COMPARATIVE ANALYSIS THE SLEEP QUALITY OF PREGNANT AND NON-PREGNANT WOMEN WHO REFER TO ZAHEDAN'S HEALTH & TREATMENT CENTERS 2014

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Abstract

Literature review and objective: Insomnia and decreasing the sleep quality causes the performance to be fallen as well as to defects in functions of the people. Disorder in sleep quality is a common problem in pregnancy which seems that it faced with psychological consequences in pregnant women. This study was done with the aim to sleep quality of pregnant and non-pregnant women who refer to the Health & Treatment centers of Sayed-al-shohada.

Methods and Procedures: this descriptive-analytical study was done over 250 persons of pregnant and non-pregnant women. Information were collected by using Pittsburgh sleep questionnaire through interview and it was analyzed by using Spss 18 software and Pearson’s descriptive and correlation methods.

Findings: From 250 samples of this research 97 persons (38/8%) were pregnant and 153 persons (61/2%) were not pregnant. There was a positive correlation between the weeks of pregnancy and the time to fall asleep which was statistically significant. The average score of sleep disorders in pregnant was 69/7, So that the average scores of sleep disorders in weeks of 2-10, 11-19, 20-28, 29-37sequently are:6, 89/7, 81/8, 86/8 and is 47/8 for non-pregnants.

Conclusion: by increasing pregnancy weeks, the time to fall asleep was significantly increased that it can indicate reducing of sleep quality in pregnant women. Therefore, it is suggested an appropriate measures to be taken to improve sleep quality in this group.

Key words: Sleep quality, pregnant women, non-pregnant women.

Introduction: Pregnancy is considered as the most important and sensitive periods of life of a woman (1). Pregnancy is also a common occurrence for women in fertility age and is generally seen as a joyful opportunity (2). In spite of that,
pregnancy with involvement of mechanical and hormonal mechanisms, can be changed to a risk factor for pregnant woman (3,4). For example, sleep which is a considerable aspect of health in pregnant women (5) is frequently confused during pregnancy (6,7). For the reason of systematic changes due to hormonal factors, spiritual, mental, emotional and physical, pregnancy can disrupt the sleep patterns and cause to sleep disorder (8). Sleep is a dynamic and organized biological process which is an important part of life and the quality and the way of sleep is effective in human life’s quality and his physical and mental health (9, 10). The quality of sleep is defined as a period of energize sleep that provides related needs with sleep of people and it allows person to perform daily's appropriate functions (11, 12). It should be considered that the reduce of the spiritual and mental peace due to the insomnia can leads to increase stress and the fear to preserve and in taking care of baby and accepting the role of mother and father in the family. In some cases, it also causes the pain after childbirth and negative impact on family and it indirectly causes to impose economic burden to society (13,8). In this regard, the results of review studies obtained from sleep disorders in pregnancy period indicate the increase of preterm labor risk, low birth weight, increasing problems during pregnancy and indelivery, increasing the duration of labor’s steps, childbirth by use of tools, cesarean and postpartum problems such as negative mood during the day and postpartum sadness. For this reason, quality and quantity of sleep due to physical and psychological consequences in the period before childbirth should be assessed, because in case of sleep disorder for three days or more, there is also the possibility of dysfunction in daily work of pregnant woman (14).

Given the importance of proper sleep on the health of mother and fetus, in pregnancy preservation the complaint for low quality of sleep is deemed as a natural event associated with pregnancy, while assessing the quality and quantity of sleep has a great importance at this time, therefore; this study has been done with the aim to comparative analysis the sleep quality of pregnant and non-pregnant women who refer to the Health & Treatment centers of Zahadan.

**Procedures and Methods:**

This descriptive-analytical study has been done over 250 persons of pregnant and non-pregnant women, singleton and without any known disease who did not use sleep medications. Simple and available sampling methods have been done in Zahedan’s health centers of Sayed-al-shohada. Researcher has collected information by using Pittsburgh sleep questionnaire through interview.

Pittsburgh Sleep Quality Interview (PSQI) is one of the most important scales used in foreign researches. This questionnaire investigates the attitude of patient about sleep quality during the past 4 weeks. This questionnaire has 7
scores for scales of 1- general description of a person of the quality of sleep, 2- delay in falling asleep 3- duration of useful sleep 4- useful sleep 5- sleep disorders 6- the amount of consumed sleeping pills 7-daily performance disorder and a total score is given from it. Each of the questionnaire’s scales score are placed between 0 to 3. The validity of this questionnaire is confirmed in Iran and the reliability of it is 0.7 which was obtained by Cronbach's alpha method (15). Finally, data were analyzed by using Spss 18 software and descriptive methods (average, standard deviation) and Pearson’s correlation.

**Findings:**

From 250 samples of this research 97 persons (38.8 percent) were pregnant and 153 persons (61.2 percent) were not pregnant. In terms of education they were elementary, guidance, high school and higher than diploma, that they sequently were 13.2%, 22%, 34.4%, 13.6 percent. For pregnant women the average of sleep hour was 10:12 hours, the time to fall asleep 20:40 minutes, waking up in the morning at 8:20 and useful sleep in round-the-clock was 8 hours and for non-pregnant women the average of sleep hour was 10:50 hours, the time to fall asleep 20:40 minutes, waking up in the morning at 8:00 and useful sleep in round-the-clock was 8 hours. There was also positive correlation between pregnancy weeks and duration to fall asleep that was statistically significant (p= 0.955) and (p=0.007). The scores average of sleep disorders in pregnant women was also 69/7, so that the scores’ average of sleep disorders in 2-10, 11-19, 20-28, 29-37 weeks respectively were 6, 89/7, 81/8, 86/8 and was 47.8 for non-pregnant women.

**Discussion:**

The result of this study showed that by increasing pregnancy’s weeks, the time to fall asleep was increased significantly; this can indicate that the quality of sleep in women was decreased. Perhaps one of the reasons of this result is that the gradual increase in the concentration of estrogen and progesterone that are associated with sleep homeostasis, cause to changes in sleep pattern during pregnancy (16). As well as mechanical factors such as fetal growth, uterine contractions, stomach ache, frequent urination, Cramps, Gastro-Oesophageal reflux have negative effect on quality of sleep (17, 18). Changing in sleep pattern cause to disorder of daily performance, mother’s tiredness, reducing family welfare, increasing accidents and subsequently it causes to reduce the quality of life. In addition to it, reducing of spiritual and mental peace due to insomnia causes to increase the anxiety and fear to preserve and in taking care of baby and accepting the role of mother and father in the family. In some cases, it also causes the pain after childbirth and negative impact on family and it indirectly causes to impose economic burden to society. (19, 13).Nausea and vomiting, frequent urination, backache and
feel exhausted are the most common reasons for changing sleep patterns in the first trimester of pregnancy, and in the second and third trimester of pregnancy the fetal movement, heartburn, leg cramps and dyspnea are more common (20, 21). Therefore, it is suggested that in this periods women by doing exercises appropriate to this periods entertain themselves. Because inactivity and long rest in the bed and lack of entertainmentcauses to untimely nap during the day and consequently it will result to reduce of night's sleep. Among the limitations of this study it can referred to the possibility of influence of individual unknown factors and other mother’s psychosocial factors on results of research, that the control of it is out of from the researcher.

Conclusion:
The result of this study showed that by increasing pregnancy’s weeks, the time to fall asleep was increased significantly; this can indicate that the quality of sleep in women is decreased. Hence it is suggested that an appropriate actions taken place to improve sleep quality in this group.

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References:


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