

The Evaluation of *Savasana (Yoga Relaxation)* on Mental Health and Happiness of Nurses

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Abstract

Psychologically, happiness has a multifaceted impact on the psychological, social, and cultural aspects of people. The aim of this study was to evaluate the evidence on the effectiveness of savasana (yoga relaxation) on mental health and happiness of nurses.

Method: This study was an experimental and randomized clinical trial. Seventeen female nurses working in Shahid Rahnemoun Hospital in Yazd were divided into two control and intervention groups by using the purpose-based random allocation software. At first, the two groups were evaluated in terms of mental health and happiness. Then, the intervention group received the intervention for one month, twice a week namely Savasana, and the control group did their daily routine activities. The post-test was performed after the intervention.

Results: Mental health and happiness in the two groups were not significantly different at the beginning of the study; however, after 8 sessions, nurses' mental health and happiness in the experimental group was significantly better than the control group ($P < 0.05$).

Conclusion: Savasana has a positive effect on nurses and improves their mental health and happiness.

Keywords: Happiness, Mental Health, Nurses, Savasana, Yoga.

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Introduction

The existence of nurses is necessary in the healthcare system; therefore, their well-being and performance have significant effects on healthcare quality in hospitals. Nursing has always been a stressful occupation in the healthcare system, and they experience a variety of stressful occupational factors (heavy workload, insufficient time to care for patients, irregular work schedules, poor working environment, and patients with combined care needs). This may have a negative impact on the health status of nurses, which may impede their professional performance and affect health care quality. These issues will inevitably have a negative impact on the patients' health (Gong et al., 2014). Nurses are always exposed to inconvenience caused by mental stress, due to their constant exposure to stressors in the workplace; therefore, the World Health Organization has ranked nursing as one of the hard jobs. The conditions of the workplace and nurses'

activities are among the factors threatening the mental health (Piquette et al., 2009). A person who has mental health is away from anxiety and symptoms of disability; hence, he/she can establish constructive relationships with others, and can cope with the pressures of life (Zonderman et al., 2014). Happiness is one of the variables associated with life satisfaction, excitement, positive mood, and lack of depression. Happiness can protect human beings from psychological pressures like a barrier and bring them mental health and well-being (Pelechano et al., 2013). Happiness is a psychological concept that means how human being could have a better life and what makes him more satisfied (Smith, 2007). Happiness is the mental health production and they have a strong relationship with each other. It is recognized that there is a direct correlation between lack of anxiety and depression and happiness. Experience of stress reduces happiness and threatens the mental health (Pilkington, 2005). However, positive emotions,

life satisfaction and lack of negative emotions, positive relations with others, a purposeful life, personality development and love for others are the necessary conditions to achieve happiness (Ross, 2013). Yoga has its origins in Indian culture and in its original form consisted of a complex system of spiritual, moral and physical practices aimed at attaining self-awareness (McIlvain, 2015). The controlled breathing helps to focus the mind and achieve relaxation; while meditation aims to calm the mind (Büssing, 2012). Yoga is one of the effective interventions for creating happiness in nurses, which consists of eight principles (universal ethics, self-abstinence, physical count, breathing, sedation, focus on meditation and liberation) (Ross et al., 2013). Yoga affects mental health and reduces depression and anxiety. Evidence suggests that yoga applies therapeutic benefits by increasing vagal stimulation and shutting off the hypothalamus axis, pituitary, adrenal, and sympathetic nervous system. Yoga movements, breathing control, relaxation, meditation, and nutrition are used to relieve emotional-muscular pressure, increase concentration, and increase blood oxygen level (Morgan et al., 2014). Lee and Gold Smith (2012) studied the effectiveness of yoga exercise on life stress and blood sugar levels in nursing students in 2014. In this study, yoga exercise (Savasana and Yoga Nidra) was performed for 60 minutes once a week during 12 weeks and at the end of the study, they measured the level of blood glucose with glucometer and stress in students with life stress criteria. They concluded that this exercise reduces the level of blood sugar and stress (Li and Goldsmith, 2012). Furthermore, Parker et al. (2016) found that physical activity interventions significantly would reduce the level of depression (Parker et al., 2016). The aim of this study was to evaluate the evidence on the effectiveness of savasana (yoga relaxation) on nurses' mental health and happiness.

Method

This study, regarding its purpose, was experimental and randomized clinical trial. The samples were divided into two control and intervention groups through random allotment software. The study population was 70 female nurses working at Shahid Rahnemoon Hospital. The survey samples were selected purposely among eligible female nurses. Finally, there were 5 participants in the intervention group. After primary sampling, the pretest was performed. Then by filling the Oxford happiness questionnaire and general health questionnaire, the eligible individuals were selected and after that they were divided into two control and intervention groups by special allocated software based on the

purpose. The intervention group underwent Savasana (Yoga Relaxation) and the control group done their routine daily activities. The inclusion criteria consisted of having mental health, tendency to participate in the study, at least 3 years of job experience, age range of 25 to 55 years, not performing Yoga previously. The excluding criteria consisted of the recent history of life stressors, such as death of relatives and first degree relatives, separation, bankruptcy, and etc., lack of physical and mental health, and lack of ability to participate in program of Savasana (Yoga Relaxation).

Materials

In this study, Yoga exercises were performed in eight 60-minute sections, 2 times a week by an experienced tutor in an environment with appropriate temperature and light. Yoga exercises include stretching, exercising, asana and meditation. Asanas include Tadasana (accurate standing), tricon asana (simple triangle), veriksh asana (three), otan asana (bending forward in standing position), dand asana (accurate sitting), cid asana (the manner of standing) and Savasana (Yoga Relaxation). The Yoga sections include 3 parts. The first part was started with 10 minutes with greeting and little conversation with members of group. Then, stretching exercises and asanas were performed for 30 minutes. Finally, mind and body calming with Savasana (Yoga Relaxation) was continued for 20 minutes. Savasana (Yoga Relaxation) is a state of body in Yoga that is effective in eliminating muscular and mental tension. For performing this movement, the individual lies down backwards on the floor, the arms are located about 15 centimeters aside the body and palms are upwards, a thin pillow can be located under head to prevent discomfort. The person separates feet slightly in a comfort position and closes eyes. Head and spinal cord should be in a straight line. The body should be placed abandoned and without any movements. Then, relaxing and meditation exercises are performed by the tutor. After performing the interventions in a general section, all the participants answered to the questions again.

Measures

Oxford Happiness Questionnaire

This scale is made by Argayl and loo (1990) and possesses 29 matters (Argyle and Lu, 1990). Each question has 4 options which allocate scores from zero to 3. Therefore, the maximum score of total test is Argayl and Loo (1990) evaluated the stability of this questionnaire by using Cronbach's alpha method about 347 subjects and calculated the alpha factor of 0.90 (Argyle and Lu, 1990). Furthermore, validity of this questionnaire are

reported in various studies (Hills and Argyle, 2001, Furnham and Cheng, 1999). In Iran, the psychometric characteristic of this questionnaire was evaluated in survey of Alipoor and Noorbala (1999). The evaluation of internal similarity of matters of questionnaire showed that all its 29 matters have a high correlation with the total score. Cronbach's alpha was 0.93 and the stability of two half of the test was 0.92. Moreover the retest stability of the questionnaire after 3 weeks was 0.79. Also, in this survey, factor analysis led to extraction of 5 factors that totally indicated 57.1% of the total variance (Alipoor and Noorbala, 1999).

Public Health Questionnaire (GHQ-28)

The public health questionnaire is designed in order to discovery and identify mental disorders in various centers and environments by Goldberg and Hillier (1979) and to evaluate effective factors on mental health in various physical signs, anxiety, disorder of social function, and depression. This questionnaire includes 28 questions and 4 scores for evaluation of the mentioned contexts. Each score has 7 questions. The questions were scored based on a 4-degree score of Likert as 0-1-2-3. Scores of 23 and higher indicates mental disorder and scores lower than 23 shows wellbeing of mental health status. The questions address the evaluation of mental status of a person during recent month (Goldberg and Hillier, 1979). Goldberg and Hillier (1979) reported the validity and stability of the 28-question form as appropriate (Goldberg and Hillier, 1979). In the study of Ebrahimi et al. (2007) the criterion validity of this questionnaire was 0.78 and the split-half ratio was 0.9 and the Cronbach's alpha was 0.97 (EBRAHIMI et al., 2007).

Data analysis

The survey data were analyzed using SPSS software and t-student method for two independent groups and zooni t.

Ethical Considerations

The local Medical Ethics Committee of Shahid Sadoughi University of Medical Sciences approved the study (number **IR.SSU.REC.1395.27**) after reviewing the study protocol, and indicated that it is not related to the Medical Research Involving Human Subjects Act. Nursing staff participation was voluntary, and data collection was conducted confidentially and anonymously. Informed consent to participate in the study was given either personally or by a legal representative appointed by the patient.

Results

In this study 31% of the participants were single, 62% were married and 5% were divorced. 17% of the cases had work experience of 1-5 years, 25% had work experience of 5-10 years, 35% had work experience of 10-15 years, 14% had work experience of 15-20 years and 5% had work experience of 20-25 years. 94% of the cases had bachelor degree of education and 5% had higher degrees. 57% of the cases had a good economic status and 42% had a moderate economic status.

The results of t-student test for two independent groups before and after the intervention and the results of paired sample *t-test* for alterations showed that mental health of nurses was improved at a significant level of 0.05; therefore, Savasana (Yoga Relaxation) had a positive effect on mental health of nurses (Table 1). The results of t-student for two independent groups before and after the intervention and t pair for created changes showed that happiness of nurses was improved at the significant level of 0.05. Therefore Savasana (Yoga Relaxation) had a positive effect on happiness of nurses (Table 1).

Table 1: Mental Health and Hope Status Before and After the Intervention in Both Groups

Index	GroupStatus	Before intervention	After intervention	p-value
Mental health	Trial group	31.22 ± 9.11	19.12 ± 6.21	0.01
	Control group	30.02 ± 6.21	25.66 ± 8.21	0.003
	p-value	0.213	0.02	-
Happiness	Trial group	56.12 ± 9.21	69.2 ± 7.21	0.01
	Control group	57.21 ± 7.21	61.31 ± 6.21	0.21
	p-value	0.23	0.233	-

Discussion

This study aimed to investigate the effect of Savasana exercise on nurses' mental health and happiness. The results of the study showed that the nurses' mental health improved significantly after doing Savasana exercise. These results are consistent with the findings of Morgan et al. (2014), Lee and Goldsmith (2012), Brown and Gergberg (2005), and Levi et al. (2005) (Morgan et al., 2014, Li and Goldsmith, 2012, Brown and Gerberg, 2009, Lavey et al., 2005). Extreme and moderate physical activities have many physical and mental benefits to humans (Lavey et al., 2005). Exercise is a basic pillar of healthy lifestyle and can be used as a behavioral pattern throughout life to prevent or control various diseases (Parker et al., 2016). Moreover, in relation to the effect of exercise on mental health, it is obvious that physical activity has a beneficial effect on mental health (Terjestam et al., 2010). The relationship between mind and body has long been clear and the goal of yoga is to balance them. Therefore, yoga exercises improve people's physical and mental health by increasing the adaptive power of psychic, nervous, immune, and cognitive systems, modulating autonomic nervous system, increasing physical stability and body resistance, and modifying the immune system. Consequently, it increases the level of physical and mental health of individuals, which is followed by life satisfaction and optimism (Parshad, 2004). This finding can also be explained based on the psychological model of Bacher and Morgan (1978) (Bahrke and Morgan, 1978). This model is based on the distraction hypothesis. It is assumed in the model that sport activities act as the factor relieving individuals from stressful stimuli and emotions that can remove psychological problems of the individuals. The fact is that the continuity of many psychological disorders, such as anxiety disorders and mood disorders is due to the focus on negative thoughts and attitudes. Accordingly, one of the psychological interventions is to keep an individual away from concentrating on negative thoughts and stressful aspects of life; moreover, doing sports activities plays the same role quite well through the distraction feature (Bahrke and Morgan, 1978).

Furthermore, the results of this study showed that nurses' happiness improved significantly after doing Savasana exercise. The results are consistent with the findings of Shostopal (1998), Kajir et al. (2002), Levi et al. (2005) (Lavey et al., 2005, Shestopal, 1998, Kjaer et al., 2002). Levi et al. (2005) believe that since any movement experience or physical change is followed by a psychological change or experience, exercises like Savasana can affect the rate of happiness in

individuals through changing the level of oxygen consumption and the production of certain hormones in the body (Lavey et al., 2005). Yoga exercises help to release more endorphin in the body, and this hormone is retained in the body for a longer time, which provides a sense of vitality and happiness for the individual and ultimately enhances the rate of life satisfaction. Participating in yoga activities makes people feel closer to one another, and affects health and fitness, balance and emotional stability, self-esteem, positive physical and social image, calmness, and reinforcement of positive thoughts. Therefore, Yoga is considered as one of the important methods of physical and psychological development. It can be argued that exercises such as Yoga and Savasana play an important role in mental health, psychological well-being, and happiness of individuals (24).

Conclusion

Given that exercises (Yoga, Savasana, etc.) are effective in reducing depression and anxiety, people who benefit from such trainings will have a lower level of anxiety and depression; moreover, they will enjoy higher levels of happiness. Regarding the effect of Savasana exercise on nurses' mental health and happiness, hospital officials are recommended to bring Savasana exercises in the form of essential programs in the hospital environment, in order to take steps to promote nurses' mental health and happiness. Only women participated in this study and lack of cooperation was the limitation of this study.

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Conflict of Interest

There is no potential conflict of interests.

Authors' Contribution

The authors had the same contribution.

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