

**Introduction:** The New Zealand White (NZW) rabbit is an established model for infection.

**Objective:** An experimental protocol for local bacteria injection at distal femoral shaft to create osteomyelitis in the New Zealand White rabbit is described.

**Methodology:** This study is a descriptive analysis of the surgical approach (and related complications) used for osteomyelitis at distal femur in the NZW model. This study was performed at Advanced Orthopaedic Research Laboratory, International Islamic University Malaysia that followed the requirements of ISO17025 standard. The procedure was to introduce sterile distilled water to wash the femoral shaft before inoculation with ATCC 25923 *Staphylococcus aureus* to produce osteomyelitis in the NZW rabbit. The outcomes then were analyzed through radiographic assessment and microbiology identification tests.

**Results:** A total of 36 NZW rabbits underwent a distal femoral shaft osteomyelitis surgery. After experimental protocol established, osteomyelitis was noted and was successful infected with *Staphylococcus aureus* to promote osteomyelitis using the method at distal femoral shaft in all 36 NZW rabbits. We achieved 100% of inoculation of osteomyelitis in all 36 New Zealand White rabbits. No mortality noted among all rabbits involved in this study.

**Conclusion:** This is a simple and reliable method was demonstrated and recommended for surgery via femoral shaft on New Zealand White rabbits to create osteomyelitis.

---

## *Population Health*

### **PREVALENCE OF RISK FOR EATING DISORDER AMONGST INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA MEDICAL STUDENTS AND ITS ASSOCIATED FACTORS**

*Hafizah P., Razman MR, Jamalludin AR, KH Abd Aziz, HE Nasreen, Swe Swe Latt.*

*Department of Community Medicine, IIUM Kuantan Campus, Bandar Indera Mahkota, 25200, Kuantan, Pahang.*

**Introduction:** Eating disorders are a poorly understood condition characterised by severe psychiatric and medical manifestations, in which eating habits, physical health and psychosocial functioning are disturbed. College and university students are among the population who are prone to eating disorder.

**Objective:** The aim of this study is to determine the prevalence of risk for eating disorders amongst the medical students in the International Islamic University Malaysia (IIUM), Kuantan campus and to identify its associated factors.

**Methodology:** A cross sectional study involving 200 medical students of IIUM Kuantan campus session 2014/2015 of all years (20-26 years old) of both genders using a self-administered questionnaire through an online website which is a Google drive between 29th June till 10th July 2015.

**Result:** This study revealed that the prevalence of risk for eating disorder among IIUM Kuantan campus medical students is 15%. The risk is noted to be higher among single, female, Malay, being the middle child, overweight and physically inactive; but the relationships were not statistically significant.

**Conclusion:** The prevalence of those who have the risk of eating disorder in this study is comparable to the result from the previous studies conducted among college and university students in Malaysia. Nevertheless, the risk of eating disorder is documented among IIUM medical students and warrant a closer look and appropriate reference for those who have the risk.

### **NICOTINE DEPENDENCE AND QUIT SMOKING: A PRELIMINARY SURVEY AMONG ADULT MALES IN KUANTAN, MALAYSIA**

*Swe Swe Lat, Razman MR, Jamalludin AR, HE Nasreen, KH Abd Aziz, Htike MP*

*Department of Community Medicine, IIUM Kuantan Campus, Bandar Indera Mahkota, 25200, Kuantan, Pahang.*

**Introduction:** Most of the smokers remain as active smokers and do not aware of their nicotine dependence (ND) level. ND is an important reason for smoking addiction.

**Objectives:** The study measured the prevalence of smoking and ND among adult males and their difficulties to quit smoking.

**Methodology:** A cross-sectional study was conducted among 296 males aged 18 years and above from Felde Bukit Goh at Kuantan, Malaysia in 2015. Socio-economic status, history of smoking, quit attempt and reasons for failing to quit were explored by using a self-administered questionnaire. Level of ND was assessed by validated Malay version of Fagerstrom Test for ND questionnaire. Multivariate analysis on relationship among socio-economic status and current smoking status, level of ND was done.

**Results:** The prevalence of current smokers was 61.1% and the prevalence of low and moderate to high ND level was 76.2 % and 23.8 % respectively. Among them, 54.1% of smokers tried to quit smoking ranging from 1 to 30 times. Forty eight percent of those attempted to quit were self-motivated and their main reason for failure to quit was addiction (71.9%). Smokers with monthly household income of RM2000-2999 was independently associated with moderate to high ND with adjusted OR=4.73 (95% CI 1.83-12.18) compared to those with income less than RM2000.

**Conclusion:** Despite high prevalence of smoking, majority of smokers have low ND. Addiction was the main reason for failure to quit. Household income was a contributing factor for moderate to high ND. The finding provides hope for the success of smoking cessation programme if it is to be done in this locality.

## **‘I CAN’T PRAY’ – THE SPIRITUAL NEEDS OF MALAYSIAN MUSLIM PATIENTS SUFFERING FROM DEPRESSION**

*MR Ahmad Nabil<sup>1</sup>, SM Saini<sup>2</sup>, N Nasrin<sup>3</sup>, R Bahari<sup>3</sup>, Sharip S<sup>2</sup>*

*<sup>1</sup>Department of Psychiatry, Kuliyyah of Medicine, International Islamic University Malaysia (IIUM).*

*Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, 25200 Kuantan, Pahang, Malaysia. <sup>2</sup>Department of Psychiatry, Pusat Perubatan Universiti Kebangsaan Malaysia (PPUKM). Jalan Yaacob Latif, Bandar Tun Razak, 56000 Cheras, Wilayah Persekutuan Kuala Lumpur, Malaysia. <sup>3</sup>Faculty of Medicine, Cyberjaya University College of Medical Sciences (CUCMS), 3410, Jalan Teknokrat 3, Cyber 4, 63000 Cyberjaya, Selangor, Malaysia.*

**Introduction:** The mainstay of treatment of depression relies on pharmacological and psychological treatments. On top of that, evidence also recognizes the vital role of spirituality for human wellness which leads to growing interest in its utilization to treat depression. However, research on spirituality among Muslims in relation to depression is relatively scarce.

**Objective:** The aim of this study is to explore the understanding of spirituality among Muslim patients with depression, and to explore their spiritual needs.

**Methodology:** This is a qualitative study conducted on 10 depressed Muslim patients at the UKM Medical Centre. Purposive sampling was done to ensure diversity of subjects. Individual in-depth interviews were conducted using semi-structured questionnaire guidelines. The data were transcribed verbatim and analysed using a thematic approach.

**Result:** Out of 10 patients, almost all of them expressed spiritual needs. Two major themes emerged in relation to the spiritual needs which are (i) religious needs; need for worship, religious knowledge and guidance, religious reminders, and (ii) existential needs; need for calmness, sensitivity and empathy, self-discipline, certainty, hope, physical help, ventilate and meaning of illness. These needs are essential for patients during the time of crisis.

**Conclusion:** The majority of patients expressed spiritual needs which are required during the process of recovery and this provides an opportunity to incorporate spiritual approaches in the treatment of depression. However, more studies are needed to demonstrate its scientific basis and to design an effective psycho-spiritual treatment modality so that the ‘holistic’ or ‘bio-psychosocial-spiritual’ treatment can be integrated by health care professionals to those in need.