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Evaluation of nurses' perception of spirituality and spiritual care of parents in neonatal intensive care units in Iran: a national study

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Abstract

Background The stress associated with the hospitalization of a newborn exerts considerable psychological pressure on parents. In the neonatal intensive care unit, nurses generally focus primarily on providing physical care. Although this care is vital, it is also equally crucial to consider spiritual needs and provide spiritual care to support families. Providing spiritual care to parents is part of nurses' care. This requires a proper understanding of spirituality and spiritual care.

Methods This was a descriptive-analytical study in which nurses' perceptions of spirituality and spiritual care were ascertained in a national analytical survey in NICUs in Iran. The research sample consisted of 1643 NICU nurses. The sampling method was multistage random sampling. We employed the Spirituality and Spiritual Care Rating Scale for data collection.

Results The mean total spirituality and spiritual care score of the nurses was (67.44 ± 9.38) . There was a significant relationship between age ($p = 0.04$), length of clinical experience ($p = 0.04$), and attention to spiritual care ($p \leq 0.001$). A total of 75.71% were interested in spiritual care, but only 31.77% were practicing it. Interest in implementing spiritual care ($p < 0.001$), implementing spiritual care in the ward ($p = 0.02$), and familiarity with the concepts of spirituality and spiritual care ($p = 0.045$) were the best predictors of the total score for understanding spirituality and spiritual care, respectively.

Conclusion Overall, NICU nurses are inclined toward spirituality. They believe in the significance of providing spiritual care. Spiritual care is not associated with a particular religion. Nurses are interested in providing this care by receiving adequate training, focusing on the spiritual needs of parents. This study indicated important results for health policy makers, suggesting the necessity of providing spiritual care training to NICU nurses.

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What is already known about this topic?

- Parents' spiritual support is sometimes neglected in the NICU.
- NICU nurses tend to spirituality. They believe in the importance of providing spiritual care. Spiritual care is not associated with any particular religion.
- Nurses are interested in providing this care to parents with a focus on their spiritual needs by receiving adequate training.
- NICU nurses do not receive enough training in spiritual care. However, they are interested in providing spiritual care.
- The age and clinical experience of nurses influence their ability to pay attention to spiritual care in the NICU.

Keywords Nurse, Spirituality, Spiritual care, Parent, Neonatal intensive care units

Introduction

Spirituality is one of the most important dimensions of human existence connecting people to greater power [1]. Everyone has spirituality, regardless of their belief, culture, race, or religion. Spirituality is linked to the way people live, and is a dynamic dimension of human life as well as a way to search for meaning and purpose in life. Indeed, spirituality connects man with moments, himself, God, others, and nature [2]. This structure is closely related to health, well-being, and recovery [3] and covers the components of love, compassion, care, transcendence, connection with God, as well as connection with the body, mind, and spirit [4]. For clients, the need to find satisfactory answers about the meaning of life, illness, and death is directly linked to their spirituality. Currently, the role of spirituality in promoting health has received growing attention. Some people believe that the main reason for not using the concept of spirituality in the health system is the lack of a clear definition. Another group considers this lack of a clear definition of spirituality as a strength as it allows nurses to understand events for each client differently based on their clinical experience and taking into account the culture, ethnicity, and religion of the people [5]. Life events are unique events that provoke spiritual responses, whereby the provision of spiritual care by nurses is needed [6].

Holistic or comprehensive care includes spiritual care. Spiritual care is an essential part of the caregiver's work, is completely person-centered, and has no presuppositions about people's beliefs or personal lives [7]. In practice, the distinction between spirituality and religion is less frequent since most clients consider themselves to be both spiritual and religious; from their point of view, there is no difference between these two concepts [8]. Spiritual care as a supportive presence involves attention, active listening, verbal and nonverbal interaction, touching the client, prayer and supplication, performing religious ceremonies, referring to a religious leader, spending time with the client, being with him during the experience of pain and suffering, giving meaning and value to life as well as understanding it [8]. To provide spiritual care, nurses should expand their understanding and knowledge of spirituality and integrate it with

nursing care [9]. If nurses do not care for the client's spiritual needs and beliefs, they will not trust the nurse's care [10]. Nurses can provide spiritual care, value this concept, and are trained for it. Nurses should believe in their ability to provide such care [11]. Although there has been much emphasis on providing spiritual care in recent years, spiritual education and spiritual care for nurses are not enough, and most of them do not implement it [12]. Because the ability to empathize and the professional commitment of nurses who receive spiritual care training are more evident than those of other nurses [13].

In the NICU, the nurse has a unique opportunity to help parents through their child's illness experience; however, before the nurse can provide this assistance, they need to have an understanding of the needs of the parents and how to fulfill those needs. In this ward, is the nurse usually primarily pays attention to providing physical care. Although this care is vital, it is important to also care for the spiritual needs of families to support them. The pediatric unit should consider the whole family as the hospitalization of the child is a critical situation for the entire family. To provide care, the family becomes very tired as well as frustrated, and needs to receive spiritual care and support to adapt to the current situation [14]. In other words, spiritual care in the NICU refers to the spiritual and mental support of infants and parents. This type of care involves considering spiritual, religious, and philosophical aspects in caring for infants and their families. Parents can be spiritually supported against the stresses caused by the infant's illness so that this peace can be transferred to the infant. This support can be fulfilled by providing a calm and spiritual environment for parents and infants, allowing parents to be present with the infant, touching and hugging the infant, allowing religious practices such as praying near the infant and using soothing music, engaging in empathetic conversations with parents, providing explanations about the infant's condition, and ensuring that the nurse will be present at all times and paying attention to the infant's needs [15]. Fathers should also be involved in caring for infants since most work is the responsibility of mothers, and this pressure of care puts their spiritual health at risk [16]. If necessary, each family should be individually

evaluated and counseled for readiness to accept the end of the infant's life. In these circumstances, parents' requests in treating the newborn with respect to their religion and culture should be responded to with utmost respect [17]. These cases are examples of spiritual care in the NICU, requiring nurses to have a proper understanding of the need to address the necessity of caring for newborns and parents.

According to these studies, no comprehensive assessment of nurses' understanding of spirituality and provision of spiritual care in the NICU has been conducted in Iran. These nurses should prepare parents for unavoidable or unexpected events in their newborns and facilitate the grieving process so that parents can accept difficult circumstances without causing spiritual harm [18]. It has been reported that effective spiritual care reduces parents' stress and anxiety; enhances their sense of comfort, hope, and transcendence; improves the quality of life and attachment of the mother and infant; and ultimately results in satisfaction with care [19]. When a nurse offers spiritual support to parents, it fosters a sense of comfort in them, and when they experience spiritual distress, focusing on aspects of faith can help them cope with critical situations and infant death [20]. Unfortunately, one of the issues that is sometimes neglected in completing the care continuum is respecting and caring for the needs, desires, and opinions of parents as clients receiving health services [21]. It is expected that nurses, aware of the spiritual needs of parents, will understand the significance of implementing spiritual care in caring

for infants. Even if infants have not yet acquired this ability, parents, as the primary caregivers of the infant, should be supported to have positive acceptance of the infant's condition along with a commitment to continued support as well as care and to prevent possible adverse spiritual consequences. Thus, the present study sought to answer the following questions:

How do nurses perceive parental spirituality and spiritual care?

Are nurses' perceptions of parental spirituality and spiritual care affected by their demographic and occupational characteristics?

Methods

This is a descriptive-analytical study focusing on evaluation of nurses' perceptions regarding spirituality and the spiritual care provided to parents in a national analytical survey of NICUs in Iran. Among the 2085 nurses working in NICUs, 1750 nurses with at least one year of clinical experience were eligible for inclusion in the study.

The sampling method was multistage random (more than one method). Initially, the entire country was divided into 10 study zones under the supervision of the Ministry of Health. Next, stratified sampling was performed. The number of hospital beds in each region was considered the sample weight, whose statistics were extracted from the Ministry of Health. The ratio of nurses to beds in each hospital was calculated. Thereafter, sampling was performed at each hospital via the convenience method (Fig. 1). Once the objectives of the study were

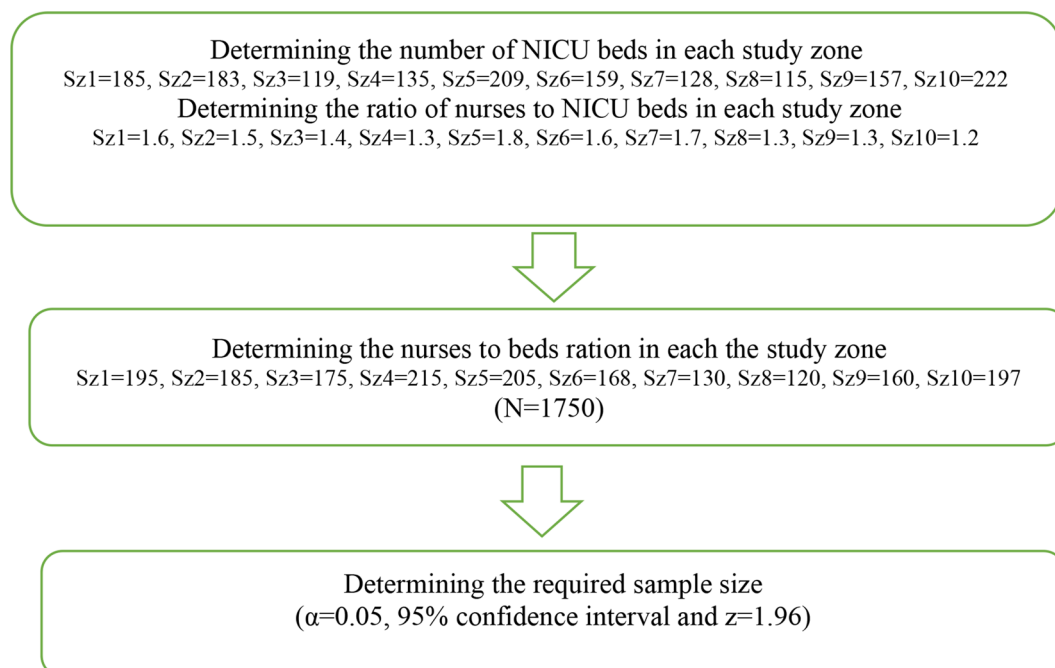


Fig. 1 Study sampling

Table 1 Mean dimensions of the spiritual understanding and spiritual care of NICU nurses

Dimensions	Mean(SD)
Spirituality	72.10(15.48)
Spiritual Care	74.49(13.68)
Religion	58.08(12.28)
Individual care	65.93(13.57)
Total score	67.44(9.38)

Mean (SD): Mean (standard deviation)

stated, nurses with at least one year of clinical experience in the NICU who were willing to collaborate were invited to participate in the study. The sampling lasted one year.

Initially, the ethics code and the approval of the research were obtained from the Ministry of Health of Iran. Prior to starting the study, a one-day briefing session was held virtually for the participants to learn about the objectives of the study and how to complete the questionnaires. Further, the informed consent form of participation in the research was provided to them so as to submit to the questioning expert of each hospital as a representative of the researchers of the research project after completion. The demographic characteristics of the participants were collected by completing the questionnaire; they included age, gender, marital status, length of clinical experience, and length of clinical experience in the NICU, as well as attention to spiritual care familiarity/education/interest/implementation of spiritual care.

Nurses' perceptions of spirituality and spiritual care were measured via the Spirituality and Spiritual Care Rating Scale. The scale was developed by McCherry, Draper, and Kendrick in 2002. This self-reported tool has 17 items measuring 4 dimensions: spirituality (items 6, 8, 9, 10, and 12), spiritual care (items 2, 7, and 11), religion (items 3, 4, 5, 13, and 16), and personal care (items 14, 15, and 17). The scoring of this scale is based on a five-point Likert scale (from strongly disagree = 1 to strongly agree = 5). The scoring of Items 4, 5, 13, 15, and 16 is reversed. The validity and reliability of this scale were evaluated by McSherry [22], with the Cronbach's alpha coefficient calculated to be 64%. Across the Iranian population, the internal consistency of the scale has been examined, where the alpha-Cronbach coefficient has been calculated to be 79%, which has been confirmed for use in future studies [23]. Data were analyzed through descriptive and analytical tests via SPSS software (IBM Corp. release 2013. IBM SPSS Statistics for Windows, version 23.0. Armonk, NY: IBM Corp).

Results

Among the 1,750 questionnaires, 1,643 nurses completed them. Of these, 1563 nurses were women (95.13%) and 89 nurses were men (4.87%), whose education was at the bachelor's and master's levels. The highest age range of

Table 2 Mean scores and characteristics of NICU nurses on the spirituality and spiritual care rating scale (SSCRS)

Variables	SSCRS N (%)	SSCRS, Mean(SD)	p
Age			
22–33	512(31.16)	3.9(0.2)	0.04 *
33–34	895(54.47)	4.5(0.3)	
44Year ≤	236(14.37)	4.5(0.5)	
Religion			
Shia Muslim	1505(91.60)	4.5(0.5)	0.2
Sunni Muslim	85(5.17)	4.5(0.5)	
Other	53(3.23)	4.5(0.5)	
Gender			
Female	1563(95.13)	3.8(0.5)	0.5
Male	80(4.87)	3.5(0.5)	
Marital status			
Single	504(30.67)	3.8(0.4)	0.2
Married	1037(63.12)	4.4(0.3)	
Without a spouse	102(6.21)	3.5(0.4)	
Length of clinical experience			
≤ 10 Year	512(31.16)	4.5(0.5)	0.04 *
11–21	895(54.47)	4.5(0.8)	
22 Year ≤	236(14.37)	4.1(0.3)	
Length of clinical experience in NICU			
≤ 5 Year	428(26.05)	3.5(0.4)	0.9
6–11	952(57.95)	4.8(0.3)	
12 Year ≤	263(16.00)	3.5(0.4)	
Paying attention to spiritual care			
Familiarity with the concepts of spirituality and spiritual care	992(60.38)	4.4(0.5)	> 0.001*
Interest in Implementing Spiritual Care	1244(75.71)	4.5(0.7)	
Education in the field of spiritual care	320(19.47)	4.2(0.2)	
Implementing spiritual care in the ward	552(31.77)	4.6(0.5)	

N: Number, %: Percentage, Mean (SD): Mean (Standard Deviation), p: probability value; *p < 0.05

nurses was 33–43 years, their clinical experience ranged within 11–21 years, and their clinical experience in the NICU ranged from 6 to 11 years. The majority of the nurses who participated in the study were Shia Muslims (91.60%) and married (63.13%). A total of 75.71% of the nurses were interested in spiritual care, while 60.38% of them were informally familiar with the concepts of spirituality and spiritual care. Only 19.47% of the nurses had received formal spiritual care training. Furthermore, 31.77% of nurses claimed that they perform spiritual care in the ward.

The mean scores for the SSCRS are reported in Table 1. The mean total score for spirituality and spiritual care was 44.67 ± 38.9 . The highest score on the SSCRS was

Table 3 Total scores for Understanding spirituality and spiritual care based on the variables of age, work experience, familiarity with the concepts of spirituality and spiritual care, interest in implementing spiritual care, education in the field of spiritual care, and implementation of spiritual care in the department

Variables	β	B	t	P	95%CI for B	
					Lower limit	Upper limit
Age	-0.066	-0.88	0.64	0.52	-0.358	0.182
Work experience	0.142	0.207	1.40	0.16	-0.084	0/499
Familiarity with the concepts of spirituality and spiritual care	0.088	1.677	2.09	0.04*	0.305	0.049
Interest in Implementing Spiritual Care	0.241	4.903	4.51	> 0.001*	2.769	7.038
Education in the field of spiritual care	0.033-	0.732-	0.73	0.46	-2.698	1.233
Implementing spiritual care in the ward	0.114	2.096	2.38	0.02*	0.370	3.822

β : Standardized regression coefficients, B: Raw coefficients that are also known as unstandardized coefficients, t: significance of regression coefficients, p: probability of significance of regression coefficient; * $p < 0.05$, CI: confidence interval

related to spiritual care, while the lowest score was linked to religion.

The associations between the demographic variables and the total mean perception scores are outlined in Table 2. There was a positive and significant relationship between nurses' age ($p = 0.04$), length of clinical experience ($p = 0.04$), and attention to spiritual care (familiarity/education/interest/spiritual care) ($p > 0.001$). A total of 75.71% of the nurses were interested in spiritual care. Participants over 44 years of age, 11–21 years of clinical experience, and 6–11 years of clinical experience in the NICU scored higher on the Spirituality and Spiritual Care Rating.

According to the standardized coefficients and significance levels presented in Table 3, the best predictors for the total score of understanding spirituality and spiritual care are interest in implementing spiritual care ($p < 0.001$), implementing spiritual care in the ward ($p = 0.02$), and familiarity with the concepts of spirituality and spiritual care, respectively ($p = 0.045$). In the presence of these three variables, the other variables noted in Table 3 were not significant predictors of the total score for understanding spirituality and spiritual care ($p > 0.05$).

Discussion

In this study, we explored NICU nurses' perceptions of spirituality and spiritual care in Iran. The results indicated that most nurses' perceptions of spirituality and spiritual care were greater than the expected average. Nurses' age and length of clinical experience strengthened these dimensions. The results of recent studies in the Middle East demonstrated that the experience of clinical practice affects nurses' perceptions of spirituality and spiritual care, which is in line with the results of the present study [24]. The experience of nurses after years of clinical activity seems to help them realize that physical care alone is not tantamount to nursing for the patient, and for the effectiveness of care and satisfaction with care, addressing the issue of spirituality and providing spiritual care to clients is a key and inseparable part of nursing care. This is also true for the age of nurses, as

nurses, by going through stages of growth and development as well as achieving psychological maturity, acquire a special stance in the understanding of spirituality which is combined with professional ethics and presented to clients in the form of spiritual care; this has been achieved in a study conducted in a different culture from Iran [25].

In this study, gender, religion, marital status, and current clinical experience in the NICU were not significantly correlated with nurses' perceptions of spirituality and spiritual care, which was concordant with the findings of a study performed in Saudi Arabia, which is closely related to Iran in terms of religion [24]. However, in some studies that are not culturally compatible with the Iranian context, the results have been different [26]. This discrepancy can be attributed to the fact that, in Iran, most people are Muslims, and in Islam, spirituality and religion are intertwined. This spiritual-religious culture exists in all Muslims, is not gender-dependent, and is institutionalized in Muslims from childhood, and developmental crises such as marriage can barely affect it.

With respect to spirituality and spiritual care, the results indicated that nurses who were interested in spiritual care, trained in this field, and provided spiritual care had a greater understanding of spirituality as well as spiritual care. These results suggest that a combination of motivation, education, and skills play a role in paying attention to spiritual care. Other studies have confirmed these findings by presenting similar results [27–29].

A review of the conceptual models and frameworks proposed for spiritual care in different societies also confirms the findings of this study; for instance, a model proposed in Europe regarding the competence of providing spiritual care also suggests the integration of knowledge (cognitive), skills (practical), attitudes (ethical), and reflection on experience in creating competence resulting from a correct understanding of spiritual care [30]. Furthermore, the spiritual care model proposed in Australia also considers nurses' understanding of spiritual care not only affect by education but also by their performance as well as implementation of spiritual care in the clinic [31].

Since in the NICU, in addition to the physical care of the hospitalized infant, the parents should also be cared for, the findings of this study will help nurses understand care in these wards differently from other wards and work in this ward by understanding the significance of providing spiritual care to parents. Nursing managers are also reminded to pay attention to the factors of age and clinical practice when selecting NICU nurses and to employ more experienced nurses in these wards to ameliorate the provision of holistic care. In addition, people who consider spiritual care as an inseparable part of patient care in their clinical experience should be employed in this department. Policymakers should also implement effective strategies to strengthen nurses' commitment to spiritual care by designing spiritual care training courses as well as motivational workshops to enhance their interest in providing spiritual care.

The limitations of this study can be the abstract and ambiguous nature of spirituality as well as spiritual care, for which nurses should design a spiritual care plan based on understanding the situation and conditions of each client. This nature can create ambiguities in nurses' perceptions of spirituality and spiritual care. Moreover, addressing the spiritual care of parents in the NICU requires a deeper understanding of the subject under study, which the nurse should consider from a more specific perspective. Another limitation of this study was the inability to sample nurses with similar gender distributions. In this study, most of the nurses were female. This gender disparity occurred because female nurses are often employed in NICUs in Iran as they can establish more emotional and empathetic connections with infants and families as well as interact better with parents, while the use of male nurses is less common. This limitation was uncontrollable and could affect the generalizability of the results to all nurses.

Conclusion

The findings of our study indicated that most nurses in the NICU have a good understanding of spirituality and spiritual care, and that providing the necessary training on the concepts of spirituality and spiritual care as well as creating an interest in providing spiritual care to parents is effective on improving their understanding. Further, according to our results, providing spiritual care was not correlated with nurses' religion, and all people were spiritual. This belief also transcended gender boundaries. Clinical experiences and maturity resulting from the growth and development of nurses can add to this understanding and facilitate the achievement of higher goals of spiritual care along with the understanding of the spiritual needs of clients. The results of this study can be used to develop future studies, such as designing educational programs and clinical guidelines for spiritual

care, to improve nurses' understanding of spiritual care, especially for NICU nurses. Finally, health policymakers should pay attention to the barriers to providing spiritual care in the neonatal intensive care unit.

Abbreviations

NICU	Neonatal intensive care unit
SSCRS	Spirituality and Spiritual Care Rating Scale

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Author contributions

All authors listed meet the authorship criteria according to the latest guidelines of the International Committee of Medical Journal Editors, and all are in agreement with the manuscript. N. Sadeghi designed the study protocol and data collection forms, wrote the statistical analysis plan, cleaned and analyzed the data, and drafted and revised the manuscript. M. Moghimian cleaned and analyzed the data and drafted and revised the manuscript. M. Heidarzadeh coordinated meetings, distributed questionnaires, and supervised the data collection. H. Heidari named collaborators were involved in data collection and submission. The author(s) read and approved the final manuscript.

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Data availability

Data are available upon request. The corresponding authors will respond via email.

Declarations

Ethical approval

This research was carried out on the basis of the principles of the revised Declaration of Helsinki, which is a statement of ethical principles that guides health teams and participants in medical research that involves human subjects. All the participants were reassured that their participation in the study was optional and that they could leave the study at any time. The participants were also assured that all their information would remain confidential. Before the beginning of the study, informed written consent was obtained from the participants. We confirm that all methods were carried out in accordance with relevant guidelines and regulations. This study was conducted by the Ethics Committee of the Islamic Azad University, Isfahan Branch.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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