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The effect of spiritual care on stress and spiritual health of mothers of neonates hospitalized in NICU

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Abstract---Background: hospitalizing neonates in NICU is a critical feeling for the parents. The present research aim was the effect of spiritual care on stress and spiritual health of mothers of neonates hospitalized in NICU. Method: The present study was semi-experimental with pre-test and post-test design with control group. A total of 66 mothers with including criteria were selected and divided into two groups of control and randomly assigned test. For the test group, spiritual need assessment was performed using the spiritual need assessment guide and nine spiritual actions based on native culture and religion were implemented based on the needs of the mother. In the control group, intervention was not performed. In both groups, Beck Anxiety Inventory and Palutzian and Ellison Spiritual Health Questionnaire completed the pre and post-test pre-admission and discharge procedures. Findings: The results of the study showed that there was no significant difference between demographic

characteristics in both control and test groups. Comparison of the level of anxiety and spiritual well-being before intervention was done between the two groups using independent t-test and paired t-test. There was no significant difference between them ($P > 0.05$). After the intervention, there was a significant difference between the groups ($P < 0.05$). Conclusion: The spiritual care used in this study is based on the type of spiritual care, the manner in which care is taken and the duration of the onset and the continuation or termination of care based on the need of the patient and has been implemented for the first time in Iran. It seems that the implementation of this spiritual care for mothers of infants admitted to the neonatal intensive care unit can be effective.

Keywords---spiritual care, neonate, neonatal intensive care unit, anxiety, spiritual wellbeing.

Introduction

The birth of a healthy child is the best divine gift; however, encountering a premature baby causes psychological crisis for parents (1), of which almost of babies need care in the neonatal intensive care unit (2). The hospitalization of the infant in the intensive care unit for parents is a severe emotional crisis, which causes great anxiety and concern in parents; parents sometimes also state that they still do not feel like being a parent and the method have not learned the relationship between the parent and the infant (3). Parents consider their baby's admission time with words such as stressful stress, anxiety, separation, depression, illness, hopelessness, hesitation, lack of control, fluctuation between fear and hope, feelings of insecurity, shock, lack of self-esteem and (4, 5). On the other hand, research shows that the emotional response of mothers to the birth of a baby is greater than that of fathers (6). Conditions in the neonatal intensive care unit create a high level of anxiety for parents, especially mothers, due to lack of participation in newborn care, and consequently experience anxiety, anxiety, and parental role change. It also has a great impact on mother's confidence (7). Increasing awareness, promoting social support and family-based care has had a significant impact on reducing stress in parents (6, 8).

During the newborn's admission, parents consider the incubator space as a sacred space for love, the meaning and purpose of life. Changes in today's world and psychological insult due to it seriously criticizes World Health Organization definition of health. Such that scientific explanations and recent studies shows health is beyond the three dimensions of physical, psychological and social (9). Scientific texts also agree on the effect of spirituality on recovery, the ability of man to confront change and adapt to it (10). Spiritual care is not a task or an intervention, but a way of caring for and penetrating all aspects of care and as a way through which physical care is provided. Spiritual Care sacrifice, unconditional love, compassion, empathy, respect, sensitivity, comfort, warmth, acceptance and treat strangers like family members to be included (11). Spiritual care is an important part of nursing and professional care, and in texts as recognition, respect, and satisfaction of spiritual needs of patients through

appropriate interventions by nurses (4), nursing is referred to as care Which are provided by the nurse and are related to the religious and existential needs of patients, such as their questions and their experiences regarding the meaning and purpose of religion and spirituality (12). Despite the promotion of religious and Islamic culture in the past three decades, there is insufficient information on the spiritual health of vulnerable groups in the Iranian society (11). Therefore, the study of parents' anxiety and the presentation of the ways to reduce anxiety is important, because Mothers are considered as the most important subjects in the support system of the newborn (13). In the field of spiritual care, various programs have been presented by scientists in different countries, but each of these care programs has a program that may not be fully compatible with the cultural and religious conditions of Iran (4, 14-17). The spread of diseases in infancy and children is many and varies from infectious diseases, heart diseases, etc(17,18).

Materials and Methods

The present study was semi-experimental with pre-test and post-test design with control group. The researcher started her work in the neonatal intensive care unit after obtaining a license from the Isfahan Nursing and Midwifery Faculty (Khorasgan) and Mashhad University of Medical Sciences. In this research, the statistical population included all the mothers of newborns admitted to the emergency care unit of Am-ol-Banin Hospital. The research was conducted in the neonatal intensive care unit of Utopia Department of Obstet. And Gynecol and the sample size was calculated using the following formula.

$$N = [Z_{(1-\alpha/2)} + Z_{(1-\beta/2)}] \times (S_1^2 + S_2^2) / (M_1 - M_2)^2$$

In the present study, 66 mothers with the criteria for admission to Am-ol-Banin Hospital (S) were placed in two groups (n = 33) and test (n = 33). The sampling method was available in the first stage by sampling method. Due to the fact that all the mothers of the infants were present in the same room and all the mothers interact with each other, there was no possibility of simultaneously taking the intervention and control groups; therefore, by drawing a lottery by the nurse, the first group as a control group from July and the second group was treated as an intervention group from July to November in the control group. The project was completed within 8 months and started on 01/01/1396 and ended on 30/08/1396.

In the first step, spiritual need assessment was done using the Mental Health Assessment Guide on the face to face with the mothers. In order to carry out spiritual care, 9 spiritual actions were taken to facilitate spiritual care, spiritual support, presence, active listening, enjoyment and enjoyment, touch, self-awareness, healing, induction of hope (Table 1) based on honest studies and Associates (1394) were designed. In the first stage, the pretest was completed with Beck anxiety inventory, Pelotzian and Ellison spiritual well-being and demographic information in the intervention group. In the second step, spiritual measures (Table 1) were implemented in the intervention group; the type of spiritual care, the manner in which care was taken, and the duration of the onset and continued or completion of mother-care care. In the control group, the pre-

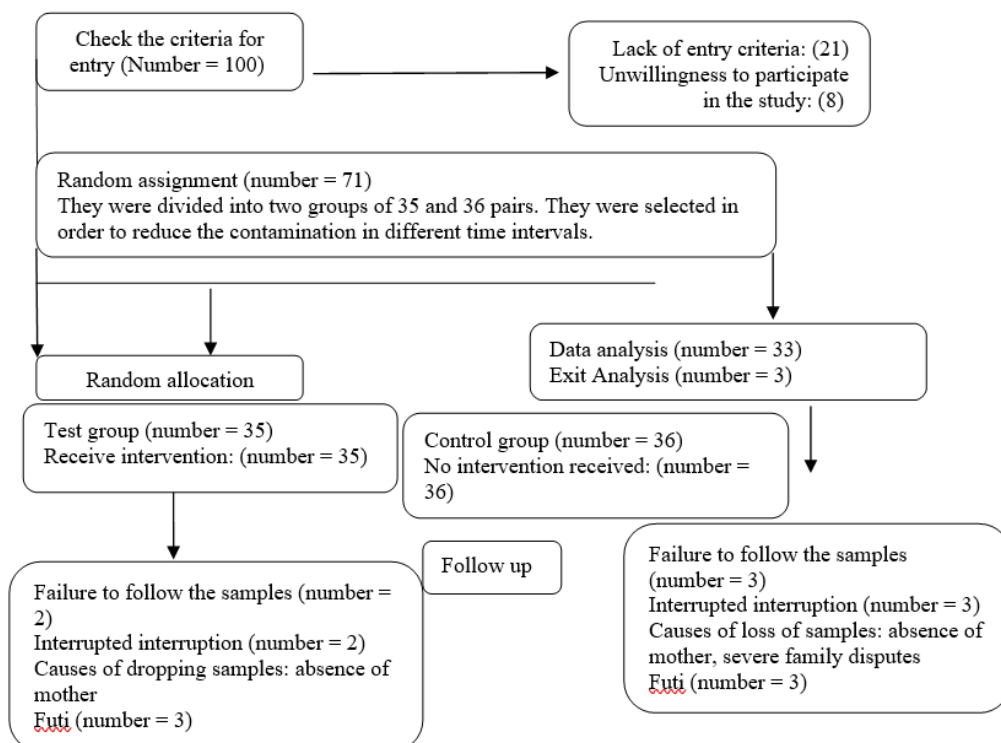
test was completed by the questionnaires at the time of admission and post-test at the time of discharge and received normal medical treatment during admission. The criteria for entering the study include: 1. to be satisfied with the study. 2. Do not use drugs. 4. At the start of the study, at least one day, and a maximum of one week from the time the baby is admitted, because under normal circumstances, the baby and parenteral bonding process is established during the infancy and becomes the basis of a permanent relationship. When the baby is in the first few weeks or in the first few months in the intensive care unit, problems arise as a result of parents' tension, which impairs the parental adaptation to the neonatal intensive care environment and has long-term effects on the relationship between parent and child and reduces their ability to care for the child (20). The data gathering tool was a demographic questionnaire (parental characteristics, infant sex, type of infant and type of delivery), Beck anxiety and spiritual health of Palutzian and Ellison.

Beck's Anxiety Inventory was introduced by Aaron Beck and colleagues in 1990 to assess the severity of clinical anxiety symptoms. This questionnaire contains 21 questions, which answers are based on Likert 4 options (at least so). Scores 0 to 7 have the lowest degree of anxiety, 15 to 8 degrees of mild anxiety, 25 to 16 degrees of moderate anxiety and 25 to 63 percent of the most severe degree of anxiety. Validity and reliability of this questionnaire were measured by Kaviani and Mousavi (21). The Spiritual Health Questionnaire, Spiritual Health Scale, was developed by Palutzian and Ellison (1983). This scale or questionnaire contains 20 questions, whose responses are based on the 6-part Likert scale (I totally agree to totally disagree). Scores 20-40 Spiritual Health at a Low Level, 41 to 99 Spiritual Health at Moderate, and 100 to 120 Spiritual Health at Upper Level. The validity of this questionnaire was determined by content validity by Abbasi (2005) and its reliability was determined by reliability coefficient by Seyyed Fatemi et al. (2006) (22, 23). Data were analyzed using SPSS software version 18. Independent and paired t-test was used to determine the relationship between demographic and clinical variables according to the type of variables.

Table1 :9 Spiritual actions	
Facilitate Spiritual Care: 1. Hold prayer ceremony 2. Facilitate the organization of religious ceremonies appropriate to family culture and practices *A prayer ceremony was held in group form at the request of mothers.	Spiritual Action 1
Spiritual Protection: 1. Providing Worship Items 2. Encouraging Participation in Ceremonies *Required worship items such as the tent of prayer, Sajda, Mehr, Quran, and supplication.	Spiritual Action 2
presence: 1. Physical presence and availability Every day, the researcher was at 9:15 on the maternity ward and during the visit, they were present at the clinic and answered their questions.	Spiritual Action 3
Active listening: 1. Listening without judging to mother's talk 2. Presenting a notebook to mothers to write and express their	Spiritual Action 4

concerns 3. Religious care * Mothers were given time to attend religious meetings and answer religious matters.	
Optimistic and Optimistic: 1. Familiarizing the staff with spiritual care and how to deal with mothers *An educational class for personnel about the spiritual care and the importance of goodness and goodness.	Spiritual Action 5
Touches: 1. To hug a mother by the investigator with the permission and observance of religious standards	Spiritual Action 6
Increasing Self-awareness: 1. Understanding the conditions and resources that help the mother, such as religious beliefs	Spiritual Action 7
Voice Therapy: 1. Biblical Music 2. Religious Music Therapy *CDs of Quranic, Prayer, and Music Books were designed and made available to mothers by experts and panels.	Spiritual Action 8
Instilling Hope: 1. Prepare Part 2. Spacing the Mother's Room * Provide appropriate posters to inspire hope in the department.	Spiritual Action 9

Sample Tracking Diagram



Results

66 mothers with newborns admitted to the intensive care unit were enrolled. For 33 mothers in the experimental group, the spiritual care program was implemented. 33 other mothers entered the control group without receiving a spiritual care program. In this study, all the contributors were Muslim. The mean age of the research units was 29 years and most of the preterm infant. Table (1) showed that the demographic characteristics of the units did not significantly differ between the control and test groups. The comparison of anxiety level before and after intervention was done by independent t-test and paired t-test. There was no significant difference between the two groups ($P > 0.05$). After intervention, there was a significant difference between the groups ($P < 0.05$).

The average level of anxiety by groups is presented in Table (2). Comparison of spiritual health level before and after intervention was done by independent t-test and paired t-test. There was no significant difference between the two groups ($P > 0.05$). After intervention, there was a significant difference between the groups ($P < 0.05$). The average level of spiritual health by groups is presented in Table (3).

Table (1): The mean of different demographic variables in the test and control groups

Independent t-test		Control group		Control group		variable
P	t	Standard deviation	Mean	standard deviation	Mean	
0.37	0.90	10.07	31.55	5.83	29.73	Mother's age (years)
0.64	0.48	7.34	32.55	6.7	33.39	The age of the father (year)
0.43	0.79	4.34	33.40	3.10	32.67	Gestational age (week)
0.55	0.61	1.34	1.88	1.09	2.06	The number of children
0.15	1.46	0.17	0.55	0.26	1	Number of abortions

Table (2): Comparison of maternal anxiety level in the research units between the two groups before and after the intervention

P.V	After intervention	-Pre-intervention	group
0.001<	2.97	14.77	Test
0.12	15.69	15.91	witnessed

Table (3): Comparison of the average level of mental health of mothers in the research units between the two groups before and after the intervention

P.V	After intervention	Pre-intervention	Group
0.001<	110.3	92.20	Test
0.76	93.85	94.54	Witness

Discussion

Pharmaceutical and non-pharmacological interventions are effective for improving health and factors affecting health, And it is necessary to pay special attention to the health of all levels, from newborns to chronic patients(33-37). Conducting research in the group of children and infants is one of the priorities of the healthcare system(38,39). The results of this study showed that spiritual care is effective in reducing anxiety in mothers with hospitalization. The results of certain studies and colleagues in patients with leukemia, mummies, chastity and chasmia and colleagues in ischemic patients also showed that spiritual care reduces anxiety (24, 25). Kandasami et al. also found that spiritual care in advanced cancer patients could improve quality of life and reduce their anxiety and depression (26). The results of these studies are consistent with the differences between the research units compared with the present study. Reducing anxiety can be due to satisfying emotional and emotional needs and human observance, as well as spiritual care, can increase the compensatory mechanism more efficiently against emotional excitement (27). The results of this study indicated that spiritual care was effective in increasing the spiritual well-being of newborn infants. The study of Houtron et al. was conducted with the aim of investigating the spiritual religious strategic relationship in the families who lost their baby. Results showed that spiritual care increases spiritual health and decreases anxiety in these mothers. The study of Zafarian Moghadam et al. With the aim of influencing spiritual-religious education on depression, anxiety, stress and spiritual well-being of carriers of children with leukemia. Results showed that spiritual support for health care reduces anxiety, depression, stress and increased spiritual well-being. . The results of the studies are consistent with the present study. It has also been stated in the studies that spiritual care can increase the positive emotions and quality of life in patients or carriers of the patient, and subsequently reduce anxiety, depression and increase spiritual well-being (29). As a result, it will help the person to adapt to the peace and relief from psychological stress (30). In other words, spiritual care creates a positive attitude towards themselves, the environment and the future, which, as a result, does not regard their own vulnerable people and feel calm in the environment, and even assess negative events in a better way. They gain a stronger sense of control (31).

Conclusion

Spiritual care is an integral part of nursing care and as the most important factor contributing to balance. Providing spiritual care is one of the duties of the nurse. The results of this study indicate that the implementation of spiritual care programs by nurses on anxiety and spiritual health of mothers of newborns who are admitted to the neonatal intensive care unit is effective. Considering the need for mothers to receive spiritual care and identifying the spiritual needs of mothers and meeting these spiritual needs in our country, on the one hand, and on the other hand, there were significant differences in values, culture and beliefs of Iran with other countries. In this study, the spiritual care performed in the present study should be designed according to the Iranian culture, based on Sadeghi et al.'s research and implemented for the first time in the neonatal intensive care unit in Iran. Therefore, this kind of spiritual care program compared to the

spiritual practices implemented in other studies were different. This difference included duration, type of implementation and design of spiritual care.

Due to the diversity of people, we decided that the type of spiritual care is unique, because some people provide this peace through music, art or communication with others. Therefore, this program is based on the needs of the client, does not require special equipment and is completely flexible. Considering that the mothers of infants admitted to the intensive care unit are experiencing high anxiety, according to the findings of the present study, the effectiveness of spiritual care in reducing anxiety and increasing the spiritual health of mothers can be The non-pharmacological, low-cost, effective and mystical way to reduce anxiety and increase the spiritual health of mothers and cares of children.

Research Limitations

The research constraints were not random sampling.

Morality

This article is based on the Master's Degree of Nursing approved by the Research Council of Isfahan Islamic Azad University (Khorasgan) with the code of ethics IR.AU.NAJAFABAD.REC.1396.21. The study was also registered at the Clinical Trials Registry, IRCT20171014036764N1. Before completing the questionnaire, written informed consent was obtained from the units under study. The research units were assured that they could be excluded from the research at any stage of the research without providing any reason. Mothers were assured that they would not be harmed to their baby, and if they were reluctant to participate in the study, they would not have any effect on the continued treatment of the baby. Also, no costs are incurred by the subjects. After completing the second stage of the Beck Anxiety Inventory and the spiritual well-being of Palutzian and Ellison, all the units were given a gift or a Quran.

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Conflict of interest: None

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