



Effect of Spiritual Intelligence Training on Perceived Stress in a Psychiatric Nurse

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ABSTRACT

Objectives: Stress is one of the major factors in reducing the health of employees and creating physical and mental symptoms of their employees. The purpose of this study was to determine the impact of teaching spiritual intelligence on nurses' perceived stress. **Method:** Using double-blind, parallel-group, randomized controlled trial. Total 60 nurses were recruited by the random sampling technique. The Cohen's perceive scale was used to measure stress perceived. The nurses in the intervention group did spiritual intelligence training for 7-weeks. The statistical analysis was done by using SPSS version 19. **Results:** The nurses were mostly men and married. The mean score of perceived stress in the experimental group was 34.4 ± 6.7 before the intervention to 38.1 ± 3.4 after intervention and 41.5 ± 9.4 at the follow-up phase of the first month, the next month it increased, while in the control group, the mean perceived stress score decreased significantly one month later. **Conclusion:** Spiritual intelligence training is an effective method to decrease stress, it is proposed for the reduction of stress and as a consequence of improving the quality of perceived nursing care.

Keywords: Spiritual intelligence, Training, Nurse, Perceived stress

INTRODUCTION

Job stress is one of the important issues studied in organizational behavior and is one of the most important occupational risks in the modern age [1]. Lazarus and Folkman defined stress as a reaction to an environment that, in the person's own words, poses a threat to his abilities and resources and is hazardous to his health [2]. Although stress exists in all occupations, it matters more in the professions that deal with human health [1]. The members of the medical team, especially the nurses, are those who receive a high level of stress. America Occupational Safety National Association has introduced nursing at the top of 40 leading careers [3]. Studies show that 4.7% of nurses get absenteeism due to stress or disability each week, which is 80% more than other occupations [4]. According to statistics from the Iranian Nursing Organization, 75% of nurses suffer from stress, depression and various physical and mental disorders [5]. Stress and fatigue of nurses can affect the vital and critical aspects of their function, such as the ability to solve a problem, the ability to make decisions, creativity, etc., and ultimately may lead to misleading care, while the safety and well-being of the patient's severity is dependent on nurses [6]. In some sectors, such as psychiatric departments, there are more stressful factors, according to their nature. Russ writes that "most nurses' mental conflicts are due to the care of patients with mental disorientation and illnesses and patients who have nothing to do with their environment" [7]. Evidence suggests that the lack of an organized structure in mental health, inadequate vocational training, difficulty in communicating with and managing mental illness, and unpredictability of events have created a dismal environment for nursing mentors [8]. Considering the key role of nurses in caring for and meeting the

needs of patients and considering the destructive effects of stress on performance and various aspects of nurses' life, intervention is necessary to reduce the stress of nurses and its consequences. Evidence suggests that psychological therapies (including meditation, music therapy, massage, cognitive-behavioral stress management) are effective in reducing and controlling stress [9]. McFarland suggests that strategies such as coping with teamwork, extracurricular activities, humor, positive feedback from managers, and participation in stress management programs have been helpful in reducing the stress of nurses and physicians [10]. Studies showed that there is a high correlation between spiritual intelligence with the purpose of life, life satisfaction, job stress, and mental health. According to George, important characteristics of spiritual intelligence include personal confidence, effective communication, interpersonal understanding, managing changes, and moving from difficult routes. Spiritual intelligence is one of the multiple intelligences that can independently grow and develop [11]. According to Zohar and Marshall, spiritual intelligence allows a person to gain a deep insight into events of life, avoid the fear of hardships in life, confront them with patience, and find rational and humane solutions [12]. Spiritual intelligence increases flexibility and consciousness against difficulties and hardships of life [13]. In fact, spiritual intelligence is a set of activities besides gentleness and flexibility in behavior, which causes individual consciousness and deep insights towards life and its purpose so that goals could be traced beyond the material world. This process requires the individual's adaptation to the environment because of the satisfaction of others [14]. In George's opinion, the most important application of spiritual intelligence in the workplace is to create peace of mind, and mutual understanding among colleagues [11]. Since nurses deal with the health of people and their function, in addition to their health, they have a direct impact on the health of other people in society, and the negative effects of stress on job satisfaction and the quality of nursing care and the necessity of prevention of mental and behavioral stresses, the researcher decided to investigate the intervention with the aim of determining the effect of training spiritual intelligence on perceived stress of nurses.

MATERIALS AND METHODS

Design and Study Setting

This research was done experimentally by designing two groups of pretest and posttest which were performed in Ibn-Sina Psychiatric Hospital in Mashhad, from 2015 to 2016. This study was carried out according to the Helsinki Declaration on ethical principles for research involving human subjects. Written informed consent was obtained from all participants.

Sample Size

Participants were randomly divided into 2 groups (32 persons) and control (32 persons) after being homogeneous in terms of work shift and position. Finally, 60 subjects (30 in the experimental group and 30 in the control group) participated in the study by dropping the units.

Selection of Participants

The criteria for this study were: willingness to participate in the research, having a degree in nursing in a postgraduate or postgraduate degree, employment in Ibn Sina Hospital at least 6 months ago, no use of drugs that affect fluency, no more than two weeks leaves in the past month, the criteria for leaving the study were: the reluctance to continue to study, not attending more than 10% of the time of the workshop, leave or transfer to another hospital, and facing major stress (divorce) during the implementation of the research.

Intervention

Spiritual intelligence training began for the intervention group as 7 weekly sessions in 2-months using spiritual intelligence training protocol based on Zohar and Marshall, Emmons, and Sisk et al., where each session took 90 minutes [12,13,15]. The implementation of the sessions is described in Table 1.

Table 1 Spiritual intelligence components training protocol

| Session | Subject |
|-----------|---|
| Session 1 | Introducing the overall structure of the sessions, and expressed expectations and regulations |
| Session 2 | Training in the field of increasing self-consciousness (existing relationships with the transcendent, other people) |
| Session 3 | Training in the field of honesty with yourself and practice in accordance with the guidance in the field of education |

| | |
|-----------|---|
| Session 4 | Training in the field of the intuitive meaning and its role in life (a mission in life, a sense of Holiness in life) |
| Session 5 | Training in the field of addressing ethical and the importance of giving them (love, compassion, humility, kindness, forgiveness and healing, link, and creative service) |
| Session 6 | Training in the field of their capabilities, the ability to control themselves and behave kindly and empathetically regardless of the circumstances |
| Session 7 | Training in the field of the concept of flexibility and its necessity in everyday life |

Measurements

The instrument used in this study was a demographic form and Cohen's perceive scale. The demographic questionnaire consisted of 16 questions about personal and occupational characteristics that were prepared according to the objectives of the research and study, the most recent sources and related articles. The perceived stress scale included 14 statements that surveyed the thoughts and feelings of individuals over the past month. At this scale, the score of perceived stress is 0 and the maximum is 56. The higher the score obtained from the questionnaire, the less stressful is the person. Content validity of this questionnaire was verified by 10 professors of the University of Medical Sciences in Mashhad. In this study, the reliability of this questionnaire was calculated by internal consistency method, and Cronbach's alpha coefficient was 0.79.

Data Analysis

The statistical analysis was analyzed by SPSS version 19. The mean and standard deviation were used to describe the demographic data. Chi-square test was used for qualitative variables for homogeneity of two groups. Paired t-test was used to compare the control group and the experimental group and the stress test and independent t-test were also used. To compare the stress between the two groups, Chi-square, repeated measure ANOVA and independent t-test were used to examine the relationship between the variables of the intervener and the dependent variables. In the tests, it was considered that the confidence level was 95% and the significance level was $\alpha=0.05$. Data collection was done in 3 stages before the intervention, end of the second session and 1 month after the intervention, simultaneously in both the groups.

RESULTS

Participants' characteristics

Total 60 nurses completed the study. Most research units were male and married in both groups. Research units in each group had a bachelor's degree. There were no significant differences between the two groups in terms of all the underlying variables and the two groups were homogeneous (Table 2).

Table 2 Demographic characteristics in teaching spiritual intelligence and control

| Variable | | Group | | Test results |
|-----------------------------|---------|-----------------|-----------------|--------------|
| | | Intervention | Control | |
| Sex | Male | 18 | 22 | p=0.073 |
| | Female | 12 | 8 | |
| Age (years) (mean \pm SD) | | 36.3 \pm 7.65 | 38.4 \pm 6.45 | p=0.586 |
| Marital Status | Single | 6 | 3 | p=0.778 |
| | Married | 24 | 27 | |

Study Outcomes

The mean score of perceived stress in the pre-intervention stage was not statistically significant between the two groups and the two groups were homogeneous in this regard. In the intervention group, the mean score of stress increased from 34.4 ± 6.7 in the pre-intervention stage, 38.1 ± 3.4 points in the post-intervention phase and 41.5 ± 9.4 in the follow-up phase one month later. In the control group, the mean score of stress decreased from 33.4 ± 4.1 in the pre-intervention stage to 32.8 ± 9.4 in the post-intervention phase and 31.2 ± 2.3 in the follow-up stage one month later. Also, the mean of stress was measured by ANOVA with repeated measurements. There was a significant difference between the three stages in intervention stages before the intervention, after intervention and follow up one month ($p=0.000$). This test showed the difference between the pre-intervention stage and the post-intervention phase, the post-intervention phase with follow-up of one month, and the pre-intervention phase with the follow-up phase one month later, which showed an upward trend ($p=0.000$). In the control group, the results of ANOVA with repeated

measurements showed that the mean of stress in the stages before the intervention, after intervention and follow up one month later, had a significant difference ($p=0.000$). This test correlates the difference between the pre-intervention stage and the post-intervention stage ($p=0.000$), the post-intervention phase with follow-up of one month ($p=0.006$), and the pre-intervention phase with the follow-up the following month, it showed a downward trend ($p=0.000$).

Table 3 Comparison of the mean score of nurses' perceived stress in the two groups before the intervention, after the intervention, and at follow-up 1-month later

| Levels | Group | | Independent T-test |
|----------------------------------|----------------|----------------|--------------------|
| | Intervention | Control | |
| | mean \pm SD | mean \pm SD | |
| Before intervention | 34.4 \pm 6.7 | 33.4 \pm 4.1 | $p=0.785$ |
| After the intervention | 38.1 \pm 3.4 | 32.8 \pm 9.4 | $p=0.002$ |
| One month after the intervention | 41.5 \pm 9.4 | 31.2 \pm 2.3 | $p=0.000$ |
| Repeated Measured | $p=0.000$ | $p=0.000$ | - |

DISCUSSION

The findings of this study showed that the mean of perceived stress score in the intervention group significantly increased in the post-intervention phase. In other words, the stress level of the test group has decreased during the intervention. This shows the effect of spiritual intelligence training on stress among nurses. Nursing Occupation focuses on people's health and nurses are on a daily basis with a variety of stressors [16]. Stress is a factor that prevents optimal clinical care and also reduces occupational competence [17]. In stressful situations, this spirituality helps the nurses, because they give life a meaning and purpose [18]. Emmons also aims to answer the question of whether spirituality is considered as a kind of intelligence, and believes that spirituality predicts performance and compliance, and also provides the necessary tools for solving problems and achieves goals to the individual [19]. Obviously, if a person has the ability to adapt to the problem and the ability to solve problems, there will definitely be less stress in both the work environment and other dimensions of life. Also, the results of studies indicate that there is an inverse relationship between mental health and occupational stress; that is, the higher the mental health of the individual, the less experienced work stress [20,21]. It is also possible that spiritual intelligence affects the physical and mental health of all individuals; it also helps people to be stable and can reduce their anxiety and concern and engage more deeply with others. The results of these studies can be deduced that spiritual intelligence has been effective indirectly in reducing stress by promoting mental health and having a positive relationship with happiness as one of the components of mental health [22].

CONCLUSION

Based on the findings of this study, spiritual intelligence training is effective in reducing Perceived stress among nurses. In this regard, it can be concluded that the training of spiritual intelligence can change the attitude and meaning of life in individuals, thereby creating a happy mood and increasing the motivation and expectation of relying on superior power (Allah), on the other hand, by promoting mental health, it increases the adaptive and adaptive power and the ability to solve problems and ultimately helps reduce the stress of nurses. Given that the effect of training has been reduced to a month later, the need for direct follow-up of training and the use of appropriate reinforcement strategies in group discussions and the formation of small groups to maintain the effect of education seems necessary, and on the other hand, education in the form of CDs as individual training and as a self-learning opportunity for nurses. To strengthen and use these training, they were asked to discuss and discuss in-sessions within the sessions. One of the limitations of this study was that the nurses of the Ibn Sina Hospital in Mashhad were the statistical population of the research, so generalization of the results should be done with caution to other statistical population. According to the choice of the test and control group from a hospital, there was a possibility of transmission of information. To reduce this error, the test group was asked to refuse to provide the control group with information and training given during the sessions. It is suggested to researchers that a similar study be carried out in other statistical societies of hospitals as well as non-governmental hospitals and the results of this study should be compared and is also suggested to researchers. A research that examines the long-term effects of spiritual intelligence training on people's stress, and research that suggests different ways of teaching spiritual intelligence to stress can be suggested to researchers.

DECLARATIONS

Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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