

The Quality of Diabetic Retinopathy Screening Program in Primary Health Care Penang 2017

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ABSTRACT

INTRODUCTION: Diabetic Retinopathy Screening Programme using Fundus Camera has been extended to Primary Care for more than 10 years to ease the patient overload for screening in Eye Clinics. NICE Guidelines recommended screening modalities with the sensitivity of 80%, Specificity of 95% and technical failure of $\leq 5\%$. Beside screening tools, successful screening program also involves the skills and competency of the staff. However, limited research has been conducted to review the quality of this program. **METHODS:** This research was conducted between January-October 2017. 30 diabetics patients' fundus images from chosen clinic in each district were randomly selected. Findings of both eyes stated by MOs in the reports and quality of images were evaluated by Ophthalmologist. Agreement on the findings by Ophthalmologist were graded as True Positive/Negative or False Positive/Negative. Subsequently, the data was analyzed as sensitivity, specificity and percentage of unsatisfactory images and compared with the standard. **RESULTS:** Overall unsatisfactory images were 11.3%. Total of 271 images were analyzed and average sensitivity was 83.7% and Specificity 93.8%. Three districts (SPU, SPT&TL) were able to achieve sensitivity $>80\%$. Clinic from BD has the lowest sensitivity with only 53.3%. Clinic from SPU, SPT and BD has specificity $>95\%$. Only SPU had 5% unsatisfactory image while the others ranging from 7%-22%. There is no district able to fulfill all the recommended criteria. **DISCUSSIONS:** The move to use Fundus Camera for retinopathy screening at primary care is necessary for wider coverage in the demand of urbanization. However, this program must not be left unmonitored to ensure the standard of screening quality

The Relationship Between Calorie Intake and Physical Activity with Body Composition of Premenopausal Women in Padang City

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ABSTRACT

BACKGROUND: Premenopause is a menopausal transition period characterised by a decrease in the hormone estrogen. This will trigger a change in body composition that results in obesity. Calorie intake and inappropriate physical activity are risk factors that can affect these changes. **OBJECTIVE:** This study aims to look for the relationship of calorie intake and physical activity to body composition (FM, FFM) in premenopausal women in Padang City. **METHODS:** A cross-sectional study was conducted on 92 premenopausal women, aged 40-55 years. The study was conducted in 4 sub-districts with eight villages in Padang City. The sample was taken by multistage random sampling. Data consisted of characteristics, calorie intake and physical activity collected by interviews using questionnaires, FFQ and IPAQ. Data were processed using computers and analysed by Pearson correlation and ONE-Way ANOVA test. **RESULT:** The results of this study found that the average calorie intake was 2014,68 \pm 3,19 Kal, FM and FFM, respectively 22,63 \pm 7,80 kg and 36,48 \pm 4,01 kg. There is no correlation between calorie intake and FM and FFM. Average FM and FFM are higher in respondents with heavy physical activity. **CONCLUSION:** There is an association between physical activity and FM and FFM. Physical activity is a risk factor for body composition while calorie intake is not a risk factor.

KEYWORDS: calories intake, physical activity, body composition, premenopause