital-acquired pneumonia (HAP), infected necrotising pancreatitis (INP), and catheter-related bloodstream infection (CRBSI) were presented in the practice section to gather information on prescribing practice. **Results:** About 868 respondents were approached but only 104 responded (12.0% response rate). Seven different classes of antibiotics giving a total of 390 were empirically prescribed for the three cases combined. Antibiotic prescribing compliance which indicates correct choice of antibiotics and dosing were 66.3%, 56.7%, and 19.2% for HAI, INP, and CRBSI respectively. In perception, 97.2% and 85.6% of respondents conceded that antibiotic concentration is inadequate, and that dosing be based on MIC respectively. Majority (94.2%) perceived that antibiotic dosing follows PK/PD profile but only half (50.9%) agreed that therapeutic drug monitoring be routinely performed. Comprehension on antibiotics showed that all respondents acknowledged PK/PD profile of antibiotics but only 64.4% able to correlate given antibiotic with their respective PK/PD. Only 13.5% of respondents able to identify the best PD approach for β-lactam antibiotics in sepsis patients. **Conclusion:** Antibiotic prescribing was somewhat appropriate in Malaysian ICU. Prolong therapy and inadequate coverage are the hallmark need to be considered especially in CRBSI. Clinicians are conversant with available antibiotics but apprehension in its PK/PD is scant.

KEYWORDS: *antibiotic, survey, beta-lactam*

ID 5. Investigating the Use and Knowledge of Analgesics among IIUM Undergraduate Pharmacy Students

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and the overall score revealed that knowledge of MOs and PPs was statistically significantly different (p=0.145). **Conclusion:** The knowledge of antibiotic stewardship is better in HPs than MOs, however, the perceptions on AMS are generally positive in both groups.

KEYWORDS: *Attitude, antimicrobial stewardship, antibiotic resistance, antimicrobial irrational use, knowledge, perception, pakistan*

ID 225. Item analysis of Objective Structured Clinical Examination (OSCE) Assessment Rubrics for Undergraduate Pharmacy Students

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Introduction: Objective Structured Clinical Examination (OSCE) is one of the assessments that objectively evaluate the students' competency in handling the specific hands-on clinical tasks. The rubrics of the assessment is very critical to be evaluated ensuring its validity. **Objectives:** This study aimed to evaluate the usefulness of the item analysis method in objectively analyse the validity of the assessment rubrics developed for OSCE in the field of pharmacy. **Materials and Methods:** Fifty-four (54) students participated in the OSCE and were divided into three groups of the concurrent session with four active stations and two preparatory stations. The examiners were well-trained on the assessment rubrics before the examination for standardization. The questions and assessment rubrics were developed and vetted earlier in a group of vetting committee who were expert in the field of pharmacy practice and languages. There were four (4) tasks in the active stations namely; i) Insulin device counselling, ii) Extemporaneous preparation of spironolactone syrup, iii) Unit of dose supply and iv) Psychotropic drugs recording and supply. **Results:** Majority of the items in the rubrics showed acceptable levels of discrimination (>0.3) and difficulty index (0.25–0.85) except for a few items that need to be reviewed and improvised literally or constructively. **Conclusion:** Item analysis method is useful in analysing the validity of the assessment rubrics developed for OSCE in pharmacy field.

KEYWORDS: *Assessment rubrics, item analysis, objective structured clinical examination, undergraduate pharmacy students*

ID 226. The Role of Polyamines in Beta vulgaris (beetroot), Ziziphus jujube (jujube) and Vitis vinifera (raisin) on Human Lung Adenocarcinoma Cells Proliferation and Apoptosis

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Introduction: Polyamines are vital in maintaining human health because they are crucial for cell growth. Excessive intracellular polyamines in diet may promote unwarranted cell proliferation. **Objective:** This study aimed to investigate polyamines as a chemopreventive agent in selected fruits against human lung adenocarcinoma cells, A549. **Materials and Methods:** *Beta vulgaris* (beetroot), *Ziziphus jujube* (jujube) and *Vitis vinifera* (raisin) were freeze dried and kept at -80 °C until analysis. The anti-proliferative activity of selected fruits was assessed on A549 cells using MTT assay and the effect on A549 growth was completed via Trypan bluedye exclusion assay. Cell cycle profile and apoptosis were conducted with flow cytometer, while caspase assay was done using microtiter plate-reader. The quantification of intracellular polyamines was done using HPLC and the effect of these medicinal plants on the gene expression of selected polyamine metabolic enzymes was determined using qPCR. **Results:** The IC_{50} ranged between 15 to 30 mg/ml for these three fruits. A549 growth indicated significant decreased in cell viability after 48 h. Annexin-V/PI demonstrated significant increase in early apoptosis in beetroot treated cells while other fruits caused significant increase in late apoptosis at 48 h of treatments. There was a significant downregulation of ODC gene in cells treated with jujube and raisins while upregulation of SSAT gene in beetroot treated cells. **Conclusion:** These medicinal fruits are the promising candidates for food-based chemoprevention strategy for their low polyamine content, vital in modulating polyamine metabolism and promoting cell death.

KEYWORDS: *Lung cancer, nutritional cancer therapy, prophetic medicinal fruits, polyamines*

ID 227. Knowledge and Perception of Final Year Medical and Pharmacy Students (MBBS and Pharm-D) Towards Antibiotic Use and Resistance in Lahore, Pakistan

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Introduction: A thorough understanding of the use of antimicrobial agents and phenomenon of resistance is a key attribute expected in medical and pharmacy graduates. Hence, it would be of significant relevance to appraise knowledge, attitude and perception of those who would