

Evaluation of Health and Happiness of Mothers of Children with Sleep Disorders

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Abstract: *Aim:* The aim of this study was to evaluate the overall health and happiness of healthy mothers of children with sleep disorder. *Methods and material:* This study was cross sectional study. To collect data from general health questionnaire (GHQ -28) with 28 questions and four subscales (somatic disorders, anxiety, social dysfunction and depression) and Oxford happiness questionnaire on five factors (satisfaction life, positive mood, health, and self-efficacy) with 29 questions was used. To analyze the data, independent t-test was used. *Result:* The results showed that the overall health and happiness of mothers of children with sleep disorder were affected by their children disorder. *Conclusion:* Mothers' health is associated with and affected by their children and sleep disorders in children reduce the quality of life in mothers.

Keywords: Health, Happiness, Mothers, Children, Sleep Disorder

1. Introduction

Sleep disorders affect 15–25% of the preschool aged population [1] and can lead to psychological, physical, behavioral and academic disorders [2, 3]. Sleep is a part of body development and is major part of the time between 2 to 5 years even more than learning [4].

Sleep disorders in children may affect the parents especially their mothers and make them unhappy. Herein, majority of investigations were performed on depression, anxiety or other mental disorders [5, 6, 7, 8]. Bayer JK et al [9] studied 692 mothers and their infants. They reported Sleep disorders are common in early infancy across metropolitan socio-economic levels and are in relations with poorer maternal health and well-being. Recently, self-rating evaluations using different scales have become important to improve the doctors in evaluation and finding psychiatric comorbidities in patients. [10, 11–14].

Mental health is of the basic human needs and its role in various spheres of life, social, work, family and society is undeniable and its purpose is, ultimately creating a healthy environment for proper human relations.

Considering that public health and the happiness of parents, especially mothers play an important role in the lives of their children, so, we decided to examine public health and welfare of mothers of children with sleep disorder take a step towards health. Rare papers discussed about the effect of children sleep disorders on their mothers and the effect is not well established. Therefore in this study we examined the prevalence of these disorders in mothers using questioners.

2. Methods and Material

Cross-sectional study was carried which the study population included the mothers of students with sleep disorders during 2015 to 2016 from sari, Iran. The sample frame consisted of Iranian mothers aged 18.

We used simple sampling method for collecting cases including 100 mothers.

Exclusion criteria

The following cases have been excluded:

- i. Non-Iranians citizens (for the purpose of homogeneity).

- ii. Those unwilling to answer the questionnaire.
- iii. Cases with communication difficulties; e.g. deafness, blindness, muteness.

Ethical notes

The study population voluntarily participated in the investigation. Written consent was obtained from the participants for publication of the research results. All subjects signed consent forms in the presence of a witness for all evaluations applied.

Translation of the Questionnaires

The questionnaires were translated from English to Farsi. To ensure that the Farsi translation showed the meaning in the English Type, back-translation was consider with the help of one translator in the English and the crucial changes were performed.

Questioner were used in this study

GHQ-28: The GHQ-28 Questioner improved by Goldberg consisted of 28 items fulfilled in only 10–12 min. The scale aim to evaluate 4 areas of psychiatric morbidity containing somatization, anxiety, social dysfunction, and depression, and indicates overall mental health at a specific point in time, as well. Each question has four answer categories including “better than usual”; “same as usual as”; “worse than usual”; or “much worse than usual”. Participants answer each item based on how they have recently felt their experience. The higher GHQ-28 scores is correlated with higher level of psychiatric problems [15, 16].

Children's sleep habits questionnaire (CSHQ)

CSHQ were used to determine sleep quality in cases. The CSHQ indicates common sleep disorders in children aged 2–12 years and includes 33 items and 8 subscales. The items are rated on a 3-scored Likert scale (rarely = 0–1 night per week; sometimes = 2–4 nights per week; usually = 5–7 nights per week). Every question correlate with the previous week, and is ranked as 0, 1 and 2, respectively. A total score of more than 33 is the cut off and reveals sleep disorders and sleep problems in children [19–23].

The Oxford Happiness Inventory (OHI)

OHI is a 29-item questionnaire which examines happiness in participants. Questions are rated in 6-point Likert scale from 1 = strongly disagree to 6 = strongly agree. The highest score is from 29 to 174. A high score reveal more happiness. The OHI had a reliable reliability with α : 0.92, and it had a strong internal consistency to measurement of happiness in the cases ($P < 0.001$) [24]. Some investigations have indicated OHI has had enough validity and reliability [25, 26, 27].

Statistics

Researchers assess the reliability of the questionnaire b Cronbach's alpha coefficient. Independent t test were used to examine the research hypotheses. P value off less than 0.05 was defined as significant.

3. Results

According to our study, 27% of subjects aged less than 30 years, 5.69 percent were in the age group between 30 to 40 years and 5.3 percent were in the age group over 40 years.

Table 1. Demographic results of study populations.

age	number	percent
Less than 30	28	28
30–40	69	69
More than 40	3	3
total	100	100

13.5% of subjects with primary education, 44.5% of elementary, 37.5 percent diplomas, 3.5 percent bachelor and 1 percent have master of sciences.

6% of subjects were self-employed, 32 percent had government jobs and 62% were housewives.

Public health variables (mental) in mothers of children with sleep disorder was 13.01%. This indicates that the average mental health in mothers of children with sleep disorders was high. Happiness variable in mothers of children with sleep disorder was 37.8%.

Question number one: Is there a difference between the healths of mothers of children with sleep disorders? Mean \pm SD answer score was 13.01 ± 5.4 . In other words, public health in mothers of children with sleep disorder is significantly higher than mothers of healthy children.

Question number two: Is there a difference between the happiness of mothers of children with sleep disorder? Mean \pm SD answer score was 37.85 ± 16.3 . There were significant differences between happiness of healthy mothers of children with sleep disorder.

Question number three: Is there a difference between physical disorders of mothers of children with sleep disorder? Mean \pm SD answer score was 2.92 ± 1.7 . There is no significant difference among mothers of children with sleep disorder.

Question four: Is there a difference between anxieties in mothers of children with sleep disorder? Mean \pm SD answer score was 2.8 ± 1.9 . In other words, the level of anxiety in mothers of children with sleep disorder is higher.

Question number five: Is there a difference between social dysfunction of mothers of children with sleep disorder? Mean \pm SD answer score was 4.5 ± 2.1 . There is no significant difference in Social dysfunction among mothers of children with sleep disorder.

Question number six: Is there a difference between depressions in mothers of children with sleep disorder? Mean \pm SD answer score was 2.7 ± 2.3 . Depression in mothers of children with sleep disorder was high.

4. Discussion

Our study revealed that sleep disorders in children would affect the quality of life in their mothers. In this regards, studies showed that sleep disorders are correlated with changed psychomotor performance [28], behavioral disturbance [29], sleepiness [30, 31], low physical activity and social interest [31], memory and learning deficits [32], and substance abuse [33].

In this regards, the rate of bedtime problems seems to be similar among Iranian [34] and Finnish [35] children.

In a study by Montgomery P et al [36] examined 45

children (aged 3-14 years) with ADHD and their mothers. They indicated maternal mental health was found to be significantly worse in the mothers who thought their children to be sleepless (Maternal definition MD).

In a paper by Roth B et al [37] checked 59 obese children with their mothers. The results showed that maternal anxiety predicted the mother indicated child's internalizing disorders beside the child's depression and anxiety self-report scores. The mental disorder status of the mother could reveal the child's internalizing disorders, and maternal binge eating disorder had an effect on the mental disorder of the pediatrics.

5. Limitations of the Study

Limiting the population of mothers with sleep disorders and normal pre-school students to Sari populations. Data were collected through questionnaires only. The subjects involved personal opinions in response to questions

6. Conclusion

It is recommended that officials with perform scientific planning and integrated mental health and happiness to parents Especially mothers of children with sleep disorder after deciding to thereby improve sleep disorders in children.

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