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The Relationship of Spirituality Development and Addiction Potential Among Students of Qom University of Medical Sciences

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Abstract Drug abuse is one of the problems of the world which due to the specific characteristics of individual, social and personality causes irreparable difficult. The aim of this study was the investigation of the relationship between the spirituality development and addiction potential among students of Qom University of Medical Sciences, Iran. This cross-sectional study was performed in Qom University of Medical Sciences, Iran, from February 2015 to July 2016 which accommodates 250 subjects that were selected through systematic random sampling. Data collection tools were demographic, spiritual attitude and addiction potential questionnaire. Data were analyzed, using frequency, percent, Pearson correlation and linear regression analysis in SPSS 20 software. The mean age was 22.26 ± 4.8; 189 (75.6%) of them were women, 207 (82.8%) were single, 239 (95.6%) of them were Iranian, and the others were non-Iranian. The Pearson correlation coefficient between spiritual attitude and addiction potential ($R = -0.25$) at the level of $p < 0.001$ and between spiritual ability and addiction ($R = -0.16$) at the level of $p < 0/009$ was reversed and meaningful, and between spiritual attitude and spiritual ability ($R = 0/76$) is directly and statistically significant at the level of $p < 0/001$. Increasing spiritual attitude and spiritual ability is associated with decreasing addiction potential among students. Information this article can be use to planning spirituality development among students that can be a kind of obstacle against addiction during stressful events.

Keywords Addiction · Spirituality development · Spiritual attitude · Spiritual ability · Students

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Introduction

"Allah says in the holy Book of the Qur'an: Do not kill yourself with your". Drug abuse is one of the problems of the international community, which causes irreparable problems with regard to the specific characteristics of the individual, social and personality of the people (Rahimian Boogar et al. 2014). According to some estimates, there are 200 million addicts around the world (Des Jarlais and Semaan 2008). The results of Iran show at least 8.3% of people who are over 12 years have had drug abuse in the past month and 0.3–0.9% of them are students (Rezahosseini et al. 2014). Research results of University of Tehran in 2008 showed that the prevalence of using hookah was 34%, 24% cigarettes, 17% alcohol, 2.3% opium, 2.2% cannabis and 0.7% ecstasy (Taremian et al. 2008). Based on reports, the number of addicts is doubled every 12 years and increases by 8% each year for their population; this is an alarm and a serious threat to the health of the individual and the community in the future (Motezaker et al. 2010) Students are among drug abuse clients. Students' mental health and well-being are one of the worries and concerns of decision-makers and authorities; however, the number of studies which carried out in this area is little. Universities, regard to the behavior of drug abuse and the prevalence of it among students and by the fact that a significant amount of drug abuse begins at post-university entry, should be considered as a high-risk group (Asghari et al. 2014). Unfortunately, smoking is common among medical students. In addition to the nature of the discipline, the campus environment and living in the dormitory, it is believed that the health care personnel put them at risk for physical and mental health problems and they are prone to use and dependence on different drugs because of easy access and prescribing many drugs such as morphine, pethidine, analgesics and benzodiazepines (Mansouri and Rafi-Bazrafshan 2012). Thus, on one hand, ignoring the rapid expansion of drug abuse among students population and the presence of synthetic laboratory drugs such as crystal and ecstasy reveals a high risk of exposure; on the other hand, there is a lack of research, lack of basic and reliable statistical information, unknown motivation of drug abuse among students, methodology patterns of consumption, prevalence of drug abuse, relationship of it with student problems such as academic impoliteness, academic failure, physical and mental illnesses, suicide, uncontrolled driving, demolition of public property, aggressive behaviors, anonymity and high-risk sexual behaviors that reveals the need for planning and developing preventive intervention strategies at universities (Sarrami et al. 2013) Attitude is a relatively constant approach to thinking, feeling and behavior toward individuals, groups and social issues, or somewhat wider, which is any incident in the environment. Attitudes determine behaviors and affect social beliefs; changing the attitudes of individuals can change their behavior (Torkan and Kajbaf 2008). Spirituality is one of the factors that can affect one's attitudes in life. The results show at least 90% of the world's population is somewhat entangled with religious and spiritual beliefs; both of them play a role in many aspects of life, especially mental health (Moreira-Almeida et al. 2014). Defining multi-dimensional concepts like religion and spirituality is not easy. The definition of spirituality is a personal and unique characteristic that interacts with one's world and others that may or may not be related to religion, while religion is the representation of spirituality in the context of faith (Gonçalves et al. 2015). Spirituality is an essential part of human, as well as health care (Puchalski et al. 2014). Some believe that religion is essential but inadequate spirituality, so that spiritual men are deeply religious (Kidwai et al. 2014). It has been well specified that religion and spirituality play an important role in creating adaptation strategies among those who are facing difficult situations (Schoenthaler et al. 2015). The influence of religion and spirituality on physical and mental health, especially

patients, has been well specified (Jim et al. 2015). The study of Giordano et al. (2015) showed that religion and dimensions of spirituality are protective factors against alcohol and marijuana (Giordano et al. 2015). The study of Zargar et al. (2008) showed that there is a negative relation between religious attitude and addiction potential (Zargar et al. 2008). But the samples in this study were the employees of a large industrial company, that may their attitude differ from the younger generation of the community (students). The study of Karimi (2015) showed that young people who have religious beliefs, awareness, self-esteem, positive thinking and more hatred toward drug have a greater resilience to addiction (Karimi et al. 2015). Although this study also was a qualitative study, interviews were conducted only on male and women were discarded due to the low prevalence of addiction. Using drugs among young people is increasing every day, and in order to control this, it is necessary to take new approaches of prevention and treatment. Due to the fact that Iran is an Islamic and religious country and the control source is related to spirituality, it is necessary to investigate the relationship between spirituality, addiction potential and the causes of their tendencies in order to take preventive programs in this regard. So, the purpose of this study was the investigation of the relationship between spirituality development and addiction potential among students of Qom University of Medical Sciences. Hoping that the outcome of this study would be the basis for further planning by managers to save the student and young people from the addiction trap.

Methods

A cross-sectional study was performed in Qom University of Medical Sciences, Iran, from February 2015 to July 2016 which accommodates 250 subjects who were selected through systematic random sampling. In order to the sampling, a list of all students of Qom University of Medical Sciences (1600 people) was prepared, then the sampling interval was calculated by the formula 7 and then between 1 and 7, one number was randomly selected, and then the units or subjects were selected with a distance of 7 from the above-mentioned number and from the general list of students. Inclusion criteria included the lack of history of known psychiatric disorders, which were based on individual statements and available documents and employment at the time of questionnaire completion. Exclusion criteria were withdrawal or non-interest in participation or imperfect completion of questionnaire. In this case, the sample was excluded from the study and another was replaced.

Data collection tool was a demographic questionnaire including age, gender, marital status, ethnicity, nationality, religion, status of residence, economic status, field and grade, mean, employment status, history of participation in religious meetings, spiritual attitude and ability questionnaire and addiction potential questionnaire. Spiritual attitude and ability questionnaire which evaluates spirituality development consists of 43 items and 2 subscales of spiritual attitude (24 items) and spiritual ability (19 items), which is used to measure the level of spirituality and the growth of it. The score of questionnaire was 5 Likert options, which were "totally disagree," "disagree," "agree somewhat," "agree," "totally agree" with 0, 1, 2, 3 and 4 points, respectively. Items 5, 10, 15, 20 and 25 are scored in reverse order. Scores which were obtained from each questionnaire ranged from 0 to 57 for poor spiritual attitude, between 57 and 86 were moderate, and higher than 86 were strong. According to Shahidifar and Farajnia study in 2012, the reliability of the questionnaire was tested on 40 subjects at a time interval of 5 weeks (35 days); the

correlation coefficient was 0.61. Also, the internal consistency of the questionnaire was calculated by Cronbach's alpha, and obtained coefficient of whole test was calculated to be 0.91. Internal consistency of the questions of each component also showed that obtained components have a high internal consistency (Shahidi and Farajnia 2012). Addiction potential scale was made by Weed et al. (1992); the questionnaire which is used in this study was the Iranian addiction potential scale which was built according to the psychological conditions of the Iranian society by Zargar et al. (2008). The questionnaire consists of two parts: 36 articles and 5 articles of polygraph test (questions 12, 13, 15, 21 and 33). Scoring of each question on a continuum was from 0 (totally disagree) to 3 (totally agree); this method of scoring in questions 6, 12, 15 and 21 will be reversed. In order to obtain the total score of the questionnaire, the total points for each question (except polygraph test scale) have to be summed up. This score will range from 0 to 108. Higher scores represent the potential of respondent for addiction, and vice versa (Zargar et al. 2008). The Constructive validity of the scale was correlated with the 25 items Clinical Symptom Index (SCL-25)[1] that was calculated to be 0.45, which less than 0.001, significantly. The reliability of the scale was calculated by Cronbach's alpha method (90%) (Karimi et al. 2015). In order to implement, after approval of the plan in the research deputy and obtaining necessary permissions and explaining the objectives of the plan for the research samples, written informed consent was obtained from them. After the random sampling, the spiritual attitude and addiction potential questionnaires were completed by students. Data were analyzed by SPSS 20 by means of central dispersion and indices, Pearson correlation and linear regression. Finally, if they agreed, the results of the research were presented to them.

Results

The mean age was 22.26 ± 4.8; 189(75.6%) of them were women, 207(82.8%) were single and 42(16.8%) of them were married, 239(95.6%) of them were Iranian and the others were non-Iranian. 60(24%) of them were medical students, 30 (12%) were nursing, 56(22.4%) hygiene, 23 (9.2%) of them were dentistry, laboratory, anesthesiology and operating room students. Each one them was 20(8%), 15(6%) medical emergency students and 6(2.4%) were midwifery. 213(85.2%) people were just studying and the rest were working in addition to studying. 191(76.4%) people said their economic condition is not proper. 40(16%) of them had rarely religious experience, 155(62%) average and 55(22%) of them had a lot of religious activity. According to Table 1, religious attitudes have been able to predict the addiction potential, significantly. Given the fact that the coefficients of the variable are negative predictors, it can be stated that as much as a person has a high religious attitude, the addiction potential is less.

As shown in Table 2, Pearson correlation coefficient between spiritual attitude and addiction potential ($R = -0.25$) at the level of $p < 0/001$ and between spiritual ability and addiction ($R = -0.16$) is reversed and significant at the level of $p < 0/009$ and with the increase in both variables of spiritual attitude and ability, addiction potential decreases and vice versa. Also, the Pearson correlation coefficient between spiritual attitude and spiritual ability ($R = 0.77$) is directly and statistically significant at the level of $p < 0/001$ by increasing or decreasing a variable, the next variable increases or decreases, respectively.

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[1] Symptom Checklist-25 (SCL-25).

Table 1 The regression coefficients of addiction potential based on demographic variables and religious attitudes

Variables	B	β	Meaningfulness
Fixed amount	45.123		0.001
Religious attitude	− 0.222	− 0.235	0.001
Age	− 0.48	− 0.12	0.16
Sex	− 6.15	− 0.139	0.076
Marital status	− 2.7	− 0.06	0.422
Ethnicity	1.47	0.101	0.163
Nationality	− 1.96	− 0.034	0.630
Field of study	0.023	0.003	0.975
Educational level	− 0.709	0.037	0.734
Average	− 0.358	− 0.048	0.479
Residence	− 1.5	0.07	0.326
Occupation	− 3.65	− 0.172	0.059
Economic status	− 0.78	− 0.018	0.794
Religious background	− 1.86	− 0.059	0.403

Table 2 Pearson correlation test between addiction potential, spiritual attitude and ability

Addiction potential	Addiction potential	Spiritual attitude	Spiritual ability
Addiction potential	1		
Spiritual attitude	− 0.25	1	
Spiritual ability	− 0.16	0.76	1

Discussion

In this study, the relationship between spiritual attitude and addiction potential was studied among students. The results of this study indicated that there is a significant adverse relationship between spiritual attitude and addiction potential among students. There is also a significant negative relationship between spiritual ability and addiction potential among them, so the increase in spiritual attitude and ability is associated with decreasing addiction potential. Based on Bandura theory, drug abuse is related to positive attitudes and beliefs toward the drug (Bahrami et al. 2013). Ellis (2001) believed that positive attitudes lead to repeated drug abuse among addicts. Religious and spiritual beliefs are a supportive factor and one of the most important skills in confronting drug addiction. Religious attitudes and beliefs and spiritual activities reduce psychological stress and prevent high-risk behaviors such as smoking, alcohol and drug abuse (Naghibi et al. 2015). The study of Turiano et al. (2012) confirmed the influence of religious beliefs on improving health, quality of life and increasing self-esteem (Turiano et al. 2012). The results of the study of Naghibi et al. (2015) showed the strengthening of the spiritual dimension can reduce drugs potential and the continuation of the treatment of addiction (Naghibi et al. 2015). Similarly, according to study of Abu Raiya et al. (2008), religion creates a sense of well-being (Abu Raiya et al. 2008). Gomes et al. (2013) also achieved similar results on the impact of religion as a powerful protective factor among Brazilian students (Gomes et al. 2013). In general,

according to the results of this study, it can be said that planning for the development of spirituality among students can be an obstacle to going to addiction when dealing with stressful events. In fact, spirituality and religion are seen as a shield against individuals' problems; they act as a shock wave which reduces mental disorders and improves the mental health. Abdolahzadeh (2011) noted that spirituality leads to self-esteem and self-confidence, increases the mood and feeling of vitality, which in turn causes a person to have open mindedness (Abdolahzadeh 2011). The results of this study predict a significant relationship between spiritual attitude and ability with addiction potential. As a result, people with high levels of spirituality can be expected to be more stable and more resistant toward addiction. The results of Amirafzali and Shirazi study (2016) showed that as much as a person has higher spiritual health, gives meaning and sense of value to himself and the world around him, and less likely to deal with the high-risk behaviors, such as drug abuse, because it affects his sense of worthiness and prevents him from achieving his goals (Amirafzali and Shirazi 2016). Addiction is a kind of soul disease and causes the addict to leave his or her community (DiReda and Gonsalvez 2016). So, planning to promote the spiritual attitude among students is suggested in the form of attractive cultural classes and workshop. Addiction of youth, especially students, as the capital of the country has a huge price for the community, universities must pay particular attention to this issue; by strengthening the spirituality among the students, they will provide them with a source of growth and productivity in order to benefit from healthy life. The accuracy and honesty of individuals in responding to questionnaires is always one of the limitations of research. In this research, many efforts were made to ensure that respondents are fully accountable and honestly persuaded. However, this issue is considered as one of the limitations of this research. This survey has been conducted in the population of students at the University of Medical Sciences of Qom; this generalization restricts the findings to non-academic young people of other cities. It is suggested a comparative study be conducted among students of universities of medical sciences and the Ministry of Science in this regard; finally their attitudes and tendency of them to addiction will be compared.

Conclusion

According to the results, increasing the spiritual attitude and ability will decrease addiction potential among students, and it is necessary to carry out other investigations and measurements which increase these two components among people. Also, it is necessary to search for bases that reduce spirituality and tendency of more young people to addiction.

Compliance with Ethical Standards

Conflict of interest The authors have no conflict of interest.

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