The Effect of Physical Activity Program by Ministry of Health Treatment and Education on Quality and Quantity of Sleep and Fasting Blood Sugar in Pregnant Women

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The purpose of this study is to study the effect of physical activity ed by the Ministry of Health, Treatment and Medical Education on the quality and quantity of sleep and fasting blood sugar (FBS) of pregnant women. At the first the method used in present study is semi -experimental method which was examined sampling on 45 pregnant women of 20-35 years in childbearing age of 33-20 weeks that referred to health centers in Rasht. Then participants divided randomly into two groups, 24 patients were examined in the control group and 21 patients in the experimental group. Preparing for childbirth training classes consist of 8 sessions that was convened in two days per week and each session for 90 minutes. These sessions consist of 30 minutes about theoretical training in the field of nutrition and routine prenatal care, 15 minutes for practical skills, and 45 minutes physical exercise for pregnant women in accordance with correct principles that their coach had been conducted and they have physical activity at their house one day a week according to plan. Pittsburgh Sleep Quality questionnaire was completed by samples in both test and control groups before the start of training classes and one day after the end of. Coincide with the completion of the Pittsburgh questionnaire, FBS of pregnant women were measured by using Auto-analyzer device for both experimental and control groups. In this study, by using paired t-test, it has showed that there is no statistically significant difference between the quality of sleep of practiced pregnant women before and after physical activity (P=0.001). It was also found that there is a significant difference in sleep quality between the untrained pregnant women before and after physical activity so this difference is in the negative direction (P=0. 001).

The independent t-test showed no significant difference between changes in sleep quality between the two groups of practiced and untrained women that The difference in the group were untrained in the negative direction (P=0. 001). Paired ttest showed a significant difference in quantity of sleep between trained and untrained pregnant women before and after physical activity (P=0. 0001). Independent t-test showed a significant difference between the quantity of sleep changes between the two groups of trained and untrained women (P=0. 0001). The paired t-test showed a significant difference between FBS of practiced pregnant women before and after the ed physical activity (P=0. 0001). There is no significant differences between the fasting blood sugar of untrained pregnant woman before and after physical activity (P=0. 375). Using of independent t-test revealed that there is a significant difference between the change in FBS between the two groups of trained and untrained women, of course, this difference in untrained women is in the negative direction (P=0. 0001). The results showed that physical activity ed by the Ministry of Health, Treatment and Medical Education is effective on the quality and quantity of sleep and fasting blood sugar of pregnant women.

Keywords : Keywords: quality and quantity of sleep, fasting blood sugar, pregnant women, physical activity of the Ministry of Health and Medical Education.

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