Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

International Journal of Africa Nursing Sciences 17 (2022) 100488

Contents lists available at ScienceDirect

International Journal of Africa Nursing Sciences

journal homepage: www.elsevier.com/locate/ijans

Perceived spiritual care competence and the related factors in nursing students during Covid-19 pandemic

Masoumeh Asgari [a], Moluk Pouralizadeh [a,*], Nazila Javadi Pashaki [a], Saman Maroufizadeh [b], Ali Nourisaeed [c], Ashraf Jannati [c], Atefeh Ghanbari [a]

[a] Department of Nursing, Shahid Beheshti School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran
[b] Department of Biostatistics, Shahid Beheshti School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran
[c] Department of Islamic Studies, School of Medicine, Guilan University of Medical Sciences, Rasht, Iran

ARTICLE INFO

Keywords:
Spiritual care
Nursing students
Competence
Covid-19
Education

ABSTRACT

Background: Spirituality is defined as the way people experience, express, and seek meanings. It is a major concept in the field of nursing care. Nursing students who are trained and exposed to patients' spiritual care will be better able to take care of their patients' spiritual needs.

Objectives: The study aimed to assess perceived spiritual care competence and the related factors in nursing students during the Covid-19 pandemic.

Methods: This was a cross-sectional study. The participants were 191 undergraduate nursing students at Guilan University of Medical Sciences (GUMS) that were entered into the study from July 29 to December 21, 2021. The spiritual care competence scale was used to measure spiritual care competence in the participants. It is a 27-item questionnaire with six dimensions including assessing and implementing spiritual care, professionalism and improving the quality of spiritual care, personal support and patient counseling, referral to professionals, attitude towards patient's spirituality, and communication. Data was collected using the convenience sampling method. Data analysis was done by SPSS software version 16.0 using descriptive, bivariate, and multivariate methods.

Results: The mean total score of spiritual care competency was 106.8 (SD = 13.4). The mean total score of spiritual care competency was significantly higher in the native students (P = 0.031) and the students with experience of jobs in hospitals (P = 0.037).

Conclusion: The findings indicated an acceptable level of performance in nursing students in spiritual care during the Covid-19 pandemic.

1. Background

Spirituality is a universal human phenomenon (Mardani and Azizi, 2011). It is an important part of care and well-being (McSherry & Jamieson, 2013). Spirituality relates to the way people seek meanings however, it can be different from religion. According to the evidence, spiritual health has a fundamental role in both humans' physical and mental health (de Diego-Cordero, López-Gómez, Lucchetti, & Badanta, 2021).

Spiritual care is the activity that improves people's spiritual well-being and performance and creates a balance between the physical, psychosocial, and spiritual aspects of life. It improves the sense of integrity and interpersonal relationships. Spiritual care requires a specific set of skills such as active listening, spiritual assessment skills, and the ability to manage patients' care (Liefbroer & Olsman, 2017).

Spiritual care has been accepted as the most essential principle of comprehensive care. It is important to educate and aware nursing students about spiritual care for their professional role in the future. However, the current spiritual care studies were limited to some chronic conditions such as geriatric care, palliative care, and end-of-life care. Also, it is often overlooked or underestimated in other areas of such as acute diseases.

Covid-19 is an acute infectious disease that has been known as one of the major crises facing the healthcare system. However, despite the challenges for healthcare providers and health centers, it created valuable opportunities to understand the importance of spiritual care for

* Corresponding author at: Assistant Professor, PhD in Nursing, Nursing and Midwifery School of Shahid Dr. Beheshti, Hamidian St., Shahid Dr. Beheshti Ave., Guilan, Rasht, Iran.
E-mail address: pouralizadehm@gmail.com (M. Pouralizadeh).

https://doi.org/10.1016/j.ijans.2022.100488
Received 15 April 2022; Received in revised form 12 September 2022; Accepted 4 October 2022
Available online 6 October 2022

critical patients (Chan, 2010).

Spirituality becomes more important during a crisis. During this period, the patient's spiritual needs become more evident. It creates a good opportunity for nurses to provide spiritual care for patients during the Covid-19 epidemic, people have experienced situations such as fear, pain, loneliness, the feeling of imminent death, and the risks of adverse consequences of the unknown disease. In these circumstances, people who experience severe physical, emotional, mental, social, and spiritual problems, feel more need to receive spiritual care (Pierce, Hoffer, & Marcinkowski, 2020). To provide appropriate interventions to relieve spiritual suffering among patients, nurses must develop the competencies needed to address spiritual care. Spiritual care competency refers to the ability of nurses to identify patients' spiritual needs and to provide interventions in line with the healthcare team. (Chen, Chen, & Lin, 2020).

Nursing is a holistic discipline and spiritual care is at the center of the profession (McSherry & Jamieson, 2013). However, nurses seldom focus on spiritual care in their routine clinical practice. There are several barriers to the implementation of spiritual care such as highly stressful clinical environments, (Yeganeh, Pouralizadeh, & Ghanbari, 2019), misunderstanding of the concept of spirituality, differences in patients' spiritual beliefs, and needs, and inadequate training of nurses (de Diego-Cordero et al., 2021).

The education of nurses on spiritual care increases their awareness of its complex nature (Ross et al., 2014). Nursing students who are trained in spiritual care will be better able to take care of their patients' spiritual needs (LaBine, 2015). However, the rapid changes in the clinical education of nursing students during the Covid-19 epidemic are the most important challenges in this regard (Carolan, Davies, Crookes, McGhee, & Roxburgh, 2020). Suitable spiritual care to patients, especially in critical situations such as coronavirus outbreaks, requires that the care providers have the required competence. Inadequate education in nursing students may cause a sense of inefficiency to deliver spiritual care and dealing with patients (Ross et al., 2018).

Another study about students' spiritual care competence showed that the mean score of students' spiritual competence was high (Yazdan Parast et al., 2017). The study of Abbasi et al. also indicated that nursing students had moderate spiritual health (Abbasi, Farahani-Nia, & Mehrdad, 2014). Rahnama et al. considered the spiritual health of the medical staff as the most important factor affecting nurses' spiritual care (Rahnama, Fallahi, & Seyed, 2015).

Although many studies have been published during the COVID-19 pandemic, most of the studies had focused on treatment methods, care planning, and epidemiologic subjects. To the best of our current knowledge, there are no study has investigated the perceived nursing students' competency in spiritual care. It has a special value in Iran, which has a Muslim population. In this context, more studies are needed to assess the competency of nursing students in spiritual care and the associated factors. So, the present study was conducted to determine the competence of spiritual care and the related factors in nursing students during the pandemic of Covid-19.

2. Methods

2.1. Study design and participants

This cross-sectional descriptive and analytical study was conducted at Guilan University of Medical Sciences (GUMS). Participants included 191 undergraduate bachelor nursing students at GUMS. Sampling was done using a convenience method. For the data collection, the electronic questionnaires were sent to virtual groups of students during the Covid-19 pandemic. Inclusion criteria included undergraduate nursing students who were willing to participate in the research. Also, incomplete research questionnaires were excluded from the study.

2.2. Instruments

The data collection instrument included a two sections self-administered questionnaire.

2.2.1. Demographic variables

The first section of the questionnaire comprised students' demographic characteristics. This section included 11 variables including age, gender, marital status, grade point average (GPA), religion, place of residence, semester, history of employment in a hospital, the experience of student work in hospitals, participation in the professional ethics workshop, and history of consumption of psychiatric drugs.

2.2.2. Spiritual care competence scale (SCCS)

The second section of the study instrument was SCCS that was designed by Van Leeuwen et al. (Van Leeuwen et al., 2009). The psychometric evaluation of this questionnaire was done in 2011 by Khalaj et al. in Iran (Khalaj, Pakpour, & Mohammadi, 2013). The SCCS is a 27-item questionnaire composed of six dimensions including assessing and implementing spiritual care (6 questions), professionalization and improving the quality of spiritual care (6 questions), personal support and patient counseling (6 questions), referral to professionals(3 questions), attitude towards patient's spirituality (4 questions), and communication (2 questions). Each item is rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) and a higher total score indicates the student has a higher level of competency in spiritual care. The total score of the scale is from 27 to 135 (Van Leeuwen et al., 2009).

The content validity index (CVI) of SCCS was calculated at 0.89 with the supervision of ten experts. Also, the CVR value for the total items of the questionnaires was larger than 0.63 which was in an acceptable range. Internal consistency of the questionnaire was confirmed with a Cronbach's Alphas coefficient of 0.98. Also, ICC = 0.89 by a test-retest procedure with the two weeks interval indicated the acceptable stability for SCCS.

2.3. Data collection

The data were collected from July 29 to December 21, 2021. An online questionnaire was created using Google Forms and then was distributed via a hyperlink, within the digital platform WhatsApp. Sampling was started after obtaining approval from the Ethics Committee of GUMS. The participants were informed of the aims of the study through the online questionnaire and then they were asked to answer the self-report questionnaire.

The electronic questionnaires were sent to the 230 students that had the inclusion criteria. 216 nursing students answered the questionnaires. However, 25 questionnaires were excluded due to incompletion. Finally, 191 questionnaires were analyzed. The time required to completion of a questionnaire was 10 min.

2.4. Statistical analysis

In this study, descriptive statistics were employed for analyses of the demographic characteristics of the students. Quantitative variables were expressed as mean (SD) and median (Interquartile Range). Also, the values of the qualitative variables were reported as frequency (percentage). The total score of spiritual care competence was compared with the average score (81) using a one-sample *t*-test. In univariate analysis, Pearson's correlation coefficient and independent *t*-test were used for the association between the score of spiritual care competence, and the demographic characteristics of nursing students. Multiple linear regression analyses were performed to determine the related factors of spiritual care competence. In multivariate analysis, Pearson's correlation coefficient and independent *t*-test were used for the association between the score of spiritual care competence, and the demographic

characteristics of nursing students. Statistical analysis was done with SPSS, version 16.0 (SPSS Inc.). The level of significance was set at 0.05.

2.5. Ethical consideration

This study was approved by the Ethics Committee of Guilan University of Medical Sciences, Rasht, Iran, with the ethical code of IR.GUMS.REC.1400.176. The students were asked to fill out the questionnaire online. Participation in this study was voluntary, and anonymity and confidentiality were assured. No pressure was put on students to complete the questionnaires.

3. Results

3.1. Participants' characteristics

Table 2 shows the demographic characteristics of the participants. 191 students entered the study. The mean of their grade point average (GPA) was 16.97 ± 1.14. According to the results, the mean age of the participants was 22.34(SD = 3.78) years. The majority of them were female (62.3 %), single (94.8 %), native (39.3 %), and Shi'ism (92.7 %). 17.3 % of the students had experience in student work in hospitals (Table 1).

Table 1
Demographic characteristics of the study participants.

Variables	Mean ± SD /n (%)
Age (year)	3.78 ± 22.34
Gender	
Male	72(37.7)
Female	119(62.3)
Marriage status	
Single	181(94.8)
Married	10(5.2)
Religion	
Shiite	177(92.7)
Sunnite	14(7.3)
Place of residence	
Native	75(39.3)
Private house	48(25.1)
Student dormitory	68(35.6)
Semester	
1-4	75(39.3)
4-8	116(60.7)
Grade point average	16.97 ± 1.14
Experience of student work in hospitals	
No	158(82.7)
Yes	33(17.3)
Participation in ethics workshop	
No	149(78)
Yes	42(22)
Consumption of psychiatric drugs	
No	177(92.7)
Yes	14(7.3)
Experience of employment	
No	157(80.6)
Yes	37(19.4)

Table 2
Descriptive of scores of Spiritual care competence in the participants.

Scores of spiritual care	Range	Observed range	Mean ± SD	Median
Implementation of spiritual care	6–30	12–30	23.5 ± 3.4	24(22–25)
Professionalization and improving the quality of spiritual care	6–30	11–30	23 ± 4	24(20–24)
Personal support and patient counseling	6–30	12–30	23.4 ± 3.5	24(22–25)
Referral to specialist	3–15	3–15	11.4 ± 1.9	11(10–12)
Attitude towards patient's spirituality	4–20	12–20	17.2 ± 2.3	17(16–19)
Communication	2–10	4–10	8.4 ± 1.4	8(8–10)
Total score	27–135	73–135	106.8 ± 13.4	106 (100–112)

3.2. Describe spiritual care competency scores

According to Table 2, the mean total score of spiritual care competency was 106.8(SD = 13.4) with a median of 106 (Interquartile Range: 100–112). The results of one sample *t*-test showed that mean of the total score of spiritual care competency was significantly higher than the average score (81). ($P < 0.001$) (Table 2).

3.3. Relationship between spiritual care competency test score and students' personal educational characteristics

The results showed the mean total score of spiritual care competency in native students was significantly higher than in non-native students (P = 0.031). Also, the mean total score of spiritual care competency in the students who had the experience of student work in hospitals was significantly higher than the other students (P = 0.037). The univariate analysis showed no significant statistical association between the other variables and the total score of spiritual care competency (Table 3).

Table 4 shows the factors related to the score of students' spiritual care competency using multiple linear regression. According to the findings, the score of spiritual care competence in female students was 3.63 points higher than male students, but this difference was not statistically significant (P = 0.073, b = 3.63). Spiritual care competency score in non-native students was 5.12 points lower than native students (P = 0.011, b = -5.12). Therefore, it was considered one of the predictors of spiritual care.

Also, students with experience of student work in hospitals reported higher scores in spiritual care competence (P = 0.016, b = 6.15). The value of the coefficient of determination ($R^2 = 0.065$) indicates that 6.5 % of the changes in the student's spiritual care competency score were explained by the variables of gender, place of residence, and experience of student work in hospitals (Table 4).

4. Discussion

This study investigated the competence of perceived spiritual care and the related factors during the Covid-19 pandemic in nursing students. The results of the study indicated that the total score of students' spiritual care competence during the Covid-19 pandemic was higher than the mean score. Also, the competence of nursing students in spiritual care in each of the dimensions was at a high level.

The study of Alseif et al on assessing the perceived competency of the medical students during the Covid-19 pandemic in Saudi Arabia is consistent with the present study (AlSaif et al., 2020). However, the study of Adib Haj Bagheri et al. showed the majority of nurses had undesirable spiritual competence in spiritual care (Adib-Hajbaghery, Zehtabchi, & Fini, 2017), Also, Jafari et al. showed that scores of

Table 3
Correlation between total score of spiritual care competence and demographic characteristics of the study participants.

Variables	Frequency(%) / Correlation coefficient	*p* value
Age (year)	0.0010-	0.985
Gender		0.318
Male	(14.1) 105.6	
Female	(13) 107.6	
Marriage status		0.258
Single	(13.4) 106.5	
Married	(14.7) 111.5	
Religion		0.753
Shiite	(13.7) 106.9	
Sunnite	(9.1) 105.7	
Place of residence		0.031
Native	(13.8) 109.4	
Private house	(13) 105.1	
Semester		0.110
1-4	(13.1) 108.8	
4-8	(13.6) 105.5	
Grade point average	0.009-	0.907
Experience of student work		0.037
No	(13.4) 105.9	
Yes	(13.1) 111.2	
Participation in ethics workshop		0.858
No	(12.2) 106.9	
Yes	(17.2) 106.5	
Consumption of psychiatric drugs		0.722
No	(13.5) 106.9	
Yes	(13) 105.6	
Experience of employment		0.108
No	(13) 106	
Yes	(14.8) 110	

Table 4
Score of the factors related to spiritual care competency of nursing students using multiple linear regression using backward elimination method.

Variables	Unstandardized coefficient		Standardized coefficient(β)	t	***P***
	b	SE			
Place of residence	−5.12	1.98	−0.19	−2.58	**0.011**
Experience of student work	6.15	2.53	0.17	2.43	**0.016**

spiritual care in students were higher than those of nurses which may be due to special attention to spirituality and spiritual care in nursing education in recent years(Jafari et al., 2012). In recent decades, the concept of spirituality in health research has increasingly been applied. The high level of spiritual care competence in nursing students seems to be due to the good quality of their clinical education. It can also be affected by the fact that spirituality is considered a crucial resource during a crisis. Marshall et al. found that during the Asian highly pathogenic avian influenza HPAI A/H5N1 pandemic, spirituality was associated with higher levels of positive emotions and helping behaviors, and lower levels of illegal behaviors (Marshall & Smith, 2015).

In addition, the high level of spiritual care competence scores in the nursing students can be due to the continuity of theoretical and clinical education. During Covid-19, clinical teachers prepared nursing students not only for their academic programs but also for the virtual clinical education imposed by the pandemic. They modified clinical education and used indirect and online clinical learning opportunities including virtual interactive case studies, simulated clinical examinations, and workshops. Additionally, telehealth and telemedicine modules were used to prepare students to obtain experiences in virtual clinical care and simulation-based education.

In line with the factors related to the students' spiritual competence, the results showed that students who had the experience of student work in the hospital had obtained higher scores on spiritual care competence, which is consistent with the study of Kalkim et al. (Kalkim, Sagkal Midilli, & Daghan, 2018). New evidence suggests that spiritual care education of nursing students in clinical settings has an effective role in the development of their knowledge, skills, and attitudes toward spiritual care (Ross et al., 2014). However, the results of the present study are not consistent with the study reported by Yazdanparast et al.(Yazdan Parast et al., 2017).

This finding indicated that clinical experience is an associated factor with the student's competence in spiritual care. Consistent with the finding, Barss et al. believed that teaching strategies based on humanistic philosophy and compassionate caring during clinical experiences are common approaches to teaching spirituality to nursing students (Barss, 2012).

It also seems that the religious beliefs of the Iranian community, and the teachings of Islam have been effective in the development of spirituality and the competence of students' spiritual care.

Place of residence was another factor related to spiritual care competency. The mean score of spiritual care competency in the native students was significantly higher than the non-native ones. This result is consistent with the findings of the study of Asgari Ghoncheh et al. (Asgari Ghoncheh, Hashemnejad, & Hajibabaeei). This finding can be related to the fact that the majority of participants lived in areas with similar cultures and beliefs. However, the findings of the current study are not consistent with the results reported by Aksoy et al. (Aksoy & Coban, 2017).

The current study findings emphasize that nursing students' spiritual aspect during crises has as important as the other aspects of their life such as living environment, emotional support from family, and crises.

5. Study strength and limitations

Since spirituality has a complex and multidimensional nature, investigation of the students' perceptions of spiritual care during the Covid-19 pandemic using the self-report online questionnaire may have affected the study findings. The generalization of the study findings is also limited as the study respondents were recruited using a web-based sampling.

6. Implication for practice

It is so important to develop spiritual care in nursing education programs. As nurses are key members of health systems, they should enhance the spirituality care level in their care plans. The results showed the students who had more experience in student work in the hospital, obtained higher scores on spiritual care competence. This implicates the experience of students' work in the hospital can reinforce their competencies in spiritual care. Also, the native students who lived with their families had higher spiritual care competence. This finding states that psychological attention is an important factor in improving spiritual care competency in nursing students.

7. Conclusion and recommendations

According to the research findings, the mean total score of spiritual care competence in nursing students was reported at a high level. It indicated an acceptable level of performance of nursing students in spiritual care during the Covid-19 pandemic. Spiritual care competence plays a key role in developing nursing students skills. Identifying the spiritual care competence level and the related factors among the students, also the application of the results can be used in the comprehensive plan of care to improve patients' quality of life and enhance their mental health and well-being. Further research is recommended to study other related social and demographic factors contributing to the spiritual care competence level among nursing students, such as type of religion and different cultures.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

This study was approved at Guilan University of Medical Sciences (GUMS) with register code 32401. The authors express their appreciation to the deputy of research and technology of GUMS for the financial support provided for this study. We also appreciate the fruitful collaboration of the study participants.

Funding

This research was supported by Guilan University of Medical Sciences [grant number 32401].

References

Abbasi, M., Farahani-Nia, M., & Mehrdad, N. (2014). Nursing students' spiritual well-being, spirituality and spiritual care. *Iranian journal of nursing and midwifery research, 19*(3), 242 [PMID: 24949061].

Adib-Hajbaghery, M., Zehtabchi, S., & Fini, I. A. (2017). Iranian nurses' professional competence in spiritual care in 2014. *Nurs Ethics, 24*(4), 462–473. https://doi.org/10.1177/0969733015600910

Aksoy, M., & Coban, G. I. (2017). Nursing Students' Perceptions of Spirituality and Spiritual Care. *International Journal of Caring Sciences, 10*(3), 1136.

AlSaif, H. I., AlDhayan, A. Z., Alosaimi, M. M., Alanazi, A. Z., Alamri, M. N., Alshehri, B. A., & Alosaimi, S. M. J. I. J. o. G. M. (2020). Willingness and Self-Perceived Competence of Final-Year Medical Students to Work as Part of the Healthcare Workforce During the COVID-19 Pandemic. *13*, 653-661. https://doi.org/610.2147/IJGM.S272316.

K. Asgari Ghoncheh H. Hashemnejad H.R. Hajibabaeei The relationship between spiritual well-being and demographic characteristic of students of Qazvin University of Medical Sciences Journal of Inflammatory Diseases 22 3 2018 50–57.[persian].

Barss, K. S. (2012). Building bridges: An interpretive phenomenological analysis of nurse educators' clinical experience using the TRUST Model for inclusive spiritual care. *International Journal of Nursing Education Scholarship, 9*(1), 1–15. https://doi.org/10.1515/1548-1923X.2389

Carolan, C., Davies, C. L., Crookes, P., McGhee, S., & Roxburgh, M. J. N. E. i. P. (2020). COVID 19: Disruptive impacts and transformative opportunities in undergraduate nurse education.

Chan, M. F. (2010). Factors affecting nursing staff in practising spiritual care. *J Clin Nurs, 19*(15–16), 2128–2136. https://doi.org/10.1111/j.1365-2702.2008.02690.x

M.L. Chen Y.H. Chen L.C. Lin L.L. Chuang Factors influencing the self-perceived competencies in spiritual care of nurses in the long-term care facilities Journal of Nursing Management 28 6 2020 1286 1294 https://doi.org/1210.1111/jonm.13080.

de Diego-Cordero, R., López-Gómez, L., Lucchetti, G., & Badanta, B. (2021). Spiritual care in critically ill patients during COVID-19 pandemic. *Nursing outlook, 70*(1), 64–77. https://doi.org/10.1016/j.outlook.2021.1006.1017

M. Jafari M. Baneshi F. Borhani S. Sabzevari Nurses and nursing students views on spiritual care in Kerman Medical University. Medical Ethics 6 20 2012 155–171.[persian].

Kalkim, A., Sagkal Midilli, T., & Daghan, S. (2018). Nursing Students' Perceptions of Spirituality and Spiritual Care and Their Spiritual Care Competencies: A Correlational Research Study. *Journal of Hospice & Palliative Nursing, 20*(3).

Khalaj, M., Pakpour, A. H., & Mohammadi, E. (2013). validity and reliability of nursing students'. *Spiritual Care Competence Scale Journal of Qazvin University of Medical Sciences, 17*(2), 64–70.

LaBine, N. L. (2015). Teaching the spiritual dimension of nursing care: A survey of associate degree nursing programs in the southeast United States.

A.I. Liefbroer E. Olsman R.R. Ganzevoort F.S. van Etten-Jamaludin Interfaith spiritual care: A systematic review Journal of religion and health 56 5 2017 1776 1793 https://doi.org/1710.1007/s10943-10017-10369-10941.

S.A. Mardani F. Azizi Question Of Position, Definition And Difficulties Of Establishing The Concept Of Spiritual Health In The Iranian-Islamic Society. 4 14 2011 11–21 [Persian].

Marshall, K., & Smith, S. (2015). Religion and Ebola: Learning from experience. e25 *Lancet, 386*(10005), e24. https://doi.org/10.1016/S0140-6736(1015)61082-61080.

McSherry, W., & Jamieson, S. J. J. o. C. N. (2013). The qualitative findings from an online survey investigating nurses' perceptions of spirituality and spiritual care. *22*(21-22), 3170-3182.

Pierce, A., Hoffer, M., Marcinkowski, B., Manfredi, R., & Pourmand, A. J. T. A. J. o. E. M. (2020). Emergency department approach to spirituality care in the era of COVID-19. *American Journal of Emergency Medicine, 46*, 765-768. https://doi.org/710.1016/j.ajem.2020.1009.1026.

M. Rahnama K.M. Fallahi B.M.S. Seyed F. Ahmadi The process of spiritual care in rehabilitation of cancer patients: A grounded theory study MEDICAL – SURGICAL NURSING JOURNAL 4 3 2015 1–12.[persian].

Ross, L., McSherry, W., Giske, T., van Leeuwen, R., Schep-Akkerman, A., Koslander, T., . . . Jarvis, P. J. N. e. t. (2018). Nursing and midwifery students' perceptions of spirituality, spiritual care, and spiritual care competency: A prospective, longitudinal, correlational European study. *67*, 64-71.

Ross, L., Van Leeuwen, R., Baldacchino, D., Giske, T., McSherry, W., Narayanasamy, A., & Schep-Akkerman, A. J. N. E. T. (2014). *Student nurses perceptions of spirituality and competence in delivering spiritual care: a European pilot study., 34*(5), 697–702.

Van Leeuwen, R., Tiesinga, L. J., Middel, B., Post, D., & Jochemsen, H. J. J. o. C. N. (2009). The validity and reliability of an instrument to assess nursing competencies in spiritual care. *18*(20), 2857-2869.

E. Yazdan Parast S. Afrazandeh H. Ghorbani F. Asadi R. Rajabi L. Naseri F. Sekandari Analysis of spiritual care competence in students of Ferdows health and paramedical school: 2014–15. Iran Journal of Nursing 30 105 2017 47–57.[persian].

Yeganeh, M. R., Pouralizadeh, M., & Ghanbari, A. (2019). The relationship between professional autonomy and moral distress in ICU nurses of Guilan University of Medical Sciences in 2017. *Nursing Practice Today*.