ABSTRACT

Introduction

Obesity is a foremost public health problem that challenges the Health system of Sri Lanka. Pre-pregnancy overweight/ obesity conveys an increased risk of complications during pregnancy, child birth and post-partum period to both mother and the neonate.

Objectives

This study was carried out to describe the proportion of pre-pregnancy overweight/obesity, its associated factors and maternal and neonatal complications among post-partum mothers in District General hospital, Kalutara.

Methods

A hospital based descriptive cross-sectional study was conducted among 325 post-partum mothers who delivered in DGH Kalutara using systematic random sampling method. The data was collected using a pre-tested Interviewer Administered Questionnaire. Statistical significance was assessed using Chi-square test and p value. Normal weight women served as the referent population.

Results

The mean BMI was 23.72 Kg/m² (SD= 4.65). According to WHO classification, 48.6% had a normal BMI, 32.6% were overweight and 7.3% were obese during pre-pregnancy period. Women with a higher level of education (p= 0.002), higher monthly income (p= 0.01) and living in urban areas (p= 0.01) were identified as factors associated with pre-pregnancy overweight/ obesity. Life style characteristics such as poor-quality sleep (p= 0.012), inadequate time spent on certain physical activities: mopping (p= 0.02), lifting objects (p= 0.008), playing with children (p= 0.001) and carrying/ lifting child (p= 0.03) and inadequate consumption of greens and beans (p= 0.004) were also associated with pre-pregnancy overweight/ obesity.

GDM was the only morbidity associated with the maternal pre-pregnancy overweight/ obesity (p= 0.01). No association was unveiled with neonatal morbidities and maternal BMI.

Conclusions

Our analysis confirms that there is an association between maternal pre-pregnancy overweight/ obesity and high living standards, physical inactivity, unhealthy food and sleep habits. Furthermore, high prevalence of GDM is attributable to pre-pregnancy overweight/ obesity. These findings highlight the important role of Primary Health Care in engaging women in weight management before they get pregnant.

Keywords: pre-pregnancy overweight and obesity, Body Mass Index, diet, physical activity, maternal complications, neonatal complications