

The Impact of Praying on Stress and Anxiety in Mothers with Premature Neonates Admitted to NICU

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ABSTRACT

Background: Neonatal mortality, prematurity, and congenital disorders, known as crisis, are unexpected stressful events causing extreme maternal stress. According to the literature, about 28-70% of the mothers have a high degree of psychological stress. Among different treatments, praying as a complementary religious approach is the most common source that people use in difficult conditions. Regarding this, the aim of the present study was to determine the effect of praying on anxiety and stress in mothers with premature neonates admitted to the Neonatal Intensive Care Unit (NICU).

Methods: This clinical trial was conducted on 60 mothers with premature neonates. The participants were randomly divided into the intervention and control groups. In the intervention group, praying was performed one day after the presence of the mother in the NICU for 7 days. The tools employed in this study included the demographic characteristics and subject selection forms, depression, anxiety, and stress scale, as well as Symptom Checklist-90-R and prayer questionnaires. The validity and reliability of these tools were approved using content validity and internal consistency, respectively. Data analysis was performed by independent and paired t-tests as well as ANOVA through SPSS version 11.5.

Results: The two groups were matched in terms of all maternal demographic and neonatal characteristics, except neonatal birth weight ($P=0.045$). As the results demonstrated, there was a statistically significant difference between the intervention and control groups in terms of their anxiety scores ($P=0.02$); however, the difference was not significant after one month following the intervention ($P=0.076$). Nevertheless, no statistically significant difference was observed between the stress scores of the two groups.

Conclusion: As the findings of the current study revealed, praying can be effective in reducing the maternal anxiety.

Keywords: Anxiety, Praying, Premature neonates, Stress

Introduction

In today's societies, premature birth is considered as one of the big problems that has gradually increased over years. Based on the statistics, over the past 20-30 years, the premature birth has accounted for 5-7% of live births. However, this rate was reported to constitute 11.6% of all births in the United States in 2000. Nevertheless, owing to the intensive care practices, the mortality rate of this population has been significantly reduced. Regarding this, newborn hospitalization is inevitable in most cases, which sometimes ends in admission to the Neonatal Intensive Care Unit

(NICU) for receiving long-time care services (1).

Neonatal mortality, prematurity, and congenital disorders, known as crisis, are unexpected stressful events causing extreme maternal stress (2). Early stages of the neonatal hospitalization are considered as a crisis for the parents. The mothers of the premature newborns have less confidence in their parental role since they have to cope with a neonate who requires special care. These mothers are doubtful about their abilities, which results in inter-conflict and stress (3). Birth of a premature neonate can be a great shock to the parents. The mothers of

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these newborns have very different experiences, compared to the mothers of the completely term neonates (4).

Some of the stress-inducing factors in these mothers include: the unfamiliar environment, various devices and alarms, sudden change of the neonate's skin color, breathing lapses, pain in the newborn, attaching the pipes and equipment to the neonate, feeling helpless to protect the neonate from pain, inability to breast-feed, separation of the mother from the newborn, overall helplessness, and the neonate's small size, abnormal weight, and weak appearance (5, 6).

According to the literature, approximately 28-70% of the mothers with premature newborns have a high degree of psychological stress (7). As reported in a study, 44% of the mothers with premature neonates admitted to the NICU showed emotional symptoms such as anxiety, depression, and restlessness. Furthermore, 26% of these mothers were reported to bear these symptoms even after the discharge of their neonates (4).

Likewise, in another study, it was reported that the clinical symptoms of anxiety and depression remained in 20% of the mothers at the end of the first year of the newborns' lives (8). Damaging effect of premature birth on the mothers hampers their ability to think and creates additional stressful conditions besides that of having a high-risk neonate. High levels of stress affect the mother-infant interactions and the mother's cooperation with the medical team (7).

According to the literature, feeling of tension not only is associated with decreased maternal loving and responsible behavior, but also leads to the emergence of disorders in parental behaviors (7). Moreover, it was demonstrated that the stress experienced by the mother can lead to the development of postpartum depression (9).

In the recent years, the human responses to the difficulties of life have been extensively studied, which resulted in the development of new coping methods for dealing with stress-related disorders.

The theoretical framework of this study is based on the Pargament's theory of religious coping. In 1990, Pargament et al. demonstrated the positive effects of various types of "religious approaches". Pargament stated that religion can be part of the central construct of each coping process. He believed that religion is a resource for assessing and dealing with crisis situations, which increases one's ability to cope with such conditions (10). Among the religious practices, praying is the most effective source used in difficult conditions (11), which is instinctively used by the people as a compatible tool when facing with

difficulties (12).

By studying the Quran and the traditions of Prophet Muhammad (peace be upon him), we find out that faith plays an important role in preventing anxiety, easing daily affairs, providing enduring support, and creating stability. Praying and trusting in God are important factors in overcoming unpleasant emotions and problems, bringing calmness, and aiding stress management (13). In the recent years, the impact of praying on disease treatment has attracted the interests of the researchers; as a result, several studies have been carried out in this regard.

In 2005, Ebrahimi et al. conducted a study at Isfahan University, which was the relationship between supplications and pray with students anxiety. The results demonstrated that the overall scores of praying scale and sex separation were negatively correlated with anxiety ($P < 0.01$). Furthermore, anxiety was found to have a significant negative correlation with the scores of the attitude to praying and personal invocation subscales ($P < 0.01$). However, no significant correlation was observed between participating in the official religious sessions and praying (stated by the subjects) and anxiety ($P > 0.01$). Accordingly, the use of praying as a spiritual strategy was concluded to have an effective role in emotion management and anxiety reduction (12).

Karen et al. carried out a study at the University of Florida, entitled "The prevalence of prayer as a spiritual self-care modality in elders". They reported that 96% of the participants used praying as a compatible strategy in stressful conditions (14).

This study was conducted with the aim of determining the effect of praying on stress and anxiety in the mothers with premature neonates, admitted to the NICU.

Methods

This clinical trial was conducted on 60 mothers of the newborns admitted to the NICU, using non-random sampling method. Based on a pilot study, which was conducted on 20 mothers in two groups (10 subjects in each group), the study population was calculated using the sample size formula, which enables the statistical comparison between the two groups. Regarding the two main variables, namely anxiety and stress, all the following calculations were carried out using the average of the two scores. Consequently, the sample size was estimated to be 25 participants in each group; however, considering the 20% probability of sample attrition, 30 individuals were assigned into each group.

After obtaining the approval of the Ethics Committee of Mashhad University of Medical Sciences, the mothers of the premature neonates in the NICU, who met the inclusion criteria, were selected and randomly assigned into control and intervention groups. The inclusion criteria were as follows: 1) the mothers whose praying questionnaire scores lay within not more than two standard deviations, 2) gestational age of less than 35 weeks, 3) lack of psychiatric disorders such as psychotic, major depressive, obsessive-compulsive, and personality disorders (identified through Symptom Checklist-90-R [SCL-90-R] questionnaire), 4) singleton pregnancy, 5) lack of obvious physical abnormalities in the neonate, and 6) Iranian nationality. The exclusion criteria included: 1) the neonate's death, 2) getting discharged earlier than 7 days, 3) lack of maternal cooperation in the implementation of the intervention.

Subsequently, the samples were randomly allocated into the intervention group by the coin-toss method.

After an introduction, the study objectives and methods were explained to the participants. Subsequently, they were asked to fill in the selection and demographic forms, the depression, anxiety, and stress scale (DASS21), as well as the prayer and SCL-90-R questionnaires.

The prayer and SCL-90-R questionnaires were employed to identify and enroll the mothers with adherence to praying and no mental illness, respectively. The prayer questionnaire was developed by Poloma and Pendleton in 1991 with the aim of measuring the frequency of praying rituals and previous praying experience. This tool was revised by Meraviglia, who studied the patients with cancer. Out of the 32 questions of this questionnaire, 17, 9, and 6 items are about the frequency of praying rituals, previous praying experience, and attitude of the patients toward praying, respectively. The reliability of these three subscales was determined in Meraviglia's study, which were 0.75, 0.78, and 0.73, respectively. The validity of this questionnaire was evaluated using content validity after translating it into Persian (15). Additionally, in the present study, the reliability of this questionnaire was calculated using 20 samples, which rendered a Cronbach's alpha coefficient of 77.2.

The primary form of SCL-90-R questionnaire was introduced by Derogotis, Lipman, and Covi in 1973. This measure is the most widely used psychological test, which has been successfully employed as a screening and diagnostic tool. This questionnaire entails 90 items, including nine dimensions: physical complaint, obsessive-compulsive disorder, sen-

sitivity in interpersonal relationship, depression, anxiety, aggression, phobia, cynical thoughts, and psychosis. The reliability and validity of this questionnaire have been confirmed by numerous studies in the United States and Iran.

The estimated reliability and validity of this tool in Mirzaei's study were similar to those obtained in the United States. According to Mirzaei's study, the reliability of this questionnaire was more than 0.80 in all the subscales, except in aggression, phobia, and cynical thoughts, and the validity indicated that it could be used as a means of screening or diagnosis of mental disorders in Iran (16). In the present study, the reliability of this questionnaire was calculated using 20 samples, which rendered a Cronbach's alpha coefficient of 95.6.

Furthermore, one day after the presence of the mothers in the NICU, they were asked to fill in the DASS21. The DASS21 is a self-assessment tool that consists of 21 items, i.e., seven questions for each studied indicator. Each item is rated on a four-point Likert scale from zero to three (0=never, 1=low, 2=moderate, 3=much). In a study conducted on a large non-clinical sample, Lovibond and Lovibond reported high internal consistency for depression, anxiety, and stress subscales, which were 0.91, 0.84, and 0.90, respectively.

To eliminate the interaction effect between the participants, at first, a group of mothers was tested and other group was examined after an interval of two weeks.

After filling in the questionnaires, the participants of the intervention group received the intervention. In addition, they completed the DASS21 one day after entering the NICU. Subsequently, this group was provided with an audio file of Tavassol prayer, which was recorded with one voice and could be played in different digital devices, especially cellphones. The participants of this study were tested in three stages including before the intervention as well as one week and one month after the intervention.

In case the mother did not have access to any of these devices, she was given an MP3 player. The mothers in the intervention group received this intervention for at least 20 min for seven days. On the third day, the mothers who followed the intervention and were still willing to continue participating would remain in the study. Time duration for using the praying intervention beyond the required minimum was optional and the participants could listen to the recorded prayer at any time they needed to relax.

Post-test was performed for the both groups using DASS21 at the end of the seventh day and one

month after the intervention. Data analyze was performed in SPSS version 11.5 using paired-samples t-test (to evaluate quantitative variables of the study groups), as well as Friedman, Wilcoxon, Mann-Whitney U, Spearman, Pearson and oneway ANOVA. Moreover, P-value less than 0.05 were considered statistically significant.

Results

Given the normality of the anxiety variable before the intervention, the t-test was employed to compare the two groups in terms of their anxiety scores. However, no statistically significant difference was observed between the two groups regarding this variable before the intervention ($P=0.312$). The results of the Mann-Whitney U test indicated a statistically significant difference between the anxiety scores of the two groups one week after the intervention ($P=0.02$). However, no statistically significant difference was observed between the two groups one month after the intervention regarding the anxiety variable ($P=0.076$).

According to the Friedman test, the anxiety scores of the intervention group were significantly different in the three stages of the intervention ($P=0.000$). Based on the results of the Wilcoxon test, there was a statistically significant difference between the anxiety scores of the intervention group before and one week after the praying intervention

($P=0.000$). Similarly, the anxiety scores of the control group was statistically significant between these two stages ($P=0.002$). Furthermore, there was a statistically significant difference between the anxiety scores of the intervention group before the intervention and one month after the praying intervention ($P=0.000$). This difference was also statistically significant in the control group between these two stages ($P=0.000$).

The results of the t-test demonstrated that the two groups were not different in terms of their stress levels before the intervention, after one week, and after one month ($P=0.131$, $P=0.364$, $P=0.843$, respectively). Regarding this, the two groups were matched in terms of their stress levels.

According to the test of homogeneity of variances ($P=0.880$), the variances of before the intervention as well as one week and one month after the intervention were equal; therefore, the oneway ANOVA can be used to compare the means. Oneway ANOVA demonstrated a statistically significant difference in the stress scores of the intervention group among the three stages of the study ($P=0.002$). In other words, the median scores of stress were different in these three stages. However, no statistically significant difference was observed in the stress scores of the control group among these three stages ($P=0.374$).

Based on the results of the independent t-test,

Table 1. Frequency distribution of anxiety in the intervention and control groups at the three stages of the study

Anxiety	Control			Intervention		
	Before	After one week	After one month	Before	After one week	After one month
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Normal	12(40.0)	14(46.7)	19(63.3)	4(13.3)	20(66.7)	23(23.3)
Mild	4(13.3)	7(23.3)	3(10.0)	3(10.0)	2(6.7)	2(6.7)
Moderate	6(20.0)	3(10.0)	5(16.7)	12(40.0)	6(20.0)	4(13.3)
Severe	1(3.3)	0	1(3.3)	4(13.3)	1(3.3)	0
Very severe	7(23.3)	6(20.0)	2(6.7)	7(23.3)	1(3.3)	1(3.3)
Total	30(100.0)	30(100.0)	30(100.0)	30(100.0)	30(100.0)	30(100.0)

Table 2. Frequency distribution of stress in the intervention and control groups at the three stages of the study

Stress	Control			Intervention		
	Before	After one week	After one month	Before	After one week	After one month
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Normal	15(50.0)	19(63.3)	21(70.0)	13(43.3)	21(70.0)	23(76.7)
Mild	3(10.0)	3(10.0)	2(6.7)	3(10.0)	4(13.3)	2(6.7)
Moderate	4(13.3)	2(6.7)	3(10.0)	8(26.7)	2(6.7)	2(6.7)
Severe	4(13.3)	3(10.0)	2(6.7)	4(13.3)	3(10.0)	3(10.0)
Very severe	4(13.3)	3(10.0)	2(6.7)	2(6.7)	0	0
Total	30(100.0)	30(100.0)	30(100.0)	30(100.0)	30(100.0)	30(100.0)

there was a statistically significant difference between the stress scores of the intervention group before the intervention and one week after the praying intervention ($P=0.008$). Nevertheless, no statistically significant difference was observed between these two stages in the control group ($P=0.409$).

Comparison of the stress scores before the intervention and one week after the intervention showed a statistically significant difference in the intervention group ($P=0.001$); however, there was no statistically significant difference between these two stages in the control group regarding their stress scores ($P=0.168$).

Table 3. Correlation of anxiety scores before the intervention with dependent variables

dependent variables	Results of correlation test	
Maternal education**	r=0.166	P=0.204
Mode of delivery**	r=0.277	P=0.032
Maternal job**	r=0.086	P=0.516
Parity**	r=0.112	P=0.393
Gravidity**	r=0.139	P=0.289
Birth rank**	r=0.093	P=0.480
Location of residence**	r=-0.099	P=0.451
Insurance status**	r=-0.004	P=0.976
Paternal job**	r=-0.2	P=0.125
Paternal education**	r=0.116	P=0.378
Paternal income**	r=-0.031	P=0.815
Neonate's gender**	r=0.082	P=0.535
APGAR score**	r=-0.153	P=0.243
Maternal age*	r=0.166	P=0.204
Gestational age of neonate*	r=-0.314	P=0.015
Birth weight of neonate*	r=-0.240	P=0.065

Pearson product-moment correlation *

Spearman's rank correlation coefficient **

According to the correlation test, the mode of delivery and gestational age of the neonates were significantly associated with mothers' anxiety scores. Similarly, there was a significant relationship between the gestational age of the neonates and the maternal anxiety scores before the intervention ($r=-0.314$, $P=0.015$), indicating that the maternal anxiety would decrease with the increase of the neonatal gestational age.

Furthermore, the Spearman correlation coefficient demonstrated a significant relationship between the mode of delivery and maternal anxiety scores before the intervention ($r=-0.277$, $P=0.032$). Accordingly, the mothers with vaginal delivery were found to have lower anxiety, compared to those underwent Cesarean section.

As illustrated in Table 3, the mode of delivery and gestational age of the neonates were associated with the maternal stress. According to Pearson productmoment correlation, there was a significant relationship between the gestational age of the neonates and the mothers' stress scores before the intervention ($r=-0.309$). Regarding this, with the increase of the neonatal gestational age, the mothers' stress levels would decrease. In addition, there was a significant relationship between the mode of delivery and the mothers' stress scores before the intervention ($r=-0.306$, $P=0.032$). The mothers with cesarean delivery were observed to have lower levels of stress.

Table 4. Correlation of stress scores before the intervention with dependent variables

dependent variables	Results of correlation test	
Maternal education**	r=0.171	P=0.190

Mode of delivery**	r=-0.306	P=0.017
Maternal job**	r=0.138	P=0.297
Parity**	r=0.199	P=0.127
Gravidity**	r=0.103	P=0.436
Birth rank**	r=0.034	P=0.794
Location of residence**	r=-0.217	P=0.096
Insurance status**	r=0.99	P=0.454
Paternal job**	r=-0.116	P=0.379
Paternal education**	r=0.098	P=0.458
Paternal income**	r=-0.196	P=0.134
Neonate's gender**	r=0.060	P=0.648
APGAR score**	r=-0.113	P=0.389
Maternal age*	r=0.246	P=0.058
Gestational age of neonate*	r=0.309	P=0.016
Birth weight of neonate*	r=-0.130	P=0.321

Pearson product-moment correlation *

Spearman's rank correlation coefficient **

Discussion

This study was conducted with the aim of determining the effect of praying on anxiety and stress in the mothers with premature neonates admitted to the NICU. The results of this study displayed that the maternal anxiety before the intervention, when facing with the NICU environment, were normal, mild, moderate, severe, and very severe in 26.7%, 11.7%, 30%, 8.3%, and 23.3% of the mothers, respectively. As the findings indicated, there was no statistically significant difference between the control and intervention groups regarding the anxiety variable.

In total, the results suggested that 73.3% of the mothers had some degree of anxiety. Paudany et al. (2004), Carvalho et al. (2008), and Jafari Mianaei et al. (2012) also showed that 35-86% of the mothers with premature neonates had some degree of anxiety (4, 7, 8). The anxiety investigated in the current study was state anxiety, which is different from trait anxiety. Comparison of the mothers' anxiety scores showed that the two groups were similar in terms of this variable ($P=0.312$).

In the post-intervention data, the comparison of mean anxiety scores in the two groups demonstrated a statistically significant difference between the two groups after one week ($P=0.02$). However, no statistically significant difference was observed between the two groups after one month in this regard ($P=0.076$).

The findings of the current study are in line with those of the literature (e.g., Majidi, 2004; Mohammadi et al., 2011; Allama et al., 1392; Allameh et al., 2013; Bolens et al., 2009; Jafari Mianaei et al., 2012). In the study of Majidi (2004), entitled "The impact of the voice of the Holy Quran on anxiety of patients before coronary angiography", it was demonstrated that the voice of the Holy Quran significantly reduced the patient anxiety (17).

In a study conducted by Mohammadi et al. (2011), spiritual psychotherapy was associated with the improvement of anxiety components in the patients using opioid drugs (18). Likewise, Allameh et al. (2013) demonstrated that the voice of the Holy Quran was effective in the pain and anxiety of the patients undergoing cesarean delivery under spinal anesthesia (19). In a study by Jafari Mianaei et al. (2012), the mothers who were provided with a psychological support program, which focused on "creating parental growth opportunities", had less anxiety following the intervention (6). Similarly, in Bolens's study, the participants showed improvements in their anxiety scores following the implementation of praying program (20).

However, the findings of the studies conducted by Bolhari et al. (2012) and Ghahari et al. (2012) are inconsistent with those of the present study. In the study of Bolhari et al. (2012), entitled "The efficacy of spiritual therapeutic approaches on reducing depression, anxiety, and stress in women with breast cancer", the spiritual program had no effect on stress and anxiety of the females with this disease.

In addition, in the study of Ghahari et al. (2012), entitled "Effectiveness of cognitive-behavioral and religious-spiritual interventions on reducing the anxiety and depression of women with breast cancer", none of the interventions were effective in reducing the participants' anxiety. This finding could be ascribed to the fact that the participants employed in the mentioned study were not in similar conditions regarding the stages of the treatment process; moreover, the prolonged therapeutic process of breast cancer could have its own effect (21, 22).

Based on the findings of the present study, the two groups showed significant reduction of anxiety (from 73.3% to 30%) after one month following the intervention. However, this reduction was not statistically significant, indicating the ineffectiveness of the intervention on anxiety after one month. This finding is consistent with those of a study conducted by Paudany et al. In this study, following the hospital discharge, the maternal anxiety showed a decrease from 35% to 12%, which is indicative of the stressful situations of the neonatal hospitalization.

Pourfarzad et al. (2012) reported an improvement in the anxiety of the students following the implementation of Tavassol prayer program after one month, which is inconsistent with the findings of the present study. In the mentioned study, Tavassol prayer was recited twice a week for four months. At the beginning of the intervention, the participants were provided with a training booklet containing prayer description, benefits of praying,

praying rituals, and the importance of praying to God along with Tavassol prayer. This discrepancy may be due to the employment of different study population, which was the public in the mentioned study. Furthermore, the duration of the two studies and the intervention methods were somewhat different (23).

In a study by Melnyk et al. (2008), investigating the effect of behavioral-educational intervention, the intervention group that received the program had better results in terms of the anxiety level two months after discharge than the control group. The cause of the stability of the intervention's effects after two months can be ascribed to the fact that the intervention was performed in four stages (24). Similarly, in the Bolens's study, which lasted six weeks, it was demonstrated that the anxiety scores of the intervention group were improved more significantly after one month, compared to those of the control group (19).

Regarding these studies, it can be concluded that the interventions with longer duration and reading through a prayer book can be more sustainable in affecting the anxiety. Regarding the normality of the stress variable at the pre-intervention stage, the comparison of mean stress scores between the two groups indicated no statistically significant difference ($P=0.946$), which indicated that the two groups were matched in this regard. Likewise, no statistically significant difference was observed between the stress scores of the intervention and control groups one week and one month after the intervention ($P=0.106$, $P=0.101$, respectively).

According to the results of the study, the maternal stress was initially 53.3%, and it reached to 33.3% and 26.7% after one week and one month following the intervention, respectively. Although this difference was not statistically significant, this descending trend is clinically important. Furthermore, no case of severe stress was observed in the intervention group one week and one month after the intervention. Despite the reduction of stress after one week in the control group, these participants showed increased levels of stress after one month (Table 2).

The findings of the studies conducted by Bolhari et al., Ahn and Kim (2007), and Glazebrook et al. (2007) were consistent with those of the present study. In the study of Bolhari et al., the spiritual intervention had no statistically significant effect on stress. The tools used for measuring depression, anxiety, and stress in the mentioned study were similar to those of our study. However, it should be noted that using another tool for measuring stress would be more favorable.

Bolhari suggests that given the long process of

breast cancer therapy, which results in inducing an ongoing anxiety in the patients, it seems that reducing the stress is a process that requires a relatively longer time (21).

In addition, in the study of Ahn and Kim (2007), some training sessions were held to reduce the amount of stress in mothers; however, the maternal anxiety was not reduced at the end. In the aforementioned study, the intervention took 3-4 days from the admission time to the NICU (25).

In a study carried out by Glazebrook et al. (2007) in Germany, a training program was implemented to reduce the amount of maternal stress. In the mentioned study, the parents received a supportive-training program about the parent-infant interactional relationship, which was performed by seven trained nurses. The intervention started from the admission time to the NICU and lasted up to six weeks after discharge and the data were collected through practical or oral tests. Despite implementing a long-term intervention, this training program had no effect on the reduction of maternal stress (26).

Furthermore, Jafari Mianaei held a training program targeted toward creating opportunities for parent empowerment in two phases (the first phase was performed 2-4 days after the neonates' admission and the second phase was conducted 2-4 days after the first phase) using booklets and audiotapes. They observed a reduction in the maternal stress after the first phase. Regarding this, this two-phase intervention was concluded to be effective in reducing maternal stress (6).

Karami et al. (2009) conducted a study entitled "The effect of supportive-training interventions on premature infants' length of hospitalization and maternal stress". They implemented a supportive-training program using videos and training booklets, which was started with the neonates' admission and continued up to their discharge. Consequently, the training program was shown to reduce the maternal stress (27).

Stress can be a response of any demand for change. In fact, stress is the body's physiological response to any change, external or internal threats, and pressure that interfere with the mental balance and may be changed at the moment. For example, the neonate's slightly poor physical condition and not drinking milk may expose the mother to high stress and pressure.

Some studies such as those of Karami et al. and Jafari Mianaei et al. employed parenting stress index, which was different from the questionnaire used in our study. Considering the aforementioned studies, it seems that the duration of intervention has no effect on reducing the stress and that these

are the trainings and interventions, which affect stress reduction.

Conclusion

As the findings of the current study demonstrated, the mothers of the premature neonates admitted to the NICU had a high degree of stress and anxiety and needed psychological support. Regarding the Iranian cultural context, among a variety of support mechanisms, praying and invocation can be effective in mothers' coping better with the stressful condition of having a premature neonate and reducing maternal anxiety.

Application of research findings in clinical practices

Since maternal support in the postpartum period is the main task of nurses and families, and also praying and invocation have become institutionalized in our culture and rituals, it is recommended that praying be practiced as an easy, safe, costless, and effective intervention to control and reduce the maternal anxiety and stress in clinical settings. Further studies are recommended to be conducted to compare the impact of the written and oral prayers.

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Conflicts of interests

The authors declare that there is no conflict of interest.

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