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Less Sleep Duration and Poor Sleep Quality Lead to Obesity

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Obesity is one of the major health problem and leads to many adverse health effects such as type 2 diabetics and cardiovascular disease. Identification of the reasons for obesity can help to reduce its prevalence. Therefore, a cross-sectional study was carried out to investigate the association of sleep deprivation and sleep quality with obesity. For this purpose a total of 225 Iranian adults (109 males and 116 females) aged 20–55 years were selected. Heart Questionnaire (SHHQ), International Physical Activity Questionnaire (IPAQ) and 24-hour dietary recall were interview-administered to evaluate sleep pattern, physical activity and dietary intake of the subjects. Besides, anthropometric also were measured, then subjects were categorized into normal weight and over-weight/obese based on WHO (2000). Sleep duration and sleep quality were assessed based on 2 groups of normal weight and overweight/obese. Overweight/obese group have shown shorter sleep duration (5·37 ± 1·1 hours) as compared to normal weight subjects (6·54 ± 1·06 hours). Poor sleep quality was shown in Overweight/obese compared to normal weight subjects. Fifty percent of overweight/obese have reported trouble in falling asleep compared to 30 % which was reported by normal weight for this problem. Furthermore, 59·7 % of overweight/obese had problem with waking up during a night and faced trouble to get back to the sleep compared to 38·3 % reported of normal weight. Poor sleeper had significantly higher risk for being overweight or obese (OR: 2·0, 95 % CI: 1·18–3·37, $p < 0·05$) compared to subjects with less sleep problems. As a conclusion, lower sleep quality and sleep duration increase the risk of being overweight and obese. Hence strategies for the management of obesity should incorporate consideration on sleeping pattern.