

A Review of the Studies Conducted on the Quality of Professional Life of Working Nurses

Abstract

Quality of life is a multi-dimensional concept studied in physical, social, psychological dimensions, and emotional performance. Quality of life is related to the personality traits and work environment of people and is greatly important for health systems and healthcare providers. Quality of life refers to a set of results for employees, such as job satisfaction, growth opportunities, psychological issues, job security, human relations between employers and employees, and the low rate of accidents. Employees with a higher quality of life have a higher organizational identity, job satisfaction, and performance and a lower turnover tendency. The mentioned studies concluded that aromatherapy is one of the therapeutic approaches that have beneficial effects on stress and anxiety, reducing fatigue and increasing the quality of life. Therefore, this method can be used to improve the overall quality of professional life, especially for nurses.

Keywords: *Quality of life, Fatigue, Anxiety, Nurses*

Introduction

Quality of life is a multi-dimensional concept studied in the physical, social, psychological dimensions, and emotional performance. Quality of life is related to the personality traits and work environment of people and is greatly important for health systems and healthcare providers.^[1] Employees with a higher quality of life have a higher organizational identity, job satisfaction, and performance and a lower turnover tendency.^[2] It has been demonstrated that initiatives to enhance employee quality of life decrease the number of grievances, absences, and disciplinary rules while increasing positivity and system engagement. Two factors that make up professional life's quality are job satisfaction and tiredness.^[3]

The importance of studying the nurses' quality of life

Nowadays, nurses experience high levels of fatigue that affect patient care outcomes and impose significant costs on the health care system.^[4] Nurses reported the prevalence of fatigue at 91.9%, and two-thirds of nurses had experienced fatigue in most cases.^[5] Nurse fatigue is defined as a subjective and multi-dimensional feeling of fatigue. It may be physically and mentally penetrating and interfere with the physical and cognitive

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ability of the nurse and may remain even with periods of rest.^[6] Nurse fatigue significantly disrupts nurses' performance and affects their ability to care for their patients effectively. The Canadian Nurses Association and the Ontario Nurses Association conducted a study in 2010. They found that nurses experience significant levels of fatigue, which acts as a major negative influence on nursing career decision-making, creativity, and problem-solving ability, all of which are essential aspects of safe patient care in the health care system.^[7] The importance of nurse fatigue is due to its harmful consequences. For example, many studies have shown a strong relationship between nurse fatigue and errors. When the nurses are fatigued, their decision-making skills decrease, their reaction time becomes longer, and their problem-solving ability is impaired. This factor is one of the most important variables directly affecting the quality of nurses' professional lives and is related to their job satisfaction.^[8-10] Two secondary stress elements brought on by an accident and job burnout are included in fatigue. Accident-related secondary stress is a bad emotion that follows fear and workplace accidents that occur to people. This type of tension is not a person's Response to dealing with mishaps and catastrophes.^[11] Secondary stress may occur suddenly and without

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warning. Symptoms of secondary stress can include feelings of helplessness, confusion, and lack of support from people around you. Secondary stress is mainly an occupational danger for healthcare workers, especially nurses because it affects their ability to provide quality services and care for patients. In addition, job burnout consists of three components: fatigue, pessimism, and a reduced sense of self-efficacy. Most burnout signs appear with symptoms of weakness, despair, emotional exhaustion, isolation, irritability, failure, despair, and indifference.^[12]

Several methods have been investigated to control these unpleasant feelings and increase the nurse's quality of life.

Literature review

In the literature review, there was no research about the effect of inhalation aromatherapy with orange essential oil on the quality of professional life of working nurses. The selected keywords included quality of professional life of nurses and orange essential oil. Data were collected in this study by referring to scientific sites such as Science Direct, PubMed, Google Scholar, and SID during the last 5 years. The keywords used are shown in the Table below. Finally, 27 articles.^[1-27] related to the searched keywords were presented, of which 4 are related to the present research (**Table 1**).

Table 1. Data collection

Row	Keyword	Related article
1	Aromatherapy + quality of professional life	6
2	Orange essential oil + quality of professional life	4
3	Aromatherapy + orange essential oil	6
4	Aromatherapy + Quality of Professional Life	4
5	Essential oil + Quality of professional life	3
6	Herbal Essential oil + Essential oil	5

Internal studies

1. Kanani *et al.* (2013) investigated a study titled "The Effect of Orange Essential Oil Aromatherapy on the Level of Anxiety of Patients under hemodialysis treatment." In this study, 62 patients were examined randomly and with a single-masked trial in two test and control groups. In the test group, essential oil inhalation was used with a tissue dipped in one drop of essential oil for 15 to 20 minutes three times a week for 4 weeks. Then, the level of overt and hidden anxiety after completing the hemodialysis in both groups was measured and recorded by the Spielberger questionnaire in one stage before the intervention and at the end of each week. The results showed that inhalation of orange essential oil significantly reduced the level of overt and hidden anxiety compared to before the intervention. ($P < 0.001$). In the inhalation of orange essential oil, there was a significant difference in the amount of overt and hidden anxiety between the stages after the intervention with one another ($P < 0.05$). These results showed that the inhalation of orange essential oil effectively reduces hemodialysis patients' anxiety and has no significant side effects.^[13]
2. Jalalian (2014) conducted a study that compared "the effect of inhalation of scent and massage of the combination of

lavender and orange essence on fatigue and quality of life of hemodialysis patients." This study was a clinical trial with a control group. The samples included 96 patients under hemodialysis treatment in the hospitals of Tehran University of Medical Sciences, who were divided into three groups by a simple random method: control and groups under the intervention of aroma inhalation and lavender and sweet orange essential oil massage 3 times a week for 8 weeks. Data were collected based on a demographic information questionnaire, the Rhoten fatigue scale, and the quality of life of renal patients KDQOL-SF1/3. Data were also analyzed using SPSS software and descriptive and analytical statistics. The results showed no statistically significant difference between the control and two intervention groups in terms of fatigue intensity before the intervention ($P = 0.54$). Still, there was a statistically significant difference in fatigue intensity between the control group and the two intervention groups after 8 weeks of intervention ($P < 0.001$). The average fatigue intensity in the essential oil massage group decreased more than in the aroma inhalation group. Comparing the intensity of fatigue 16 weeks after the intervention in the control group and the two intervention groups showed that fatigue increased in the control group. At the same time, it was less in the two intervention groups than in the control group. In addition, changing the general and specific dimensions of quality of life showed a statistical difference between the three groups in different periods ($P \leq 0.05$ and $P < 0.001$). The quality of life in the essential oil massage group was better than the aroma inhalation group, but the control group did not have a good quality of life. According to the results, lavender and sweet orange essence inhalation and massage have positive effects on reducing fatigue intensity and improving the general and specific aspects of the quality of life of hemodialysis patients. Therefore, these methods can be used as a low-cost and non-invasive approach to reduce fatigue intensity and improve patients' quality of life.^[14]

Foreign studies

3. Wattanathorn *et al.* (2012) investigated the effect of orange essential oil and lavender oil on the working memory of young people. In this study, 30 people were randomly selected for the test group. Each subject was exposed to 25 microliters of orange essential oil or lavender oil for 5 minutes. Then, working memory was checked before and within 30 minutes after the intervention. Statistical data were analyzed using SPSS version 12.0 software. Statistically significant data were analyzed using the Wilcoxon test. According to the data, people exposed to lavender oil and orange essential oil showed substantial changes in the reaction time in numerical working memory compared to the initial data ($p < 0.05$ and $p < 0.01$, respectively). The people who consumed orange essential oil showed a significant decrease in the reaction time of the word recognition test. In addition, the people exposed to lavender essential oil showed a reduction in the picture recognition test ($p < 0.05$). This study showed that aromatherapy with essential oils mentioned in the present study can improve working memory.^[15]

4. Lehrner *et al.* (2000) conducted a study investigating the "Inhalation of orange essential oil on the reduction of stress in patients under dental treatment." In this study, 72 patients between 22 and 57 years old were chosen while waiting for dental treatment. The participants were assigned to a control group (14 men and 23 women) and a test group (18 men and 17 women). The orange scent was diffused in the waiting room through an electric diffuser for the test group, but there was no scent in the control group. Approximately 0.25 ml of 5 drops of the desired essential oil was released into the air every morning and noon. Patients were randomly selected to control different dental procedures. The patients were registered after arriving and filled out questionnaires while waiting for treatment. They completed a questionnaire requesting demographic information. Then, they were asked about the current pain using an 11-point Likert scale from 0 to 10. Then, the State-Trait Anxiety Inventory (STAI) was given to the patients to evaluate their traits and state of anxiety. High scores indicated increased anxiety. The ANOVA statistical test was used to analyze the data. Then, demographic and cognitive variables such as anxiety, pain, mood, alertness, and relaxation were evaluated. This study reported that exposure to the smell of oranges has a calming effect. Compared to the control, people exposed to the smell of oranges had a low level of anxiety and a high level of relaxation. This study's data support the soothing properties of natural orange essential oil.^[16]

Conclusion

The mentioned studies concluded that aromatherapy is one of the therapeutic approaches that have beneficial effects on stress and anxiety, reducing fatigue and increasing the quality of life. Therefore, this method can be used to improve the overall quality of professional life, especially for nurses.

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Conflict of interest

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Ethics statement

None.

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