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Association of Physical Activity and Sedentary Lifestyle with Overweight and Obesity among Adult Women in Sri Lanka

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Abstract: To evaluate how the leisure time physical activities (LTPA), household chores (HHC) and sedentary behaviours (SB) impact on overweight or obesity in Sri Lankan adult women. This study was conducted from July 2012 through March 2013 at the outpatient department (OPD) in the Ayurveda Teaching Hospital, Borella. The sample was collected from one hundred and twenty one overweight or obese women, age between 18 – 60 years, representing different socio-economic districts. The questionnaire developed for the study was organized in three areas: (1) socio-demographic information (2) physical activity and the sedentary behaviour tools, (3) anthropometric measures and biochemical examination. The socio demographic results obtained as follows: the mean age of participants were 39.6 years (±SD 10.7) and nearly 56% of the participants were below the age of 40. Higher percentage of subjects in this study was unemployed and served as housewives when compared to the employees and the students' populations. About 44% of the participants indicated that they receive a monthly income of less than LKR 25,000. In the present investigation, 41.3 % had BMI = 25 kg/m² (overweighed) and of whom 35.5 % and 18.2 % were obese I and obese II respectively and 5% showed morbid obese. Analysis of Leisure Time Physical Activity (LTPA) revealed that 91 % of participants responded that they were spend less than 90 minutes /week on walking, 100 % of the participants responded that they were not engaged in swimming and approximately 93% of the participants responded that they were not involved in any aerobic physical exercises. Results of the analysis of House Hold Chores (HHC) revealed that responsiveness of not participation on washing, cooking and gardening were 33%, 13% and 89% respectively. Considering LTPA and HHC together as a separate variable, Total Physical Activity (TPA) was analyzed. About 91% of participants showed sedentary physical activity level and only 8% of participants showed a light physical activity level. The results revealed on SB that only 5% of participants viewed TV more than 14 hours per week and a 3.3% of participants used computer more than 7 hours per week also only 5.8% of participants conversed more time on telephone. A negative correlation was found between the variables of brisk walking, aerobic physical exercises, washing and gardening with different BMI range. Therefore, can conclude that Sedentary behaviors (SB) such as watching TV, computer usage and more time spent in telephone were not the causes for overweight/obesity but the poor LTPA and poor HHC would be influenced the overweight/ obesity in women in Sri Lanka. Level of income were not affected the level of obesity but the level of education found to be impact in women obesity in Sri Lanka.

Key words: Overweight % Obesity % Sedentary lifestyle % Physical activity % Females % BMI

INTRODUCTION

Rates of non-communicable diseases have been progressively increasing in Sri Lanka during the last

several years [1]. Cardiovascular disease, cancer, chronic respiratory diseases and diabetes lead to a higher incidence of mortality among people [2]. Although, genetic and environmental factors are involved in the

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