

Research Paper

Investigating the Spiritual Health Status of Surgical Technology and Anesthesia Students at Shahid Sadoughi University of Medical Sciences in 2024



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ABSTRACT

Background and Objectives: Human health, as one of God's most wonderful creations, encompasses various dimensions. Spiritual health is one of these dimensions related to the other dimensions. The present study investigates the spiritual health status of students in the Operating Room and Anesthesia Departments at Shahid Sadoughi University of Medical Sciences, Yazd City, Iran, in 2024.

Methods: This descriptive-analytical cross-sectional study was conducted on 163 students from the Operating Room and Anesthesia Departments at Shahid Sadoughi University of Medical Sciences, Yazd City, Iran, in 2024, using a census method. The data were collected through a demographic form and the spiritual health questionnaires developed by Paloutzian and Ellison. Meanwhile, the data were then described using descriptive statistics, such as frequency and percentage, and analyzed using inferential statistics, including the t-test and Pearson correlation coefficient, using the SPSS software, version 27.

Results: In this study, the mean spiritual health score of students was 90.55 ± 17.43 , indicating that the students were at a mean level of spiritual health. No significant relationship was found between gender, marital status, native-ness, field of study, or semester and spiritual health, existential health, and religious health ($P > 0.05$).

Conclusion: Considering the influence of religious culture in Yazd City, Iran, it is natural to expect religious influences to serve as a source of adaptation to society. Based on the results obtained and the higher mean spiritual health score of the students studied compared to similar studies, it would be appropriate to implement programs aimed at maintaining and promoting spiritual health.

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Introduction

Human health, as one of the most remarkable creations of God, has various dimensions; one important aspect within these dimensions is spiritual health [1]. According to the [World Health Organization \(WHO\)](#), spiritual health is one of the dimensions of health, along with physical, mental, and social health [2]. Just as the physical, mental, and social dimensions are interrelated and affect one another, spiritual health is also interconnected with and influences other dimensions [3]. Spirituality is a unique force in human life and is considered one of the most important dimensions of human existence, linked to various pillars of life. Spirituality is a universal phenomenon that connects humans to the source of all existence [4]. Spiritual health can be defined as the spiritual experience of individuals in two dimensions: Religious health and existential health. Religious health emphasizes how individuals perceive health in their spiritual lives when connected to the source of existence and reflects the satisfaction derived from connecting with an infinite power. Existential health focuses on social and psychological concerns regarding how individuals reconcile themselves with their inner selves and their environment, and it also expresses the human effort to understand the reason and purpose of life [5-7]. Spiritual health enhances a person's overall well-being and is associated with other aspects of health, ultimately increasing the quality of human life [8, 9]. For example, individuals with higher spiritual health tend to exhibit greater responsibility and a stronger ability to face life's challenges. In contrast, those with lower spiritual health may experience various mental disorders, such as depression or a loss of purpose in life [10].

The results of studies conducted on students indicate that their spiritual orientation plays an effective role in their mental health; accordingly, higher levels of spiritual health among students indicate better mental health [11, 12]. Khadem et al. in a study titled "the relationship between spiritual health and mental health of students at [Ferdowsi University of Mashhad](#)," conducted in 2015 with 322 students from the [Ferdowsi University of Mashhad](#), Iran, reported that spiritual health has a direct relationship with mental health, stating that higher spiritual health correlates with better mental health [13]. Recent research also demonstrates a significant and positive relationship between the spiritual health of medical students and their care for patients. Kazemzadeh et al. after examining the relationship between spiritual health and ethical behavior in students from the Nursing and

Midwifery Faculties of [Ardabil University of Medical Sciences](#) in 2019, concluded that an increase in the level of spiritual health leads to more desirable ethical behavior [14]. Considering the nature of paramedical disciplines, the close interactions these individuals have with patients, and the importance of spiritual care, it follows that the more paramedical students possess spiritual health and a positive attitude toward spirituality, the higher the quality of care and interventions provided to patients will be [14]. Accordingly, one of the important initial steps to achieving spiritual care and addressing the spiritual needs of patients is to assess the spiritual health of students and their understanding and comprehension of spiritual health [15].

In Iran, thousands of students enter universities every year and various factors, such as distance from family, dormitory environment, and academic conditions, can affect the spiritual health of students during this period [10]. Despite these challenges, the spiritual health of medical students is more vulnerable to harm than that of other students due to their specific academic conditions [16]. Additionally, because of the nature of these fields, students in the operating room and anesthesia disciplines experience more psychological trauma than those in other fields. Therefore, their spiritual health should be given greater attention in providing better care to patients [17, 18]. Research conducted nationwide has yielded various means for the spiritual health of the students studied. In a study conducted by Poorkiani et al. in 2015 on nursing and operating room students at [Larestan University of Medical Sciences](#), the mean spiritual health score was 81.58. In a study by Kazemzadeh et al. in 2019, this mean was reported as 70.02 for operating room students at [Ardabil University of Medical Sciences](#) [14, 19]. Vahedian Azimi et al. also reported a mean of 88.38 in 2019 while studying medical students at [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran [9].

In addition to affecting various aspects of students' health, spiritual health also impacts the treatment process of patients. These students are the future specialists responsible for improving the overall health of society. However, there is limited research available on the spiritual health of operating room and anesthesia students. Therefore, the present study investigates the spiritual health status of students in the Operating Room and Anesthesia Departments at [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran, in 2024 and explores its relationship with gender, place of residence, marital status, field of study, and semester of study among these students.

Methods

This descriptive-analytical study was conducted cross-sectionally on 163 students from the Operating Room and Anesthesia Departments at [Shahid Sadoughi University of Medical Sciences](#) in Yazd in 2024, selected using a census method.

The inclusion criterion for this study was enrollment in the operating room and anesthesia departments at the time of the research, while unwillingness to participate was considered an exclusion criterion. This study was limited to the population of students in the operating room and anesthesia departments of [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran, which constitutes a limitation of the research. Additionally, the impact of environmental factors and students' activities in the stressful operating room environment may have influenced the results.

Sampling was conducted using a census method, along with a demographic characteristics form and the spiritual health questionnaires developed by Paloutzian and Ellison. The demographic checklist included questions such as age, gender, academic semester, field of study, marital status, and place of residence. The spiritual health questionnaire, designed and developed in 1983, assesses spiritual health, existential health, and religious health. It consists of 20 questions that evaluate spiritual health based on a Likert scale. Individuals are classified into low (20-40), medium (41-99), and high (100-120) levels based on their scores. The reliability coefficient of this questionnaire was calculated to be 0.82 based on the Cronbach α .

The SPSS software, version 27, was used for data analysis. After examining the descriptive statistics indicators, the relationship between spiritual health and age, gender, academic semester, field of study, marital status, and place of residence was analyzed.

Results

In this study, out of 163 students in the operating room and anesthesia fields, 147(90%) were willing to participate, while 16 were excluded based on the exclusion criteria. The mean age of the students was 20.37 ± 1.55 years, with a minimum age of 18 years and a maximum age of 30 years. The highest frequency was found in the age group of 20 to 25 years, which comprised 70.1% of the study population ([Tables 1 and 2](#)).

The mean spiritual health score of the students was 90.55 ± 17.43 , with the highest score being 120 and the lowest score being 36. Additionally, the mean existential health score was 42.36 (with a maximum score of 60 and a minimum score of 17) and the mean religious health score was 48.10 (with a maximum score of 60 and a minimum score of 18). Ten students (6.8%) were classified at a low level, 89(60.5%) at a mean level, and 48(32.7%) at a high level of spiritual health. The frequency of students according to their level of spiritual health is shown in [Figure 1](#).

A total of 9 students (6.1%) believed that God has no role in their lives, and 24(16.3%) reported not having a satisfactory personal relationship with God. Additionally, 54 students (36.7%) felt that they had an uncertain future, and 52(35.3%) did not derive enough pleasure from their lives. Furthermore, 12 students (8.1%) believed that there was no specific purpose for their existence. No

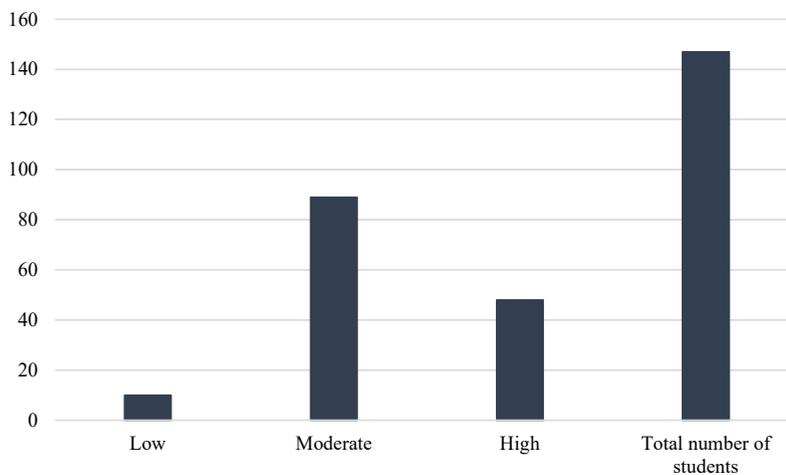


Figure 1. Frequency of students by the level of spiritual health

Table 1. Mean spiritual health, existential health and religious health scores according to demographic variables

Variables	No. (%)	Mean±SD			
		Spiritual Health	Existential Health	Religious Health	
Gender	Male	46(31.3)	91.6±16.79	42.93±10.61	48.67±8.46
	Female	101(68.7)	90.07±17.78	42.09±9.67	47.85±9.54
Marital status	Single	135(91.8)	90.2±17.42	42.4±9.83	47.93±9.19
	Married	12(8.2)	94.5±17.81	41.91±11.62	50.08±9.41
Field of study	Surgical technology	74(50.3)	91.06±18.03	42.91±10.44	48.25±8.78
	Anesthesia	73(49.7)	90.04±16.91	41.79±9.46	47.95±9.65
Semester	1	46(31.3)	95.06±18.08	44.84±10.07	50.15±9.82
	3	30(20.4)	87.6±16.96	41.7±7.29	46.56±10.3
	5	37(25.2)	85.89±15	39.67±10	46.21±7.32
	7	34(23.1)	92.14±18.37	42.5±12.28	48.76±8.85
Place of residence	Native	78(53.1)	91.32±16.87	42.67±9.91	48.6±8.96
	Non-native	69(46.9)	89.69±18.14	42±10.05	47.55±9.48

statistically significant relationships were found between gender, marital status, native status, field of study, and semester with spiritual health, existential health, and religious health ($P>0.05$).

Discussion

In this study, 147 students from the Operating Room and Anesthesia Departments at [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran, were examined regarding their spiritual health status. Age did not have a significant effect on spiritual health scores, which may be attributed to the limited age range of the participants.

The mean spiritual health score of the students was 90.55. Ten students (6.8%) were classified at a low level, 89(60.5%) at a mean level and 48(32.7%) at a high level of spiritual health. In a similar study conducted in Jiroft City, Iran, in 2021, the mean spiritual health score of 608 medical students was determined to be 72.53 ± 10.86 [20]. Another study conducted in Khorramabad City, Iran, in 2020 reported the mean spiritual health of 210 students at Khorramabad Azad University to be 75.98 ± 6.54 [21]. Additionally, the mean spiritual health score of nursing students in South Korea was evaluated as 76.03 ± 15.74 in a study conducted by Lee in 2014 [22]. The spiritual health of nursing students in Taiwan was also reported

to be at a mean level by Hsiao et al. in 2010 [23]. The differences in the mean spiritual health scores across various studies may be attributed to the fact that this research was conducted in different cities and countries. Given the dominant religious culture in Yazd City, Iran, a higher mean score can be expected compared to studies conducted in other cities.

The mean religious health score was 48.10 (with a maximum score of 60 and a minimum score of 18), while the mean existential health score was 42.36 (with a maximum score of 60 and a minimum score of 17). Based on the statistical results, these two variables had a positive correlation and were mutually influential ($P<0.001$, $r=0.590$). In the study by Etebari et al. in Ardebil City, Iran, the mean scores for these two variables were determined to be 35.63 and 34.87, respectively. In the study by Ziapour et al. in Kermanshah City, Iran, the mean religious health score was 36.46, and the mean existential health score was 35.39. These studies also noted a positive statistical correlation between these two variables ($P<0.05$) [24, 25].

In this study, there were 46 men and 101 women, resulting in a female-to-male ratio of 2.19; however, the mean spiritual health score in these two groups did not differ significantly. Additionally, no statistically significant re-

Table 2. Relationship between spiritual health and demographic variables

Variables	Demographic Variables	P	Statistics
Spiritual health score	Gender	0.624	t=0.492
	Marital status	0.416	t=0.816
	Field of study	0.723	t=0.356
	Semester	0.266	r=-0.092
	Place of residence	0.575	t=0.563
Existential health score	Gender	0.638	t=0.471
	Marital status	0.873	t=0.161
	Field of study	0.495	t=0.684
	Semester	0.142	r=-0.122
	Place of residence	0.681	t=0.412
Religious health score	Gender	0.617	t=0.501
	Marital status	0.44	t=0.775
	Field of study	0.845	t=0.196
	Semester	0.355	r=-0.077
	Place of residence	0.491	t=0.691

relationship was found between gender and spiritual health ($P=0.624$). This finding is inconsistent with the results of Kazemzadeh et al. in Ardabil City, Iran, Poorkiani et al. in Larestan City, Iran and Ziapour et al. in Kermanshah City, Iran [14, 19, 25]. In all these studies, a significant relationship was observed between gender and spiritual health, with girls exhibiting greater spiritual health ($P<0.05$). However, Habibi et al. in Tehran City, Iran, in 2020 did not find a significant relationship between spiritual health and gender ($P=0.9$) [26].

In the present study, 91.8% of the students were single, and no significant relationship was observed between spiritual health and marital status ($P=0.416$). This finding is consistent with the studies by Poorkiani et al. in Larestan City, Iran, and Ziapour et al. in Kermanshah City, Iran [19, 25]. However, in a similar study conducted by Faryabi et al. in Jiroft City, Iran, this relationship was significant, with married individuals exhibiting higher spiritual health [20].

Among the students surveyed, no statistically significant correlation was found between place of residence and spiritual health status ($P=0.575$). The results of Ka-

zemzadeh et al. in Ardabil City, Iran, and Poorkiani et al. in Larestan City, Iran, align with our study in this regard ($P>0.05$) [14, 19].

Despite the mean spiritual health score in this study being 90.55, the difference in spiritual health status between the operating room and anesthesia disciplines was not statistically significant ($P=0.723$). In a study by Vahedian Azimi et al. conducted in 2019 on medical students at [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran, the mean spiritual health score was reported to be 88.38 [9]. In another study conducted by Ebadi et al. on nursing students in Yazd City, Iran, the mean spiritual health score was determined to be 95.04 [27]. Since there are no specific findings regarding the mean spiritual health score in other majors at Yazd City, Iran, University of Medical Sciences, comparisons between these majors require further investigation. However, the higher mean scores found in the available studies are promising for appropriate spiritual health among students in medical majors at [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran.

Regarding the relationship between spiritual health status and academic semester, the mean score was nearly at the same level, and no significant relationship was found in this regard ($P=0.266$). This finding conflicts with the results of Kazemzadeh et al. in Ardabil City, Iran, and Masoudi in Tehran City, Iran [14, 28], where the mean spiritual health score was higher among students with greater educational levels. Conversely, in the study by Asgari Ghoncheh et al. in Qazvin City, Iran, the mean spiritual health score decreased with increasing educational level [29]. This discrepancy in results may be attributed to factors such as the student's field of study, as well as the time and location of the research. If spiritual health does indeed decline with increasing educational levels, the underlying causes of this issue should be investigated, and strategies to enhance spiritual health can be implemented. Among the students surveyed, 6.1% believed that God had no role in their lives, and 16.3% reported not having a satisfactory personal relationship with God. In a study by Azimi et al. on medical students at [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran, these values were reported as 10.4% and 24.8%, respectively [9]. Accordingly, there is a need for increased cultural programs aimed at enhancing students' understanding of God.

In this study, 35.3% of students did not feel sufficient enjoyment in their lives, and 8.1% believed that there was no specific purpose for their existence. In the study by Azimi et al. these values were reported as 31.9% and 13.3%, respectively [9]. The lack of sufficient enjoyment of life among medical students may be attributed to the specific educational conditions in these fields. Psychological counseling for these students could help improve their attitudes in this regard. Additionally, the lack of belief in a specific purpose in the lives of this group of students is an issue that requires further research to identify the factors involved.

Conclusion

Given the religious culture of Yazd City, Iran, religious influences exist as a source of adaptation to society. Based on the results obtained and the higher mean spiritual health score among the students studied compared to similar studies in other cities, it would be appropriate to implement programs, such as courses related to spirituality, to maintain and promote spiritual health. It is also recommended that, in supporting medical students, attention be paid to their spiritual aspects so that positive results can be observed in the student's academic progress as well as in patient treatment. We hope that this study will encourage further research in this area and

that managers and specialists will be able to take effective measures to promote the spiritual health of medical students by utilizing the findings. The present study was limited to the population of students in the Operating Room and Anesthesia Departments of [Shahid Sadoughi University of Medical Sciences](#) in Yazd City, Iran, which represents a limitation of the study. Additionally, the impact of environmental factors and students' activities in the stressful operating room environment could affect the results. This was one of the objectives of the study; however, these findings cannot be generalized to all medical students, and there is a need for further investigation in other medical disciplines. It is suggested that future studies examine a broader range of students to obtain more accurate results regarding the relationship between spiritual health and various variables. Additionally, interventions, such as conducting training courses and assessing the effectiveness of various interventions, are other valuable goals.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of [Shahid Sadoughi University of Medical Sciences](#), Yazd, Iran, after obtaining the necessary permits to conduct the research from the relevant authorities (Code: IR.SSU.REC.1403.070). After explaining the research method and objectives to the participants and assuring them of the confidentiality of the research process, questionnaires were distributed and subsequently collected. The participants were free to choose whether to participate in the study. Professional ethics were upheld at all stages, including sampling, data collection, data analysis, and reporting of results

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Authors' contributions

All authors contributed equally to the conception and design of the study, data collection and analysis, interpretation of the results, and drafting of the manuscript. Each author approved the final version of the manuscript for submission.

Conflict of interest

The authors declared no conflict of interest.

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References

- [1] Masoudi Asl I, Rajabi Vasokolaee G, Nazari H, Goudarzi L, Raadabadi M. [The evaluation of the relationship between mental health and spiritual health of students at Tehran University of Medical Sciences, 2013 (Persian)]. *Med Spirit Cult*. 2017; 23(3):55-66. [\[Link\]](#)
- [2] Kashfi SM, Yazdankhah M, Heydarabadi AB, Jeihooni AK, Tabrizi R. [The relationship between religious attitude and mental health in students of Shiraz University of Medical Sciences (Persian)]. *J Pizhūhish dar dīn va salāmat*. 2016; 1(3):34-41. [\[Link\]](#)
- [3] Marzban S, Heydarabadi AB, Rahimi E, Vejdani M, Shokri M. [Spiritual health status in students of shahid beheshti university and shahid beheshti university of medical sciences (Persian)]. *J Pizhūhish dar dīn va salāmat*. 2016; 2(4):15-24. [\[Link\]](#)
- [4] Khiyali Z, Jafarzadeh S, Aleosfoor M. [The spiritual health among paramedical students studying in Fasa University of medical sciences (Persian)]. *Med History J*. 2017; 29(8):119-37. [\[Link\]](#)
- [5] Musarezaie A, Momeni Ghaleghasemi T, Ebrahimi A, Karimian J. [The relationship between spiritual wellbeing with stress, anxiety, and some demographic variables in women with breast cancer referring to the specialized cancer treatment center in Isfahan, Iran (Persian)]. *J Health Syst Res*. 2012; 8(1):104-13. [\[Link\]](#)
- [6] Moghimian M, Salmani F. [The study of correlation between spiritual well-being and hope in cancer patients referring to seyyedo shohada training-therapy center of Isfahan University of Medical Sciences, 2010, Isfahan, Iran (Persian)]. *Qom Univ Med Sci J*. 2012; 6(3):40-5. [\[Link\]](#)
- [7] Martins H, Dias Domingues T, Caldeira S. Spiritual wellbeing in cancer patients undergoing chemotherapy in an outpatient setting: A cross-sectional study. *J Holist Nurs*. 2020; 38(1):68-77. [\[DOI:10.1177/0898010119858269\]](#) [\[PMID\]](#)
- [8] Allahbakhshian M, Jaffarpour M, Parvizy S, Haghani H. [A survey on relationship between spiritual wellbeing and quality of life in multiple sclerosis patients (Persian)]. *Zahedan J Res Med Sci*. 2010; 12(3):e94299. [\[Link\]](#)
- [9] Vahedian Azimi M, Hosseini S, Hazar N. [Spiritual health among medical students of Shahid Sadoughi University of Medical Sciences in 2019 (Persian)]. *Health Res Dev J*. 2024; 2(1):28-40. [\[DOI:10.61186/jhrd.2.1.28\]](#)
- [10] Tabibi M, Ahmari Tehran H, Soltani Arabshahi SK, Heidari S, Abdi Z, Safaeipour R. [The association between spiritual health and academic achievement in medical students of Qom University of Medical Sciences, 2011 (Persian)]. *Qom Univ Med Sci J*. 2013; 7(S1):72-78. [\[Link\]](#)
- [11] Yousefi F, Rafiee S, Tairi F. The relationship between spiritual health and mental health in students of Kurdistan University of Medical Sciences. *Shenakht J Psychol Psychiatr*. 2019; 6(4):100-9. [\[DOI:10.29252/shenakht.6.4.100\]](#)
- [12] Aghakhani N, Torabi M, Hazrati A, Alinejad V, Esm Hosseini G R, Nikonejad A. [The relationship between spiritual wellbeing and depression in medical students of Urmia University of Medical Sciences (Persian)]. *Stud Med Sci*. 2016; 27(8):642-9. [\[Link\]](#)
- [13] Khadem H, Mozafari M, Yousefi A, Ghanbari Hashemabad B. [The relationship between spiritual health and mental health in students of Ferdowsi University of Mashhad (Persian)]. *J Med History*. 2015; 7(25):33-50. [\[Link\]](#)
- [14] Kazemzadeh R, Etebari Asl Z, Jafari I, Agayi S. [Correlation between spiritual health and ethical behavior among students of nursing and midwifery faculty in Ardabil University of Medical Sciences (Persian)]. *J Health*. 2022; 13(1):60-9. [\[DOI:10.52547/j.health.13.1.60\]](#)
- [15] Sayyadi M, Sayyad S, Vahabi A, Vahabi B, Noori B, Amani M. [Evaluation of spiritual health level and its related factors in the students of Sanandaj Universities, 2015 (Persian)]. *Shenakht J Psychol Psychiatry*. 2019; 6(1):1-10. [\[DOI:10.29252/shenakht.6.1.1\]](#)
- [16] Khodaveisi M, Baiat M, Amini R, Roshanaei Q. [The corollation on general health and spiritual health of nursing students in University of Hamedan Medical Sciences in 2016 (Persian)]. *Avicenna J Nurs Midwifery Care*. 2017; 25(3):26-33. [\[DOI:10.21859/nmj-25034\]](#)
- [17] Zarea K, Bahrani H. Study of mental health in status the operation room students who are educating in Ahvaz Jundishapur University of Medical Science in 2011. *Jentashapur J Health Res*. 2013; 4(1):23-31. [\[Link\]](#)
- [18] Karimi Z, Zandi Ghashghai K, Malazem Z, Kamkar A, Ghafarian Shirazi H. [Anxiety and its related factors in the clinical environment in the operating room and anesthesia students (Persian)]. *Iran J Med Educ*. 2005; 5(4):14. [\[Link\]](#)
- [19] Poorkiani M, Sheikhalipoor Z, Jourkesh F. [The assessment of paramedical students' spiritual health: The necessity to pay more attention (Persian)]. *Med History J*. 2017; 8(29):63-81. [\[DOI:10.22037/mhj.v8i29.16745\]](#)
- [20] Faryabi R, Daneshi S, Rahimi T, Ravayie P. [The association between spiritual health and the intention to perform risky behaviors in university of medical sciences students (Persian)]. *J Health Res Dev*. 2023; 1(1):68-77. [\[DOI:10.61186/jhrd.1.1.68\]](#)
- [21] Naghi-Beyranvand M, Mousavi S-F. [The relationship between spiritual health and anxiety in nursing students (Persian)]. *Nurs Dev Health*. 2021; 11(2):25-35. [\[Link\]](#)

- [22] Lee Y. The relationship of spiritual well-being and involvement with depression and perceived stress in Korean nursing students. *Glob J Health Sci.* 2014; 6(4):169-76. [DOI:10.5539/gjhs.v6n4p169] [PMID]
- [23] Hsiao YC, Chiang HY, Chien LY. An exploration of the status of spiritual health among nursing students in Taiwan. *Nurs Educ Today.* 2010; 30(5):386-92. [DOI:10.1016/j.nedt.2009.05.001] [PMID]
- [24] Kazemzadeh R, Etebari Asl Z, Jafari I, Agayi S. [Correlation between spiritual health and ethical behavior among students of Nursing and Midwifery Faculty in Ardabil University of Medical Sciences (Persian)]. *J Health.* 2022; 13(1):60-9. [DOI:10.52547/j.health.13.1.60]
- [25] Ziapour A, Kianipour N, Saeidi S, Zangeneh A. Examining the status of spiritual health among students at the autonomous campus of Kermanshah University of Medical Sciences in 2016. *J Res Relig Health.* 2017; 3(2):8-19. [DOI:10.22037/jrrh.v3i2.12507]
- [26] Habibi H, Alaei A, Hasani G. [Evaluation of the correlation between spiritual health and depression in dental students of clinical stage in 2020 (Persian)]. *J Shahid Sadoughi Univ Med Sci.* 2022; 30(4):1-13. [DOI:10.18502/ssu.v30i4.9898]
- [27] Ebadi BN, Rahgoi A, Hosseini MA, Fallahi khoshknab M, Biglarian A. The correlation between spiritual well-being and hope among nursing students of medical sciences universities and Islamic Azad Universities of Yazd. *J Health Promot Manage.* 2017; 6(2):8-13. [DOI:10.21859/jhpm-06042]
- [28] Masoudi Asl I, Rajabi Vasokolaee G, Nazari H, Goudarzi L, Raadabadi M. [The evaluation of relationship between mental health and spiritual health of students at Tehran University of Medical Sciences, 2013 (Persian)]. *J Med Spirit Cultivation.* 2015; 23(3):55-66. [Link]
- [29] Asgari Ghoncheh K, Hashemnezhad H, Hajibabaei HR. The relationship between spiritual well-being and demographic characteristic of students of Qazvin University of Medical Sciences. *J Qazvin Univ Med Sci.* 2018; 22(3):50-7. [DOI:10.29252/qums.22.3.57]