Original Research

The Effect Of Continuous Care Model On Maternal Perception Of Infant Sleep In Bint Al-Huda Hospital In Bojnourd

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Abstract

Introduction: Sleep plays an important role in the development of infants. If the mother has a positive perception of infant sleep, she will have a better relationship with her infant. The mother's perception of her infant is based on her perception of infant's biological behaviors. The aim of this study was to determine the effect of continuous care model on maternal perception of infant sleep in Ben Al-Hald Hospital in Bojnourd.

Methods: This empirical study was performed on 66 mothers attending Bint Al-Huda teaching hospital in Bojnourd in 2019. Sampling was done by convenience method and the samples were randomly assigned into the intervention and control groups. The intervention group received a continuous care model program in 4 sessions of 45-60 minutes. Data were collected by a demographic characteristics form and Maternal Cognitions about Infant Sleep Questionnaire (MCISQ), and then were analyzed by SPSS software version 20 using Fisher Exact and Rapid Major statistical tests at the significance level of p <0.05.

Results: The results showed a significant difference between the intervention and control groups in terms of the research variable (P= 0.02). This difference was observed more in the intervention group in which, the mother's perception of infant sleep was higher. Also, in terms of the areas of infant sleep perception, a significant difference was observed between the two groups in terms of the areas of doubt and anger, so that the level of doubt and anger was lower in the intervention group.

Conclusion: According to the obtained results, it is recommended to provide the necessary grounds for the implementation of continuous care model, as this model is effective in improving infants' sleep.

Keywords: Continuous Care Model, Mother Perception, Sleep, Infant

Introduction

Infancy is the most sensitive, important and vital period of human growth and development, and breast milk plays a decisive role in the physical, mental and emotional development of children (1). Meanwhile, sleep is considered as an important factor in maintaining mental health and balance (2), which has a significant effect on rehabilitation, growth and energy storage for metabolism, cognitive function, neural maturity, learning skills and memory (3). It has been suggested that sleep-related brain processes can affect physical, emotional, and cognitive function throughout the day. In this regard, some complex brain processes (such as abstract thinking, creativity, planning, and academic performance), including sleep-sensitive cognitive-neurological functions have been identified (4). Of course, factors such as socioeconomic status, drug side effects, psychological factors (parental distress), and the environment (the child's sleeping environment and interactions with parents) can be effective in sleep development (5). On the other hand, it has been shown that adequate sleep is influenced by various factors such as age, genetics, etc (6). Lack of sleep health, which can be the result of physical, mental or hereditary conditions, reduces the amount of sleep desired and endangers the health of the child in a way that, reducing the quality and quantity of sleep can cause the child to suffer from physical (headache and pain) and behavioral-psychological (irritability and aggression) complications (7). This is a unique topic, which is different for each mother and infant. How a mother imagines her infant, what she thinks about her infant's behaviors that she deals with on a daily basis, and how problematic she thinks her infant is can determine her perception. The most important of these behaviors is the infant sleep, which is different in each infant (8).

Although sleep is mentioned as an opportunity to relax and get rid of the stressors of everyday life, research has shown that sleep is a dynamic and organized biological activity and process during which, vital processes occur that are essential for health and well-being. Sleep has many benefits and, like food and water, is essential for promoting health and physical function (9). On the other hand, establishing order and regulations in relation to various aspects of sleep, including sleep hours and observing them, improves the quality of sleep (10). In this regard, many interventions have been done to improve sleep, from which we can refer to pharmacological and non-pharmacological interventions (11). On the other hand, due to the side effects of drug treatment, researchers have paid more attention to non-pharmacological methods. One of the non-pharmacological methods is to use continuous care model (12). Continuous care is a regular process to establish effective and consistent interaction between client and health care provider in order to identify needs and problems, and also sensitize client to accept ongoing health behaviors, help client to maintain his/her recovery and improve his/her health (13).

In this model, after recognizing the cognitive and practical deficiencies of clients and their families regarding problem control and therapeutic/care measures, four interrelated stages of recognition, sensitization, control and evaluation are performed (14). Since the continuous care approach is dynamic and changeable, it is special and unique for each disease or health problem, and the flexibility of work process is a prominent feature of this model. It is important to note that, the duration of this model is between 3 to 6 months, and

according to the study subject, this time can be changed. Another point is that the presence of patient's family in this model is necessary and inevitable (15). Therefore, using a continuous care model leads to the correct recognition of patient's problems, motivation and involvement of patient and his/her family in problem solving. Therefore, this study was conducted to determine the effect of continuous care model on maternal perception of infant sleep in Bint Al-Huda Hospital in Bojnourd.

Methods

This empirical study with pre-test post-test design was conducted on two intervention and control groups. The statistical population of this study consisted of mothers attending Bint Al-Huda Teaching Hospital in Bojnourd. The sample size in this study was calculated to be 66 people (33 in intervention and 33 in control groups) by G* POWER software, considering the effect size of 0.92 and test power of 95% based on Narengi's study (16). The significance level of 0.05 was considered in all the tests.

Inclusion criteria were; willingness to participate in the study, ability of mothers to read and write, lack of physical and mental problems in the studied infants, mothers who had their first child, and mothers attending Bint Al-Huda Teaching Hospital in Bojnourd in 2019. Also, non-participation in educational sessions, the mother's withdrawal from the study, and having two or more other children were among exclusion criteria in this study.

A total of 66 mothers were selected by convenience sampling method and then, were randomly assigned into the intervention and control groups. For this purpose, the mothers of Bint Al-Huda Educational Hospital in Bojnourd, who met all the inclusion criteria, were considered as a research sample after giving their informed consent.

The tools used in this study included a demographic characteristics questionnaire (that intended to collect information such as gender, mother's age, father's age, mother's job, father's job, mother's education, father's education, and economic status), and the Maternal Cognitions about Infant Sleep Questionnaire (MCISQ). The MCISQ was designed by Jorlin Morrell in 1999 to assess maternal perceptions of infant sleep problems and to assess infants' sleep behavior through maternal reports. This tool consists of 20 questions and for each question six answers are considered, each of which is given a score. The response to questions is based on 5-option Likert scale, ranging from strongly disagree (score 0), relatively disagree (score 1), slightly disagree (score 2), slightly agree (score 3), relatively agree (score 4) and strongly agree (score 5). The score range of this questionnaire is from 0 to 100, which is obtained from 5 subscales of limited involvement (mean questions 4-6-13-18-19), doubt (mean questions 8-9-14-15-16), feeding (mean questions 2-5-20), safety (mean questions 1-3) and an overall scale, with higher score indicating higher doubt and concern in mothers. In the study of Mohsenian (2012) that was conducted at Ferdowsi University of Mashhad, the validity of MCISQ was evaluated and confirmed using the opinions of supervisors and experts. Its reliability was also calculated by Cronbach's alpha coefficient that was above 0.70, indicating the acceptable reliability of this questionnaire (17).

Demographic and MCISQ questionnaires were completed before the intervention in both intervention and control groups. Before the intervention, a brief explanation was

provided to the intervention group. Then, the researcher held an educational program for the intervention group, which was based on the continuous care model and related to infant sleep (definition of sleep, types of infant sleep, importance of sleep, appropriate duration of infant sleep, appropriate sleep strategies, and factors affecting sleep) in 4 sessions (15 minutes each) using educational pamphlets (Table 1). Then, the mothers in the intervention and control groups completed the questionnaires at one month, two months and three months after their infants' birth. During this period, no interventions were performed for the control group and only pre-test was taken from them. At the end of the program, a post-test was held.

In this study, mothers were reassured that their non-participation in the study would not prevent them from receiving the usual services of the center. The samples were explained that they could withdraw from the study at any time without any consequences. In addition, they were assured of the confidentiality of their personal information, and accuracy and scientific reliability in recording information and statistics obtained at the time of data collection and analysis. In order to observe ethical issues, after the study, educational materials were provided to the control group.

SPSS statistical software version 20 was used to manage the data. Frequency, percentage, mean and standard deviation statistics were used to describe the data and Fisher Exact and Rapid Major tests were used to analyze the data.

Table 1. Training sessions

Educational content	Areas	Duration	Session
Familiarity with the work process and goals of the group, familiarity with the mothers under study and establishing communication and mutual trust between the researcher and mothers. Questionnaires were divided between both intervention and control groups and mothers answered the questions and got to know each other.	Recognition	15 min	First session
Allocation of intervention and control groups by the researcher			
Familiarity with the infant's natural physiological changes	Physiologic	15 min	Second session
Familiarity with common problems and obstacles in the infant's sleep and establishing the correct sleeping habits in the infant	Evaluation	15 min	Third session
At the end of the third session, an educational pamphlet was provided to mothers to stabilize the content.			
Completion of questionnaires one month, two months and three months after the intervention by two groups of intervention and control - evaluation: At this stage, after two months of continuous intervention, the data were obtained by completing the Sleep Quality Questionnaire, and the results were	One month, two months and three months after the intervention	15 min	Fourth session

compared in study groups.

Findings

In regard to demographic characteristics, 15 (45%) people in the intervention group, 17 (52%) in the control group were female, and 18 (55%) people in the intervention group and 16 (48%) in the control group were male. Chi-square did not show a significant difference between the two groups (p = 0.4) in this regard. Also, Fisher exact test did not show a significant difference between the two groups in terms of the mother's age (p = 0.12), father's age (p = 0.38), mother's job (p = 0.59), father's job (p = 0.23), mother's education (p=0.36) father's education (p = 0.62) and economic status (p = 0.31), (Table 2).

Table 2 - Comparison of the samples' demographic characteristics between the intervention and control groups

Group / Demographic characteristic		Intervention	Control	p-value
Gender	Female	15 (45%)	17 (52%)	P=0.4
	Male	18 (55%)	16 (48%)	
Mother's age	15-20	8 (24%)	13 (40%)	P=0.12
	20-25	9 (27%)	7 (21%)	
	25-30	6 (19%)	10 (30%)	
	30-35	8 (24%)	2 (7%)	
	35-40	1 (3%)	0	
	Over 40	1 (3%)	1 (3%)	
Father's age	15-20	1 (3%)	1 (3%)	P=0.38
	20-25	8 (24%)	8 (24%)	
	25-30	10 (29%)	15 (45%)	
	30-35	9 (27%)	6 (18%)	
	35-40	3 (10%)	2 (7%)	
	Over 40	2 (7%)	1 (3%)	
Mother's job	Housewife	31 (3%)	32 (3%)	P=0.59
	Self-employed	2 (24%)	1 (24%)	
Father's job	Unemployed	6 (18%)	3 (9%)	P=0.23
	Self-employed	27 (82%)	30 (91%)	
Mother's education	Illiterate	0	1 (3%)	P=0.36
	Secondary	13 (39%)	19 (8%)	
	Diploma	11 (33%)	7 (21%)	
	Associate diploma	3 (10%)	0	
	Bachelor's degree	6 (18%)	4 (12%)	
	Master's degree	0	2 (6%)	
Father's education	Secondary	12 (36%)	15 (45%)	P=0.62
	Diploma	15 (45%)	12 (36%)	
	Associate diploma	1 (4%)	2 (7%)	

	Bachelor's degree	5 (15%)	4 (12%)	
Economic status	Over average	17 (52%)	14 (56%)	P=0.31
	Below average	15 (45%)	15 (45%)	
	Poor	1 (3%)	3 (95)	

According to Table 3, Rapid Major test showed a significant difference between the intervention and control groups (p = 0.02) in terms of the mother's perception of infant sleep, and this difference was observed more in the intervention group, so that the mother's perception of infant sleep was higher in the intervention. Also, in regard to the areas of infant sleep perception, a significant difference was observed between the two groups in terms of the areas of doubt and anger, so that the level of doubt and anger was lower in the intervention group.

Table 3. The effect of continuous care model on mother's perception of infant sleep

Time / Areas of mother's perception		Pre-intervention	Post-intervention 1	Post-intervention 2	Post-intervention 3	P
Limited involvement	Intervention	18.75±4.7	20.66±4.14	20.75±4.45	21.3±3.7	0.42
	Control	19.45±3.87	22.14±4.81	22.6±4.63	22.06±4.7	
Anger	Intervention	15.29±3.83	14.06±4.5	13.81±4.9	13.5±41	0.009
	Control	16.45±3.81	16.31±4.7	17.1±5.1	16.69±5.11	
Doubt	Intervention	16.93±5.11	17.48±4.88	17.03±5.7	13.51±4.6	>0.01
	Control	16.72±4.41	21.72±4.21	21.41±4.6	21.87±10.49	
Feeding	Intervention	13.48±3.75	14.42±3.52	14.63±2.99	14.72±2.71	0.29
	Control	12.85±3.3	14.83±3.45	15.29±2.17	15.15±3.78	
Safety	Intervention	15.12±1.93	4.54±2.13	4.81±2.31	4.6±1.9	0.16
	Control	6.02±2.81	6.15±2.91	5.09±2.15	5.18±2.25	
Overall scale	Intervention	69.68±10.3	71.18±11.5	71.08±12.6	67.75±13.9	0.02
	Control	71.21±11.1	81.72±16.6	81.8±17.47	80.96±19.22	

Discussion and conclusion

Considering the importance of maternal perception of infant sleep, the present study was conducted to determine the effect of continuous care model on maternal perception of infant sleep in Bint Al-Huda Hospital in Bojnourd. The results of this study showed a significant difference

between the mothers who received the intervention and the mothers who did not receive the intervention in terms of perception of infant sleep, which was observed more in the intervention group. The mother's perception of infant sleep was higher in the intervention group after the intervention. There was also a significant difference between the two groups in terms of the areas of infant sleep perception such as doubt and anger, so that the level of doubt and anger was lower in the intervention group compared to the control group. Undoubtedly, the effect of education on raising the level of knowledge and awareness of people is obvious, and if education is continuous and permanent, it can have a significant impact on improving people's knowledge and consequently, changing people's behavior. In line with our study, the results of Bonak et al (2016) and Wahingrom et al (2018) studies showed that parents and children education helps to promote sleep status (18, 19). Sadeghi et al (2010) showed that implementation of continuous care model in patients increased their sleep quality, so that a statistically significant difference between the mean scores of sleep quality was observed before and after the intervention (20). The results of Hojjati et al (2015) study showed that implementation of continuous care model improved the sleep quality of dialysis patients, but it had no positive effect on the adequacy of dialysis (21). Azizzadeh Forouzi et al (2012) in a study to investigate the effect of continuous care model on drowsiness of hemodialysis patients concluded that, drowsiness was present in 74.4% of patients before the intervention, but it decreased to 38.8% after the intervention (22). Golafrooz et al (2014), revealed that implementation of continuous care model increased the mean score of sleep quality in diabetic patients in the intervention group compared to the control

group (23). Mehdizadeh et al (2010) in a study to evaluate the sleep quality of chemically injured patients with obstructive bronchitis showed that, implementation of continuous care model increased the mean score of sleep quality of chemically injured patients with obstructive bronchitis in the intervention group compared to the control group (13). The study of Khosrovan et al (2015) indicated that the use of non-pharmacological interventions based on the continuous care model improved the sleep quality of type 2 diabetic patients and reduced sleep disorders in them (24). The results of a study by Jalal Marvi et al (1398) showed that continuous care model reduced insomnia (25). In the study of Zupan et al (2017), sleep strategy and sleep health intervention for children with acute lymphoblastic leukemia were effective in improving sleep health in these children. In this study, to educate children in the intervention group, a 60 minute long educational session along with books with educational content were used, which were useful in improving sleep health, sleep quality and sleep deprivation of the children (26). Findings of Kyra et al (2014) showed the positive effect of sleep health education programs on increasing sleep duration (27). According to the results of Firoozabadi et al (2014) study, changes in environmental conditions cause sleep disorder and sleep anxiety in people, and make them unable to sleep for a long time. Also, people who live in stressful, exciting and threatening environments will experience higher level of sleep anxiety (28). In the study of Mesnabadi et al (2016), the educational intervention was able to reduce the mean scores of resistance towards going to bed, daily drowsiness, duration of sleep and waking up at night in the intervention group, but no significant difference was observed in the control group (29). Mikaeli Manie et al (2015) revealed that, the types of sleep

problem in children have a significant relationship with the level of depression in mothers, and with increasing the severity of depression in mothers, sleep disorders in children increases (30). Mohammadi et al (2016) by examining the effect of circadian rhythms on behavioral problems and sleep quality of students concluded that, the type of circadian rhythms has an effect on behavioral problems and sleep quality (31), and also spiritual care in people plays an important role in sleep quality (31).

Mothers have an important role in promoting care of their children (33, 34), which is consistent with the results of present study. Despite the studies that are consistent with the present study, no study was found to contradict the findings of present study. Considering the results of this study, it can be argued that mothers, due to their important role in the family, are the main shaper of the atmosphere and psychological context of the family, and their psychological health greatly affects the quality of family interactions and atmosphere. Children are sensitive to and react to the mother's emotional status (35), and parents, especially mothers, play an important role in children support and development (36).

Limitation

Among the limitations of this study, we can refer to the unwillingness of some mothers to participate in the study. Also, since this study has been conducted in one educational center, its results cannot be generalized to other educational centers.

 Since the above-mentioned limitations may adversely affect the generalizability of the study findings, it is suggests that in future studies, larger sample sizes would be used in other educational and medical centers. It is also suggested that future studies would perform longer follow-up, because long-term follow-up evaluations can help understand the long-term effects of this treatment on mothers.

References:

1.   Malmir M, Farhoud D, Mokhtarian T, Mokhtarian T. (Review Article)Moral Imperative of Breastfeeding & Commitment to the Children's Rights. Ethics in science and Technology. 2017;12(1):5-9.
2.   Chan-Chee C, Bayon V, Bloch J, Beck F, Giordanella JP, Leger D. [Epidemiology of insomnia in France]. Rev Epidemiol Sante Publique. 2011;59(6):409-22
https://doi.org/10.1016/j.respe.2011.05.005.
3.   Unalan D, Ozturk A, Ismailogullari S, Akgul N, Aksu M. The effect of sleep duration and quality on academical success of the elementary school children in Kayseri Turkey. JPMA The Journal of the Pakistan Medical Association. 2013;63(5):576-80.
4.   Modaresi M, Faghihinia J, Akbari M, Rashti A. The Relation between Sleep Disorders and Academic Performance in Secondary School Students. Journal of Isfahan Medical School. 2012;30:1456-67.
5.   Ozgoli G, Sheikhan Z, Soleimani F, Nasiri M, Mirzaee S, Kavousi F, et al. A Study of EffectiveFactors on Sleep Disorders in 4-6Years old Children in Tehran City, Iran. Qom Univ Med Sci J. 2015;9(5):50-60
http://journal.muq.ac.ir/article-1-366-fa.html.

6. Pedretti LW, Pendleton HM, Schultz-Krohn W. Pedretti's occupational therapy: practice skills for physical dysfunction. 7th ed. ed. St. Louis, Mo.: St. Louis, Mo. : Elsevier; 2013.

7. Shamsaei F, Ahmadinia H, Seif M, Khalili A. Sleep Habits of Primary School Students of Nahavand City From the Point of View of Parents. Qom Univ Med Sci J. 2018;12(8):78-85 https://doi.org/10.29252/qums.12.8.78.

8. Ghasemi M, Dehdari T, Mohagheghi P, Gohari M, Zargrzadeh Z. Mothers' Performance on Caring for their Premature Infants: A Pilot Study. Iran Journal of Nursing. 2012;25(79):24-33.

9. Atadokht A. Sleep Quality and its Related Factors among University Students. Journal of Health and Care. 2015;17(1):9-18 http://hcjournal.arums.ac.ir/article-1-296-en.html.

10. Rahimi A, Ahmadpanah M, Shamsaei F, Cheraghi F, Sadeghi Bahmani D, Holsboer-Trachsler E, et al. Effect of adjuvant sleep hygiene psychoeducation and lorazepam on depression and sleep quality in patients with major depressive disorders: results from a randomized three-arm intervention. Neuropsychiatr Dis Treat. 2016;12:1507-15 https://doi.org/10.2147/NDT.S110978.

11. Qiu C, Gelaye B, Fida N, Williams MA. Short sleep duration, complaints of vital exhaustion and perceived stress are prevalent among pregnant women with mood and anxiety disorders. BMC Pregnancy and Childbirth. 2012;12(1):104 https://doi10.1186/471-2393-12-104.

12. Jalal Marvi F, Kordi M, Rezaei Talab F, Mazlom SR. Comparing the Effects of Training Based on Continuous Care Model and Telehealth on Quality of Sleep in Pregnant Women. Evidence Based Care. 2019;8(4):35-44 https://doi.org/10.22038/ebcj.2018.31717.1791.

13. Mohmadi S, Hojjati H. The effect of continuous care model on sleep quality in veterans with post-traumatic stress disorder referred to psychiatric clinics of Alborz province. J Mil Med. 2019; 21 (4) :418-424

14. Hashemi S, Tayebi A, Rahimi A, Einollahi B. Examining the effect of continuous care model on adherence to dietary regimen among patients receiving hemodialysis A R T I C L E I N F O. 2015.

15. Zakeri MA, Khoshnood Z, Dehghan M, Abazari F. The effect of the Continuous Care Model on treatment adherence in patients with myocardial infarction: a randomised controlled trial. Journal of Research in Nursing. 2020;25(1):54-65 https://doi.org/10.1177/1744987119890666.

16. Narenji F, Rosbahany N. The effects of massage therapy on weight gain and sleep behaviors in infants. Koomesh. 2008;9(4):279-84 http://koomeshjournal.semums.ac.ir/article-1-61-en.html.

17. MOHSENIAN E, TABIBI Z, MASHHADI A. SETTLING TO SLEEP STRATEGIES AND SLEEPING PROBLEMS AMONG 1-2 YEAR OLD INFANTS. DEVELOPMENTAL PSYCHOLOGY (JOURNAL OF IRANIAN PSYCHOLOGISTS). 2014;10(39):-.

18. Bonuck KA, Schwartz B, Schechter C. Sleep health literacy in head start families and staff: exploratory study of knowledge, motivation, and competencies to promote healthy sleep. Sleep Health. 2016;2(1):19-24 https://doi.org/10.1016/j.sleh.2015.12.002.

19. Wahyuningrum E, Hartini S, Rahmat I. EFFECT OF HEALTH EDUCATION OF SLEEP HYGIENE ON SLEEP PROBLEMS IN PRESCHOOLERS. 2018. 2018;4(1):8 https://doi.org/10.33546/bnj.208.

20. sadeghi h, azizzadeh foruzi m, haghdoost a a aa, mohammad alizade s. Effect of implementing continuous care model on sleep quality of hemodialysis patients. 2. 2010;3(1):5-6.

21. HOJAT M, KARIMYAR JAHROMI M, KARAMI Z. EFFECT OF CONTINUOUS CARE MODEL ON SLEEP QUALITY AND DIALYSIS ADEQUACY OF HEMODIALYSIS PATIENTS: A CLINICAL TRIAL STUDY. MEDICAL - SURGICAL NURSING JOURNAL. 2015;4(1):- https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=442819.

22. Mansour AF, S.H HAA, Sikineh MA. The effect of applying continuous care model on dysentery in hemodialysis patients. Journal of Shahid Sadoughi University of Medical Sciences. 2012;20(5):537-46.

23. GOLAFROOZ M, SADEGHI H, MOUSAVI SQ, TABARAEE Y. THE EFFECT OF USING CONTINUOUS CARE MODEL ON SLEEP QUALITY IN PEOPLE WITH TYPE 2 DIABETES. JOURNAL OF SABZEVAR UNIVERSITY OF MEDICAL SCIENCES. 2014;21(4):-.

24. Khosravan S, Alami A, Golchin Rahni S. Effects of Continuous Care Model Based Non-Pharmacological Intervention on Sleep Quality in Patients with Type 2 Diabetes Mellitus: A Randomized Controlled Clinical Trial. International Journal of Community Based Nursing & Midwifery. 2015;3(2):96-104 https://ijcbnm.sums.ac.ir/article_40698_d11537b75e993edbb2c837fe63cca8f6.pdf.

25. Jalalmarvi F, kordi m, mazlom sr. Assessing the Impact of Continuous Care Model on the Treatment of Chronic Diseases. Paramedical Sciences and Military Health. 2018;13(2):35-43 http://jps.ajaums.ac.ir/article-1-145-en.html.

26. Zupanec S, Jones H, McRae L, Papaconstantinou E, Weston J, Stremler R. A Sleep Hygiene and Relaxation Intervention for Children With Acute Lymphoblastic Leukemia: A Pilot Randomized Controlled Trial. Cancer nursing. 2017;40(6):488-96

https://doi.org/10.1097/ncc.0000000000000457.

27. Kira G, Maddison R, Hull M, Blunden S, Olds T. Sleep education improves the sleep duration of adolescents: a randomized controlled pilot study. J Clin Sleep Med. 2014;10(7):787-92 https://doi.org/10.5664/jcsm.3874.

28. Eshaghie Firoozabady E, Kamali Zarch M, Afshani SA, Halvani A. The Prevalence of Sleep disorders and Their Relationship with Anxiety and Behavioral Problems in Second Primary School Female Students in Yazd. International Journal of Pediatrics. 2015;3(3.1): 625-31 https://doi.org/10.22038/ijp.2015.4347.

29. Masnabadi M, Roozbahani N, Khorsandi M. The effect of combined Training Program on Sleep Hygiene among of girls primary school students. Iranian Journal of Health Education and Health Promotion. 2020;8(1):23-34 https://doi.org/10.29252/ijhehp.8.1.23.

30. MICHAELI MANEE F, ALIZADEH S, HASSAN POUR E, SADIGHIE Z. RELATIONSHIP BETWEEN MOTHERS' DEPRESSION AND SLEEP PROBLEMS IN 3-6 YEAR OLD PRESCHOOL CHILDREN. JOURNAL OF MAZANDARAN UNIVERSITY OF MEDICAL SCIENCES. 2015;25(129):-.

31. Hekmati Pour N, Mahmoodi-Shan GR, Ebadi A, Behnampour N. Spiritual self-care in adolescents: a qualitative study. Int J Adolesc Med Health. 2020 Oct 16:/j/ijamh.ahead-of-print/ijamh-2019-0248/ijamh-2019-0248.xml. doi: 10.1515/ijamh-2019-0248. Epub ahead of print. PMID: 32083447.

32. Rezaei-Oshyani, I, Yarmohammadian, A.,, Farhadi, H. The effectiveness of Self- Compassion Focused Training (CFT) on mothers on sleep quality of theirs preschool children with symptoms

of learning disability. Journal of Clinical Psychology. 2018;9(4):71-82 https://doi.org/10.22075/JCP.2018.12601.12 29.

33. Hanieh Sajadi, Golbahar Akhoundzadeh, Hamid Hojjati. (2020). The Effect of Empowerment Program on Participation of Mothers with Premature Infants Hospitalized in Neonatal Intensive Care Unit of Sayyed Shirazi Hospital in Gorgan, in 2018. *Indian Journal of Forensic Medicine & Toxicology*, *14*(2), 1269-1276. https://doi.org/10.37506/ijfmt.v14i2.3082

34. Yolme ABS, Hojjati H, Akhoundzadeh G. The effect of Islamic semanticism on self-reporting and lifestyles of mothers of adolescents with thalassemia. International Journal of Adolescent Medicine and Health. 2020 Feb. DOI: 10.1515/ijamh-2019-0192.

35. Mishra A, Pandey RK, Minz A, Arora V. Sleeping Habits among School Children and their Effects on Sleep Pattern. J Caring Sci. 2017;6(4):315-23 https://doi.org/10.15171/jcs.2017.030.

36. Hosseini N, Akhoundzadeh G, Hojjati H. The effect of child-parent relationship therapy on social skills of Preschool Children: a semi-experimental study. International Journal of Adolescent Medicine and Health. 2019. **DOI:** 10.1515/ijamh-2019-0151

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