ASSESSMENT OF DIETARY INTAKE PATTERN AND PHYSICAL ACTIVITY LEVEL AMONG PREGNANT WOMEN IN SELANGOR

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ABSTRACT

Adopting a maternal healthy eating habit and physical activity is very crucial to ensure a good pregnancy outcome. This study was aimed to assess dietary intake pattern and physical activity level, and to assess the relationship between dietary intake pattern and physical activity level with several demographic characteristics among pregnant women in Selangor. 101 pregnant women from six Klinik Kesihatan in Selangor were involved in this study. A three-time 24-hour dietary recall was used to assess the dietary intake pattern. The Pregnancy Physical Activity Questionnaire (PPAQ) was used to assess the physical activity level. The energy intake obtained from this study is only from 60% to 74% of the Recommended Nutrient Intake (RNI) Malaysia. The percentage achievement of protein from RNI exceeds with the figure of 108% to 118%, whereas the calcium intake is lower than the RNI of only 36% to 53%. The mean for energy was 1542kcal to 1767kcal, for protein; 67.6g to 74.3g, and for niacin; 12.5mg to 15mg. The median for carbohydrate was 164g to 219g, for fat; 62.5g to 74g, for calcium; 369mg to 536.5mg, for iron; 11mg to 15.5mg, for thiamine; 0.8mg, for riboflavin 1.4mg to 1.7mg, for total A equivalent; 635µg to 895.5µg and for vitamin C; 32.5mg to 45mg. Pregnant women in Selangor generally have low physical activity level. The median for total activity was 164.69 MET-h·wk^{-1}. . The highest energy expenditure on intensity was light physical activity of 105.45 MET-h·wk^{-1} (67.27 MET-h·wk^{-1}, 168.89 MET-h·wk^{-1}) within range of 1.5 to 2.9 METs. However, the highest energy expenditure of 82.29 MET-h·wk^{-1} was household physical activities. The findings of this study showed that women with older age, higher education level, unemployed, higher income and more number of children were associated with higher participation in physical activity especially household activity.

CHAPTER I

INTRODUCTION

1.1 RESEARCH BACKGROUND

Balanced and healthy maternal dietary intake during pregnancy is well known for a healthy pregnancy outcome (Bawadi et al., 2010). There are several micronutrients that play important roles in supporting the pregnancy thus help to achieve a healthy pregnancy outcome. They are calcium, folic acid, Vitamin B6, Vitamin A, Vitamin C as well as zinc. According to Wennberg, Lundqvist, Högberg, Sandström, & Hamberg (2013) proper maternal nutrition is crucial during pregnancy. It includes a diet with enough energy, wide choices of nutrients, minerals and vitamins. For example, the risk of getting spina bifida is higher when being associated with reduced level of mineral such as folate.

Adopting a healthy eating habit is very crucial to ensure a good pregnancy outcome. Premature or low birth weight delivery will put the newborns in higher risk of poor physical or neurocognitive growth (Bawadi et al., 2010) . Thus, it will cause the newborn to develop various kinds of diseases in their future life. However, normal birth weight and newborns that are born maturely may also be at risk of developing adult disease as the effect of insufficient nutrients intakes during gestational period (Calkins & Devaskar, 2011). Regardless of the importance of healthy dietary intake during pregnancy, women in developing countries are still having the problem of insufficient nutrients intake (Bawadi et al., 2010).