## Original Research

# The Relationship between Preoperative Anxiety and Religious Beliefs in Patients in Peymaniyeh Hospital in Jahrom in 2017

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**Abstract**

**Introduction:** Since the diseases affect the both body and mind along with anxiety, may be associated with poor treatment outcomes and prolonged recovery process and postoperative complications. So in this study we investigated The Relationship between preoperative anxiety and religious beliefs.

**Methods:** This study is a cross-sectional descriptive study in which 209 patients admitted to hospitals affiliated to Jahrom University of Medical Sciences entered the study. The data collection tools in this study were the Spielberger Anxiety Questionnaire and the Religious Beliefs Questionnaire. Data analysis was performed using descriptive and analytic statistical tests at a significance level of $P < 0.05$.

**Results:** According to the results of the Pearson correlation coefficient between preoperative anxiety variables and religious beliefs in hospitalized patients in Jahrom's Peymaniyeh Hospital, it was observed that there was not any significant relationship between religious beliefs score and Trait anxiety ($r=0.067$, $p = 0.396$) and state anxiety ($r=0.086$, $p=0.270$).

**Conclusion**: In the present study, there was no significant relationship between preoperative anxiety variables and religious beliefs in hospitalized patients, so it is recommended that further studies be conducted in this field.

**Keywords:** Preoperative Anxiety, Surgery, Religious Beliefs, Hospital, Patients

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## Introduction

Today, surgery is a common treatment for many diseases and injuries (1). Surgery is always a great experience for the patient and his family (2), which is accompanied by several psychological complications for patients (3), among which mental disorders and anxiety are the most common (4). In 2001, the World Health Organization (WHO) examined mental disorders in various countries and found that mental disorders, especially anxiety, were seen in 38.6 percent of people in developing countries and 83.2 percent in industrialized countries (5). Anxiety is a distressing state of mind or a feeling of helplessness related to a threatening situation or anticipation of an unknown threat to oneself or others (6). Anxiety begins when the patient is aware of the need for surgical treatment and peaks at the time of hospitalization (8). Anxiety before

surgery is a common public phenomenon seen in almost all patients awaiting surgery (9). Kim et al. (2010) stated that its incidence is more than 60% of patients (10). Anxiety harms tissue healing and repair; besides, consuming too much mental and physical energy during anxiety can lead to fatigue and cause a series of biochemical activities in the body that stimulate the autonomic system, muscle tension, and increase production Corticosteroids (11); it may stimulate the sympathetic system to increase heart rate, increase blood pressure, reduce blood flow to the wound, and constrict arteries (12). If anxiety is not controlled or get prolonged, it may lead to increased protein breakdown, reduced wound healing, increased risk of infection, altered immune responses, and electrolyte and fluid imbalances, and changes in sleep patterns (13). These factors prolong hospital stay and delayed patient discharge (14); also, the presence of anxiety during the preoperative period may attribute to gastric ulcer (15) and reduces patients' satisfaction with the treatment and nursing care ( 16). But one of the things that play a very important role in the prevention of psychotherapeutic disorders is religion and religious beliefs (17,18). Today, most scholars believe that religion has undeniable effects on the health of the body and other aspects of human life. Religion is considered a factor in psychological well-being, and the lack of religion or adherence to religious beliefs in any religion or profession is associated with high levels of depression and suicidal ideation. It has been suggested that people who have religious beliefs or perform religious acts are more likely to experience anxiety and psychological diseases than those who do not have religious beliefs (21,22). Religion is so important to nurture the health of the human soul that it is like breathing air. Religion helps a person understand the meaning of life's events, especially those that are painful and anxious. Religion (23). Joint research between religious and professional groups in the field of mental and medical health has found that spirituality and religious attitudes are associated with positive outcomes in physical and mental health (24, 25). Systematic review studies have also shown that religious interference and spirituality are associated with better health outcomes (26). Thus, several findings support appropriate attention to spirituality in treatment. Although the need to address religious and spiritual issues in treatment is becoming increasingly apparent, there is still a traditional resistance by many physicians to a variety of personal and professional contexts (27). But new studies have examined the use of religious confrontation during stressful events such as cancer treatment, surgery, kidney transplantation, and have shown that the use of religious confrontation is generally effective and can help patients survive and recover (28,29). Various studies have shown conflicting results on the relationship between religious beliefs and anxiety (32-30). Helping patients to safely achieve improved mental

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health may be easily possible through the religious beliefs. Therefore, a study investigating the relationship between anxiety before surgery and religious beliefs in patients admitted to Peymaniyeh Peymaniyeh Hospital in Jahrom city in 2017 has been designed.

## Method

This research is a cross-sectional descriptive study that was conducted in 2017 in Peymaniyeh Educational and Medical Center of Jahrom city. After obtaining permission from the Medical Ethics committee and the officials and the director of Peymaniyeh Hospital, the researcher collected samples who were patients admitted to different wards of Peymaniyeh Hospital. The sampling method was random from different wards. The sampling method was such that the researcher distributed the questionnaires equally in 5 wards of Peymaniyeh Hospital. After entering each ward, the questionnaire was given to the hospitalized patients and information was collected. The data collection tool consisted of three questionnaires:

1- Demographic information questionnaire included: age, gender, marital status, type of job, level of education.

2- Spielberger State-Trait Anxiety Inventory (STAI) that was developed by Spielberger in 1970. Spielberger's anxiety questionnaire contains 40 questions, from questions 1 to 20 dedicated to state anxiety and from questions 21 to 40 are regarding the trait anxiety section. Answers are in the 4-likert scale scoring options of: “never”, “sometimes”, “generally”, “too much”. And the questions related to trait anxiety are given in the same way as the 4 scoring options, which are: “rarely”, “sometimes”, “most of the time”, and “almost always” (33). Finally, each question scores are summed in each section (minimum 20, maximum 80 for each section). Spielberger et al. (1970) reported that Cronbach's alpha coefficient for the state anxiety subscale was 0.92 and for the trait anxiety subscale was 0.90. The test-retest coefficient was also obtained for the state anxiety subscale equal to 0.62 and for the trait anxiety subscale equal to 0.68.

3- The religious beliefs questionnaire prepared by Golriz et al. in 1974 has an interpretation of the Allport test and consists of 25 questions. The reliability of this study was obtained through correlation with 80% Allport test (34). Allport and Ross prepared this test in 1970and it was translated and standardized in Iran in 2008 (reviewed in 35). Its internal reliability was obtained using Cronbach's alpha coefficient of 71%. Each question has five scales (score of 0 to 4) based on the Likert scale, with a total score of 100. Response options were as follows: “excellent”, “good”, “average”, and “poor”, respectively. In the case of a total score of 76-100 was defined as excellent religious attitude, 51-75 as good, 26-50 as moderate, and 25 and below as poor religious attitude (36).

## Inclusion and exclusion criteria

Criteria for admission to the study include: patients admitted to different wards of Peymaniyeh Hospital, age between 20 and

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50 years and the ability to read and write, and exclusion criteria include: non-cooperation to participate in the study, incomplete filling in the questionnaire.

## Data analysis

Descriptive indicators (frequency distribution, mean, standard deviation) and analytical statistics (independent statistical tests, Pearson and analysis of variance) were used to describe the data. SPSS software version 21 was used to analyze the data.

## Results

Based on the results of the descriptive statistics, it was found that the majority of the people in the study (57.7%) belonged to men. Also, in terms of marital status, the majority of respondents (57.7%) were married, in terms of the level of education, the majority had high school degree (49.2%); in terms of occupation the majority (35.3%) had a freelance job. The subjects in this study had an average age of 34.22 years and a standard deviation of 15.35 years, with the lowest age being 16 years and the highest age being 86 years. Also, the majority of respondents (36.6%) were in the age group of 21 to 30 years. Table 1 shows the descriptive statistics of demographic variables.

## Preoperative anxiety:

The results of the study of the subjects in terms of the degree of state and trait anxiety along with the mean and standard deviation of these characteristics are presented separately in Table 2. According to the results of the study, the average state anxiety level was 44.96±7.57 and the trait anxiety levels was 44.54±8.17.

According to the results of the independent t-test, there was no significant difference between the average anxiety of women and men for state and trait anxiety (t(187) =-0.688, p=0.492; t(187)=0.861, p=0.391, respectively). However, there was a significant difference between the average anxiety of single and married people (t(187)=-2.807, p=0.006). There was also a significant difference between the mean trait anxiety of single and married individuals (t (187)=-2.273, p=0.024).

According to the results of one-way analysis of variance between the mean state and trait anxiety of people with different educational levels (F(3,179)=1,274, p=0.285; F (3,179)=1,567, p=0.199, respectively) There was no significant difference between the mean state anxiety of people with different occupations (F(5,178)=1,927, p=0.092) and the mean trait anxiety of individuals with other occupations (F (5,178) =1,138, p=0.342). There was a significant difference between the mean state anxiety of individuals in different age groups (F (5,180)=2,621, p=0.026). However, no significant difference was observed between the mean trait anxiety of individuals in different age groups (F (5,180) =1.995, p=0.081).

According to the results, the people in the study had an average Religious beliefs of 59.73±8.50 (Table 2). Based on the results of the independent t-test, no significant difference was observed between the mean of religious

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beliefs of men and women (t (187) = - 1.153, p = 0.250). But there was a significant difference between the average religious beliefs of single and married people (t (187) = - 2.556, p = 0.011).

Based on the results of one-way analysis of variance, there was no significant difference between the average religious beliefs of people with different educational levels (F (3.179) = 1.255, p = 0.291), between the average religious beliefs of people in different occupations (F (5,178) = 1.237, p = 0.293)) And between the mean religious beliefs in different age groups (F (5.180) = 1.187, p = 0.318).

## The relationship between religious beliefs and preoperative anxiety:

According to the results of Pearson correlation coefficient between pre-operative anxiety variables and religious beliefs in hospitalized patients of Jahrom city hospital, it was observed that there wasn't any significant relationship between religious beliefs score and state anxiety (r = 0.067, p = 0.396) and There was no difference between religious beliefs and trait anxiety (r = 0.086, p = 0.270).

**Discussion:**

The present study showed that there is no significant relationship between the score of religious beliefs and anxiety. In line with the results of this study, Kalkhoran and colleagues reported a relationship between religious beliefs and preoperative anxiety but did not find this relationship to be significant (37). Also in Koenig et al.'s study, listening to religious radio and television programs had a negative relationship with physical health and, contrary to expectations, a positive relationship with depression (38). In contrast to the present study, the results of the study of Tajbakhsh et al. showed that spiritual-religious care has a significant effect on reducing the fear of patients before cardiac surgery (39). Bussing's study also showed that religion and spirituality were considered as an important source of physical and mental fitness in chronically ill patients (40). Study Koenig showed that beliefs and religious activities can improve mental health, reduce the rate of suicide, anxiety, and depression, speed of recovery from depression, increased health, hope and optimism, more social support, creating purpose and meaning in life and the satisfaction and stability of family life (38). Findings of Aghajani's study in hemodialysis patients indicated that spiritual counseling caused a decrease in the median mental anxiety and depression in the intervention group (41). Various studies have shown a positive correlation between spiritual health, religious orientation, and religious beliefs with better mental physical performance and higher self-esteem (42). Also, there was a significant relationship between religiosity and recovery from heart surgery and it was found that those who had stronger religious beliefs had fewer complications and shorter hospital stays (43). Another study that examined the link between religious activity and depression in older people with cancer

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showed that among blacks with cancer, religious activity included performing religious duties, religious attachment, and watching or listening to religious programs are associated with lower levels of depressive symptoms (44). Besides, it has been shown that the use of the effect of religious confrontation in general, both at specific times and over time, has had better adaptive effects for both groups of patients and their relatives (43, 45). The reasons for the better situation in patients who have better beliefs can be found in the hope and purpose of life and the attitude and fear of death among religious people (46).

The present study showed that there is a significant difference between the average religious beliefs of men and women. Unlike our study, a study by Barati et al. showed that the level of religious beliefs in women was significantly higher than in men. Similarity has been shown in several other studies that women had higher levels of religious beliefs than men. Although this difference may not be clinically significant. In a epidemiologic prespective, the reason for this difference can be justified in the interaction between anxiety caused by surgery and greater fear in women, possibly due to a lack of better understanding of religious questions in women (47,48).

In the present study, the score of the religious attitude of most research wards was higher than average. Soltani et al.'s study also showed that the spiritual experiences of the patients under study were higher than the average level, which is consistent with the results of this study (49).

The results showed that there is a positive and significant relationship between age and religious belief, which is consistent with the results of the study of Soltani et al. (49). As

People get old, they are progressing to the final stages of their spiritual and psychological development and have a clearer and more meaningful view of their lives. On the other hand, the cultural and religious context in Iran is such that older people have a broader religious-spiritual perspective.

The present study was observational and in terms of determining the causal relationship between anxiety and religious belief may not provide a strong reason for causality, but it can provide an overview to the field of interventional studies in patients' beds, especially in providing treatment for incurable diseases with a long hospital stay. This study was conducted cross-sectional, so it cannot express causal relationships between variables alone. Also, the results of the study are based on patients' reports of their condition, and this can lead to a percentage of errors. This is one of the most important limitations of this study.

## Conclusion

In the present study, there was no significant relationship between preoperative anxiety variables and religious beliefs in hospitalized patients, so it is recommended that further studies be conducted in this area.

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## Conflict of interest

There is no conflict of interest for the authors of this article.

## References

1. Foggitt PS. Anxiety in cataract surgery: pilot study. J Cataract Refract Surg. 2001 Oct; 27(10): 1651-5
2. Ghardashi F. Saleh Moghaddam A, Hassan Abadi H, Setaish Y. Study of the Relationship between Pre-operative Waiting time and Anxiety in Patients. Journal of Sabzevar School of Medical Sciences. 2004; 10(4): 76-84.
3. Apostolakis E. Quality of life after coronary bypass surgery in male patients: 1 year after follow up.,[Online],<http://www.nursing.gr/>[10Apr2008].
4. Mattew M, Benedetto C, Rosenberg R, Soufer R. Pre surgical Depression predicts medical morbidity 6 month After coronary Artery Bypass Graft surgery. Psychosomatic medicine. 2003; 65: 111-118.
5. Dessner S. A work cable solution to test review. Nurse Education 2000; 6: 12-13.
6. Ghanei R, Rezaei K, Mahmoodi R. The relationship between preoperative anxiety and post operative pain after cesarean section. The Iranian Journal of Obestetrical, Gynecology and Infertility. 2013; 15(39): 16-22.
7. Ganji T, Hosseini A.Under graduate nursing students' religious beliefs and their relationship with anxiety. Iranian Journal of Nursing. 2011; 23(64): 44-51.
8. Padmanabhan R, Hildreth AJ, Laws D. A prospective, randomised, controlled study examining binaural beat audio and pre-operative anxiety in patients undergoing general anaesthesia for day case surgery. Anaesthesia. 2005 Sep; 60(9): 874-7.
9. Zakeri Moghadam M, Ali Asgharpour M, Mehran A, Sakineh M. Effect of patient education about pain control on patient's anxiety prior to abdominal surgery. Hayat 2010; 15:13-22. [In Persian]
10. Kim WS, Byeon GJ, Song BJ, Lee HJ. Availability of preoperative anxiety scales as a predictive factor for hemodynamic changes during induction of anesthesia. Korean J Anesthesiol 2010; 58: 328-33
11. Rohy G, Rahmany H, Abdollahy E, Mahmodi G. [Effect of music on preoperative anxiety and their physiological responses of patients]. Boyye Gorgan University of Medical Science Journal. 2006; 7(1): 17-21. (Persian)
12. Barker R, Kober A, Hoerauf K, Latzke D, Adel S, Kain ZN, Wang SM. Out-of-hospital auricular acupressure in elder patients with hip fracture: a randomized double-blinded trial. Acad Emerg Med. 2006 Jan; 13(1): 19-23.
13. Phipps WJ, Monahan FD, Sands J, Marek JF, Neighbors M. Medical-surgical nursing: Health and illness perspectives. 7th ed. St. Louis: Mosby; 2003.
14. Agarwal A, Ranjan R, Dhiraaj S, Lakra A, Kumar M, Singh U. Acupressure for prevention of preoperative anxiety: a prospective, randomised, placebo controlled study. Anaesthesia. 2005 Oct; 60(10): 978-81
15. Hong JY, Oh JI. Effects of preoperative anxiety on gastric fluid acidity and volume. J Korean Med Sci. 2005 Apr; 20(2): 232-5.
16. Caumo W, Ferreira MBC. Perioperative anxiety: psychobiology and

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[ DOR: 20.1001.1.23222913.2020.9.3.7.8 ]

effects in postoperative recovery. Pain Clinic. 2003; 15(2): 87-101.
17. Rabie S, Avazeh A, Eskandari F, Dust Mohammadi T, Mazloom Zadeh S, Paryad E. A study of the anxiety and environmental and mental factors influencing the family of the patients hospitalized in tensive (ICU). Sci Res J ICU. 2010; 3: 175-80.
18. Ansari P. Association between religious attitude and mental health patient in 20-30 year old students. Roodehen islamic azad university of medical sciences; 1995. [Thesis in Persian]
19. Exline jj. Beliefs about God and forgiveness in a Baptist church sample. J Psychology and Chiristianity. 2008; 27: 131-39.
20. Tahmasebipoor N, Kamangari M. Association between religious attitude and mental health patient in shohadayeh haftom tir hospital and rasul akram complent. Tehran: Iran University of Medical Sciences; 1996. [Dissertation]
21. Koenig HG, McCullogh ME, Larson DB. Handbook of religion and health. New York: Oxford; 2001; 53-60.
22. Vaillant G, Templeton J, Ardelt M, Meyer S. The natural history of male mental health: Health and religious involvement. Soc Sci Med. 2008; 66: 221-31.
23. Karimollah M, Agha-Mohammadi M. The relationship between religious beliefs and depression in students of medical sciences. Teb va Tazkieh2003; 53: 62-65.
24. Pardini DA, Plante TG, Sherman A, Stump JE. Religious faith and spirituality in substance abuse recovery: determining the mental health benefits. Journal of substance abuse treatment. 2000; 19(4): 347-54.
25. Hayward RD, Krause N, Ironson G, Hill PC, Emmons R. Health and Well-Being Among the Non-religious: Atheists, Agnostics, and No Preference Compared with Religious Group Members. Journal of religion and health. 2016: 1-14.
26. Yonker JE, Schnabelrauch CA, DeHaan LG. The relationship between spirituality and religiosity on psychological outcomes in adolescents and emerging adults: A meta-analytic review. Journal of adolescence. 2012; 35(2): 299-314.
27. Lannert JL. Resistance and countertransference issues with spiritual and religious clients. Journal of Humanistic Psychology. 1991; 31(4): 68-76.
28. Vallurupalli MM, Lauderdale MK, Balboni MJ, Phelps AC, Block SD, Ng AK, et al. The role of spirituality and religious coping in the quality of life of patients with advanced cancer receiving palliative radiation therapy. The journal of supportive oncology. 2012; 10(2): 81.
29. Mazzotti E, Mazzuca F, Sebastiani C, Scoppola A, Marchetti P. Predictors of existential and religious well-being among cancer patients. Supportive Care in Cancer. 2011; 19(12): 1931-7.
30. Flannelly KJ, Koenig HG, Ellison CG, Galek K, Krause N: Belief in life after death and mental health: Findings from a national survey. The Journal of Nervous and Mental Disease 2006, 194(7):524-529.
31. Mohr WK: Spiritual Issues in Psychiatric Care. Perspectives in Psychiatric Care 2006, 42(3):174-183.
32. Mueller PS, Plevak DJ, Rummans TA: Religious involvement, spirituality and medicine: Implications for clinical practice. Mayo Clinic Proceedings 2001, 76(12):1225-1235.
33. Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press.
34. Ebrahimi, Amrollah. et al. Factor Structure, Reliability And Validity of Religious Attitude Scale. Journal of Mental Health. 1387; 10(38): 107- 116. [In Persian]
35. Geravand, Hushang. et al. A Comparative Study of Religious Orientation (Internal And External). Journal of Psychology and religion. Spring 1391; 1: 103- 79. [In Persian]
36. Sadeghi, Mohammadreza. et al. The Religious Attitude And Mental Health in Students of Mazandaran University of Medical Sciences. Journal of Mazandaran University of

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[ DOR: 20.1001.1.23222913.2020.9.3.7.8 ]

Medical Sciences. 1389; (75) 20: 71-75. [In Persian]
37. Kalkhoran MA, Karimollahi M. Religiousness and preoperative anxiety: a correlational study. Annals of general psychiatry. 2007; 6: 17.
38. Koenig HG, Hays JC, George LK, Blazer DG, Larson DB, Landerman LR. Modeling the cross-sectional relationships between religion, physical health, social support, and depressive symptoms. The American journal of geriatric psychiatry: official journal of the American Association for Geriatric Psychiatry. 1997; 5(2): 131-44.
39. Hosseini MA, Tajbakhsh F, Rahgozar M. The Effect of Religious-Spiritual Care on Stress Post Surgery Coronary Artery Bypass Graft Patients. Iranian Journal of Rehabilitation Research in Nursing. 2016; 2(4): 58-64.[In Persian]
40. Büssing A, Koenig HG. Spiritual needs of patients with chronic diseases. Religions. 2010;1(1):18-27. PMID: 24788614
41. Aghajani M, Afazel MR, Morasai F. [The Effect of Spirituality Counseling on Anxiety and Depression in Hemodialysis Patients]. Evid Base Care J. 2012;3(9):20-8.
42. Krause N. Religious involvement, humility, and self-rated health. Social indicators research. 2010; 98(1): 23-39.
43-Pelzang R. Religious Practice of the Patients and Families during Illness and Hospitalization in Bhutan, Jo. Citation Rinchen Pelzang (2010) Religious Practice of the Patients and Families during Illness and Hospitalization in Bhutan, Journal of Bhutan Studies. 2010; 22: 77-97.
44. Musick MA, Koenig HG, Hays JC, Cohen HJ. Religious activity and depression among community-dwelling elderly persons with cancer: the moderating effect of race. The journals of gerontology Series B, Psychological sciences and social sciences. 1998; 53(4): S218-27.
45. Mazzotti E, Mazzuca F, Sebastiani C, Scoppola A, Marchetti P. Predictors of existential and religious well-being among cancer patients. Supportive Care in Cancer. 2011; 19(12): 1931-7.
46. Aghababaei N, Sohrabi F, Eskandari H, Borjali A, Farrokhi N, Chen ZJ. Predicting subjective well-being by religious and scientific attitudes with hope, purpose in life, and death anxiety as mediators. Personality and Individual Differences. 2016; 90: 93-8.
47. Contrada RJ, Goyal TM, Cather C, Rafalson L, Idler EL, Krause TJ. Psychosocial factors in outcomes of heart surgery: the impact of religious involvement and depressive symptoms. Health psychology: official journal of the Division of Health Psychology, American Psychological Association. 2004; 23(3): 227-38.
48. Kalkhoran MA, Karimollahi M. Religiousness and preoperative anxiety: a correlational study. Annals of general psychiatry. 2007; 6: 17.
49. Soltani F¬, hosseini F¬, Arab M. Relationship of daily spiritual experiences with life expectancy and death anxiety in patients undergoing coronary artery bypass surgery. Cardiovascular Nursing Journal. 2016; 5(2): 6-13.

## Tables and Charts:

**Table 1**: Descriptive statistics of demographic variables

| Variable | Categories | Number | Frequency |
|---|---|---|---|
| Gender | Man | 109 | 57.7 |
| | Female | 80 | 42.3 |
| marital status | Single | 80 | 42.3 |

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| | | | |
|---|---|---|---|
| | Married | 109 | 57.7 |
| Level of Education | High school | 90 | 49.2 |
| | Diploma | 40 | 21.9 |
| | Bachelor | 47 | 25.7 |
| | Master's degree and higher | 6 | 3.3 |
| Job Type | Freelance | 65 | 35.3 |
| | Farmer | 10 | 5.4 |
| | Employee | 21 | 11.4 |
| | Unemployed | 28 | 15.2 |
| | housewife | 43 | 23.4 |
| | manual worker | 17 | 9.2 |
| Ages | 20 years and less | 27 | 14.5 |
| | 21 to 30 | 68 | 36.6 |
| | 31 to 40 | 39 | 21 |
| | 41 to 50 | 25 | 13.4 |
| | 51 to 60 | 14 | 7.5 |
| | 61 and above | 13 | 7 |

**Table 2**. Mean and standard deviation of patients' anxiety and Religious beliefs

| | | **state anxiety** | | **Trait anxiety** | | **Religious beliefs** | |
|---|---|---|---|---|---|---|---|
| | | **mean** | **Standard deviation** | **mean** | **Standard deviation** | **mean** | **Standard deviation** |
| Gender | male | 44.73 | 7.29 | 44.99 | 7.79 | 59.14 | 8.80 |
| | Female | 45.51 | 8.30 | 43.95 | 8.77 | 60.58 | 8.08 |
| marital status | Single | 43.18 | 7.29 | 42.94 | 7.64 | 58.05 | 9.02 |
| | Married | *46.34 | 7.88 | *45.64 | 8.41 | *61.18 | 7.78 |
| Level of Education | High school | 45.46 | 7/64 | 44.92 | 8.17 | 60.14 | 8.69 |
| | Diploma | 45.78 | 8.86 | 45.57 | 8.66 | 58.02 | 9.40 |
| | Bachelor | 43.13 | 6.66 | 42.24 | 7.02 | 60.88 | 7.42 |
| | Master's degree and higher | 43.06 | 7.80 | 43.83 | 7.90 | 56.12 | 6.96 |
| Job Type | Freelance | 45.81 | 8.28 | 45.53 | 8.62 | 59.35 | 9.73 |
| | farmer | 43.36 | 7.80 | 43.90 | 6.75 | 57.51 | 5.76 |
| | Employee | 43.20 | 5.31 | 42.76 | 4.70 | 59.84 | 7.06 |
| | Unemployed | 41.96 | 7.26 | 42.21 | 6.95 | 57.65 | 9.57 |
| | housewife | 46.85 | 7.57 | 44.67 | 9.22 | 62.21 | 6.94 |
| | manual worker | 45.73 | 7.36 | 46.80 | 8.64 | 59.25 | 8.13 |
| Ages | 20 years and less | 43.15 | 6.85 | 42.13 | 8.17 | 58.75 | 9.90 |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 21 to 30 | 44.20 | 7.25 | 43.91 | 7.23 | 58.78 | 8.02 |
| | 31 to 40 | 44.60 | 8.50 | 44.51 | 8.58 | 59.84 | 9.10 |
| | 41 to 50 | 48.12 | 7.36 | 46.53 | 7.90 | 59.95 | 7.95 |
| | 51 to 60 | *50.05 | 6.36 | 49.52 | 10.23 | 60.75 | 7.08 |
| | 61 and above | 44.64 | 8.50 | 43.82 | 7.09 | 64.73 | 8.26 |

* Significant statistical result with p value <0.05.

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