

Original Article

Spirituality and General Health among Hospital Personnel of Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Nahid Mazloom Bafrooi M.Sc.¹, Ziba Loukzadeh M.D.^{2*}, Sahar Pak M.Sc.³, Zeinab Zangui B.Sc.⁴

1. Master of Psychology, Emam Jafare Sadegh Hospital of Meybod, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
2. Assistant professor and member of Industrial Diseases Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
3. Master of Clinical Psychology, Ahvaz Shahid Chamran University, Ahvaz, Iran
4. Nursing in Student

Accepted: 4/16/2013

Received: 5/28/2013

Abstract

Introduction: Given the importance of spirituality and health as well as activities done by hospital personnel, the aim of present study is to evaluate the relationship between spirituality and general health and to assess some possible affecting factors such as demographic and work factors on these variables in hospital staff.

Materials and Methods: This cross-sectional study was done on hospital employees of Yazd Shahid Sadoughi University of Medical Sciences. First, 101 hospital staff were selected randomly by using multistage sampling. General Health, spiritual experience and demographic questionnaires as reported by the subjects themselves, were completed. Cut-off point of 23 was considered for general health, So that those, whose score were 23 or less, were considered as healthy individuals. Collected data were entered software SPSS (Ver.19) and then analyzed using Pearson correlation, t-test and ANOVA tests.

Results: Mean and standard deviation of spirituality was 251.50 and 42.30 and for general health was 46.79 and 10.82, respectively. Spirituality and general health had a significant negative correlation (p-value=0.03). Spirituality was significantly higher in subjects who were single (p-value=0.04). Men (P-Value=0.01) and those older than 33 years (P-Value=0.001), had significantly better general health. General health significantly associated with service location (P-Value \leq 0.0001).

Conclusion: The study finding shows, increase in spirituality is associated with higher levels of general health. Given that the general health score in this study were higher than the cut-off 23, and physical and mental health of hospital staff is associated with their quality of service at work, so promotion of general health and spirituality in hospitals, which are responsible for public health, is essential.

Keywords: Spirituality; Health; Health Personnel; Personnel, Hospital

* **Corresponding author:** *Tel:* +983516229291, *Email:* dr.loukzadeh@gmail.com

Introduction

Today, due to advances in technology and its direct impact on the quality of human life, attention to health and its affecting factors, is of particular importance and providing public health is one of the most fundamental issues in any country ^[1]. World Health Organization, considers spiritual dimension in addition to physical, psychological, social dimensions of human ^[2] and health is not only absence of disease, but is harmony and well-being in the physical, mental, social and spiritual dimensions ^[3]. Spirituality is inner core of man who could cause calm in stressful situations and connects are humans to the superior power of the universe ^[3]. Numerous studies have shown that people who have spiritual tendencies, when dealing with stress, have better response and finally have a better health status ^[4, 5].

Mental health is the ability to maintain harmonious relationships with other people. Improving the environment and resolve conflicts around spirituality has a huge impact on the mental health, so that religious beliefs and having believed in God and a superior and absolute strength increases difficulties tolerance and thus helps to maintain physical and mental health and prevent mental illness ^[6].

Workplace mental health promotion is one of the most important aspects of the development and improvement of human resources in organizations and attention to the physical and mental health in various institutions, is really effective in raising

productivity. Employees, who work in hospitals, are the main group of health service providers, but they have to face the physical and psychological problems. Permanent confrontation with the patient, having responsibility for human health, performing clinical processes, dealing with critically ill patients, the lack of adequate equipment or defect in them, dealing with emergencies and unexpected situations, a lot of noise in the workplace and shift work are stress full factors in the health profession that reduce the quality of patient care, reduce correct and time decisions, skills, ability and commitment of staff the flow of stressors that can talk to medical - health, reduce the quality of patient care, reduce sound and timely decisions, skills, ability of the staff and cause job dissatisfaction, feelings of inadequacy, depression, antipathy, exhaustion from work, absenteeism, delays at work and thus threaten the lives of patients and the quality of provided services ^[7].

Research in the field of relationship between spirituality and health in the general population, patients with physical problems, mental patients, and cancer patients; have concluded that the religious beliefs have positive effects in the prevention and improvement of mental and physical illnesses and coping with physical illness ^[8]. Considering that there are very limited studies ^[3,6] that has assessed the association of spirituality and general health in hospital personnel in other cities with other assessment tools such as questionnaires including

components of religion / spirituality, spiritual intelligence and also most previous studies have been conducted on patients or students and on the other hand, there are evidences that show, levels of spiritual well-being, may change over time and in different situations^[9], so performing more research on the populations at different ages and in different societies and at different times is essential. Due to the importance of spirituality and its impact on mental health promotion and the significance of activities of health care workers in hospitals, the need to do more research, can be felt.

Materials and Methods

Study population of this cross-sectional survey included all employees in the Hospitals of Shahid Sadoughi University of medical sciences. The sample consisted of 101 individuals who were selected multi-stage random sampling. First three hospitals (Afshar, Emam Jafare Sadegh and Ziaei) were selected and then study population were selected randomly from three offices, therapy and service sections, according to the volume of each section.

The tools used in this study were three questionnaires, Including demographic questionnaire, about age, sex, marital status, work duration, work shift (only morning or rotating shift: morning, evening and night), educational level, service location (office, medical and service), Spiritual Experience and General Health Questionnaires. Spiritual Experience Questionnaire was designed in Iran

by Ghoobaribonab in 1384. This questionnaire consists of 75 items, including 6 factors about meaning in life (19 questions), effect of the relationship with God (15 questions), spiritual activities (10 questions), mystical experiences (15 questions), negative experiences (11 questions), religious and social activities (5 questions). The questions were evaluated using a Likert system. Coefficient reliability for this test is reported 90%^[10]. General Health Questionnaire was developed by Gold Leaf and Hiller (1979). The questionnaire has 28 questions with multiple choice answers (GHQ-28). GHQ-28 is composed of four scales including somatic symptoms (questions 1 to 7), anxiety and insomnia (questions 8 to 14), social dysfunction (questions 15 to 21) and depressive symptoms (questions 22 to 28). Likert scoring system used in this questionnaire and scores range varies from 0 to 84 for each person. Higher score on this test indicates the presence of more severe general health problem. In a study on the validity of the GHQ-28 that has been done in Iran, the cut-off point, ≤ 23 have acquired, so that people who have acquired a score equal or less than 23 can be considered as healthy subjects^[11].

Questionnaires were delivered to the subjects and the explanations were provided and then were collected in the next visit. Entry into the study was voluntary and we assured study population that their information will remain confidential. Collected data were entered into the SPSS (Ver. 19). In order to calculate the correlation between general

health and spirituality, the Pearson Correlation Test was used and for evaluation of the relationship between two quantitative variables and association between the general health and Spirituality with place of work, t-test and ANOVA were used respectively.

Results

In this study, women were slightly more than men, but most of the hospital staff, were married and were older than 33 years and have less than 15 years of work experience. Mean spirituality and general health of the study population were 251.50 ± 42.30 and 46.79 ± 10.82 respectively. Average general health of the study population was 46.79 ± 10.82 , which is more than cut-off point 23.

Mean score of spirituality was significantly higher in subjects who were single (p-value=0.04). Men (P-Value = 0.01) and those older than 33 years (P-Value = 0.001), had significantly better general health. The survey also found that the mean score of general health significantly associated with service location (P-Value \leq 0.0001). (Table 1) Between the mean of spirituality and general health scores a significant negative correlation was found (p-value=0.03) (Table2).

Between spirituality and general health subscales (somatic symptoms, anxiety and insomnia, social dysfunction and depressive symptoms) were also a significant relationship in the negative direction (Table 2).

Table 1. The relationship between spirituality and general health, demographic characteristics on hospital staff

		N (%)	Spirituality Mean \pm SD	general health mean \pm SD
sex	Female	52 (51.5)	245.45 \pm 29.18	49.70 \pm 12.10*
	Male	49 (48.5)	259.76 \pm 53.12	44.29 \pm 8.65*
Marital status	Single	25 (24.8)	236.48 \pm 32.47*	50.25 \pm 12.26
	Married	76 (75.2)	256.78 \pm 44.52*	46.20 \pm 10.36
Age (year)	\leq 33	64 (63.4)	254.81 \pm 43.89	49.74 \pm 12.13*
	\geq 33	37 (36.6)	248.47 \pm 42.61	42.42 \pm 6.33*
Service location	Office	47 (46.5)	253.42 \pm 34.29	51.72 \pm 12.77**
	Medical service	32 (31.7)	252.85 \pm 60.10	44.33 \pm 6.57**
Work duration (year)	\leq 15	58 (57.4)	254.53 \pm 49.82	47.03 \pm 10.60
	\geq 15	43 (42.6)	249.33 \pm 30.75	47.15 \pm 11.36
Educational level	Associate degree and lower	38 (37.6)	266.21 \pm 58.34	44.88 \pm 11.51
	Bachelors or higher	63 (62.4)	243.99 \pm 30.19	48.54 \pm 10.63
Work shift	Morning shift	59 (58.4)	252.65 \pm 45.04	47.56 \pm 12.37
	Rotating shift	42 (41.6)	253.73 \pm 40.55	45.57 \pm 7.79

* P-value \leq 0.05 (t-test), ** P-value \leq 0.05 (ANOVA)

Table 2. Correlation matrix among spirituality and general health and its subscales in hospital staff

variable	Mean ± SD	1	2	3	4	5	6
spirituality	251.50 ± 42.30	-					
general health	46.79 ± 10.82	-0.56* [∞]	-				
somatic symptoms	11.86 ± 2.41	-0.32*	-0.76*	-			
anxiety and insomnia	12.68 ± 4.34	-0.45*	-0.81*	-0.26*	-		
social dysfunction	10.97 ± 5.13	-0.39*	-0.68*	-0.33*	-0.61*	-	
depressive symptoms	11.28 ± 4.98	-0.51*	-0.42*	-0.12*	-0.37*	-0.43*	-

* P-value ≤ 0.05, [∞] P-value = 0.03

Discussion

This study examined the relationship between general health and spirituality among hospital staff. In this study, a significant inverse relationship was observed between general health and spirituality among hospital staff, So that with increase in spirituality mean score, the score of general health would decrease. Given that in the general Health evaluation, the highest score indicating the lowest level of health, so we can conclude that the increase in spirituality ^[11], people had higher levels of general health.

This findings are consistent with previous studies ^[12, 13], which confirms a significant association between general health and spirituality. In a study conducted on university students, correlation of the spiritual which consists of two components, religious welfare (level of experience a satisfactory relationship with God), and well-being (sense of purpose and life satisfaction) with a general health and its component was significant ^[14]. In several studies a significant relationship between spiritual intelligence and general health in different populations, including university students and nurses have been seen ^[3, 15]. In a

study the people who had a stronger religious beliefs, had better general health ^[16] and in another study, religion is as a protective factor against mental disorders so that groups that were more religious, had lower anxiety and depression scores ^[17]. Spirituality is described as a phenomenon that its existence in any individual or organization is undeniable, but the frequency and intensity of spirituality and its impact on human health is more important. People with spiritual experience and religious beliefs, can deal with the stress and emotional problems and coping strategies among them is stronger, spirituality creates the power that affect on their physical state, feelings, thoughts and relationships ^[18]. Therefore spirituality and religion are as a buffer against individuals' problems and complaints and it acts as a bumper and reduces mental disorders and promotes mental health ^[13, 14].

General health scores in our study were higher than the cut-off 23, so those who acquired scores of 23 or less consider as normal and those whose score were equal or more than 24 are suspected to have the disorder. Given that the general health of hospital personnel is associated to quality of

their performance at work, existence of healthy workplace and normal mental health in hospitals, which are responsible for public health.

The findings of this survey also suggest that there was a significant relationship between the general health with gender and age. In studies conducted on different populations, the relationship between sex and general health was not significant^[3, 15, 18, 19]; however, in some studies, general health score of women was lower than men. The burden of housekeeping, limitations in social activities, biological factors such as hormonal change and environmental stresses are the main factors that may reduce the general health of the women^[16, 20]. In the present study similar to study of Noorbala in 2001^[21], with increasing age, the levels of general health also increased, but different results have been obtained in other studies, so that in some of them, reverse relationship^[20] and in others no significant association was found between age and general health^[3,16].

Results showed that there is a significant relationship between general health and service location; the general health score in service personnel, medical and administrative personnel reduce, respectively. There are limited studies on type of occupation and general health; in a study that was done to assess association between occupational order and general health among women, the general health score of female managers was the lowest and medium in service women while, it was the most in experts^[22].

In some studies, similar to our study, the spirituality of married people was more than single; the reason may be due to a change of view after marriage, so that Motahhari stated a family means interesting in the fate of others and it is the first step in human egotism and self-love to loving others^[23]. Different results has been seen in other studies; in a study done among nurses, spiritual intelligence was not associated with marital status^[3] and in other study, meaning in life was not related with demographic variables such as education level, marital status, and authors explained that the reason of not affecting demographic variables on meaning in life, is a force that exists in all humans and are not affected by these variables^[2]. Cross sectional nature of this study, it is one of the limitations and therefore cannot obtain the cause and effect relationship from these findings. Also we did not assess the effect of socioeconomic status, number of children and religious backgrounds.

With regard to physical and mental health of hospital staff is associated with their quality of service at work, therefore promotion of mental health and spirituality in the workplace in all organizations, including hospitals, which are responsible for public health is essential^[7]. In this context, recognition of social and psychological problems of hospital personnel and more attention of the Ministry of Health on the psychological team's programs, training courses and consulting services in hospitals and promotion of spirituality is recommended. It is suggested that similar studies in other public hospitals and private hospitals be done

so, the various factors affecting on general health in this group of employees will be detected. It is also necessary to consider the role of spirituality in improving the general and mental health. It is recommended that

researchers in psychology and related fields evaluate how psychological variables such as personality traits, self-esteem, optimism, attribution styles, and hardiness affect on the spiritual and mental health.

References

1. Boero ME, Caviglia ML, Monteverdi R, et al. Spirituality of health workers: a descriptive study. *Int J Nurs Stud.* 2005; 42(8):915-21.
2. Shoostari LT, Pourshafei H. The relation between meaning in life and general health among staff of Birjand University (2009-2010). *Journal of Birjand University of Medical Sciences.* 2011; 18(1):55-61. [Persian]
3. Akbarizadeh F, Bagheri F, Hatami HR, et al. Relationship between nurses' spiritual intelligence with hardiness and general health. *Behbood Journal.* 2012; 15(6): 466-72. [Persian]
4. Mitchell DL, Bennett MJ, Manfrin-Ledet L. Spiritual development of nursing students: developing competence to provide spiritual care to patients at the end of life. *J Nurs Educ.* 2006; 45(9):365-70.
5. Walt V, Alletta E. A descriptive and exploratory study towards a spiritual intelligent transitional Model of organizational communication University of South Africa. *J Nurs Res.* 2006; 35(2):273-80.
6. Ghahremani N, Nadi MA. Relationship between Religious / Spiritual Components, Mental Health and Hope for the Future in Hospital Staff of Shiraz Public Hospitals. *Iran Journal of Nursing (IJN).* 2012; 25(79):1-11. [Persian]
7. Enjezab B, Farnia F. Job stress with behavior and psychic responses of lucina in Yazd's Hospitals. *Research- Science Journal of Yazd University.* 2003; 3:32-8. [Persian]
8. Rippentrop AE. A Review of the Role of Religion and Spirituality in Chronic Pain Populations. *Rehabil Psychol.* 2005; 50(3):278-84.
9. Keefe FJ, Affleck G, Lefebvre J, et al. Living with rheumatoid arthritis: the role of daily spirituality and daily religious and spiritual coping. *J Pain.* 2001; 2(2):101-10.
10. Ghoobaribonab B, Salimi M, Selyani L, et al. Spiritual Intelligence. *Andishe Novine Dini.* 2007; 3(10):125-47. [Persian]
11. Noorbala AA, Bagheri yazdi SA, Mohammad K. The validation of general health questionnaire- 28 as a psychiatric screening tool. *Hakim medical journal.* 2008; 11(4):47-53. [Persian]
12. Carmody J, Reed G, Kristeller J, et al. spirituality and health related symptoms. *Journal of psychosomatic research.* (2008); 64:393- 403.
13. Ghobary BanabB, Habibi H. Relation between mental health and spirituality in Tehran University Student. *Journal of Social and Behavioral Sciences.* 2010; 5:887-91.
14. Safee Rad I, Karimi L, Shomoossi N, et al. The relationship between spiritual well-being and mental health of university students. *Journal of Sabzevar University of Medical Sciences.* 2011; 17(4) :274-280. [Persian]
15. Ebrahimi A, Keykhosrovani M, Dehghani M, et al. Investigating the Relationship between Resiliency, Spiritual Intelligence and Mental Health of a group of undergraduate Students. *Life Science Journal.* 2012; 9(1):67-70.

16. Tavabi Amir A, Iran-Pour E. The association between religious beliefs and mental health amongst medical students. *J Pak Med Assoc.* 2011; 61(2):135-8.
17. Vasegh S, Mohammadi MR. Religiosity, anxiety, and depression among a sample of Iranian medical students. *Int J Psychiatry Med.* 2007; 37(2):213-27.
18. Jafaria E, Dehshirib Gh, Eskandarib H, et al. Spiritual well-being and mental health in university students. *Procedia Social and Behavioral Sciences.* 2010; 5:1477-81.
19. Ghoraei B, Ahmadvand A, Akbari Dahaghi A, et al. The relationship between mental health and inner and outer religion in Kashan. *Journal of Psychology.* 2009; 3(10):65-88. [Persian]
20. Noorbala AA, Bagheri Yazdi SA, Yasamy MT, et al. Mental health survey of the adult population in Iran. *Br J Psychiatry.* 2004; 184:70-3.
21. Noorbala AA, Mohammad K, Yasami MT, et al. A view of mental health in Iran. Tehran: Iranian Red Crescent Society Publication; 2001.
22. Hadadi M, Kaldi A, Sajadi H, et al. Relationship between job classification and mental health in employed women. *Social Welfare Quarterly* 2011; 11(40):107-27.
23. Raghieb M, Ahmadi SJ, Siadat SA. Spiritual intelligence of students of Isfahan University and its relationship with demographic characteristics. *Journal of educational psychology students* 2008; 5(8): 39-56. [Persian]