

Effects of Emotional Freedom Technique in Reducing Stress and Enhancing Well-Being/Self-Esteem Among Nurses Working in Tertiary Care Hospital Lahore.

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KEYWORDS

Stress, Self-Esteem.
Registered Nurses,
Emotional Freedom Technique.

ABSTRACT

Background: The Emotional Freedom Technique (EFT), commonly known as "tapping," is a therapeutic approach that blends aspects of cognitive and exposure therapies with acupressure. It involves gently tapping on specific meridian points on the body while concentrating on a negative emotion, memory, or concern. The technique is founded on the idea that imbalances in the body's energy system can cause emotional and physical issues, and by tapping on these points, one can restore balance and alleviate discomfort. Unfortunately, in clinical settings most of nurse's have high level of stress and low-self-esteem due to long working hours, hectic routine and increased workload. So, there is a dire need to adopt EFT, to alleviate stress and boost self-esteem.

Objective: To assess effects of Emotional Freedom Technique in reducing stress and enhancing self-esteem among Nurses working in tertiary care hospital Lahore.

Methodology: A quasi experimental study included 59 registered nurses selected by a universal sampling technique. A ten weeks' educational intervention consists of PowerPoint lectures, audio visual demonstration (AVD) and hands on practice sessions, which was prepared from third edition of Emotional Freedom Technique (EFT) manual, were given by researcher to registered nurses on how to tackle stress and enhanced self-esteem. Data on nurses' scores of stress and self-esteem were collected two times before and after the intervention via validated questionnaires.

Results: The study showed a significant ($P < 0.001$) improvement in reducing stress and enhancing self-esteem among nurses after education. Results revealed that stress level was reduced significantly as $P\text{-value} = 0.000$. The mean value of stress before educational intervention was 21.49 and after educational intervention it was 18.13. Results revealed that self-esteem was improved significantly as $P\text{-value} = 0.005$. The mean value of self-esteem before educational intervention was 23.01 and after educational intervention it was 24.45.

Conclusion: emotional freedom technique (EFT) significantly reduce stress and improved self-esteem among nurses working in critical care areas of tertiary care hospital.

LIST OF ABBREVIATIONS

Abbreviations	Full Form
EFT	Emotional Freedom Technique
MICU	Medical Intensive Care Unit
SICU	Surgical Intensive Care Unit
NICU	Neonatal Intensive Care Unit
CICU	Cardiac Intensive Care Unit
PSS	Perceived Stress Scale
RSE	Rosenberg Self-Esteem Scale
SPSS	Statistical Package for Social Sciences
BIH	Bahria International Hospital
AVD	Audio Visual Demonstration

CHAPTER 1: INTRODUCTION

1.1. BACKGROUND:

Nursing is a vital profession characterized by great nobility. Despite this, many nurses struggle with self-doubt, which can be a major hindrance to their ability to provide quality patient care. Self-esteem plays a crucial role in the nursing profession. Nurses with positive self-regard are more likely to provide therapeutic care, while those with a negative self-image are less likely to do so (Wati, Sansuwito, Rai, et al., 2022).

The development of one's personality and professional identity is deeply intertwined with their sense of self-worth, which is crucial in shaping their growth and success (Wati, Sansuwito, Rai, et al., 2022).

Within the healthcare sector, the role of nurses is crucial, as they dedicate more time to patient care compared to physicians. Notably, nurses experience higher levels of stress than other healthcare professionals. Research indicates that occupational stress among nurses can negatively impact their behavior in caring for patients. Therefore, it is imperative to identify and address stressors in the workplace to ensure the well-being of nurses and maintain high-quality patient care (Kaushik et al., 2021).

Nursing as a profession demands a high level of dedication. While fulfilling their core responsibilities, nurses face increasing demands from both their employers and the patients they care for. The pressure intensifies as they are expected to provide optimal care to patients, their families, and the communities they serve. Additionally, nurses must build trust with patients and their families to establish meaningful therapeutic relationships, which can result in a wide range of stressful situations (Saher et al., 2022).

Health professionals are continuously working in an environment that influence to the stress and burn out which ultimately depends on their job description and their position

in the workplace, low self-esteem is one of the major issue which effects the capacity of the health care workers to perform their duty properly. Because of stress and burn out and without any kind of support from other group of professionals they make decisions which is harmful for the patients and for themselves also (Sifferlin, 2014).

ICU nurses face various types of stress due to conflicts between job demands and their skills and capabilities in the workplace. Furthermore, physicians often show a lack of respect for nurses and undervalue their expertise, which adds to the growing complexity of nursing tasks and contributes to the daily stress experienced in ICU operations (Saher et al., 2022). Persistent work-related stress has detrimental effects on the overall well-being of employees, affecting both their physical and mental health. Prolonged exposure to such stressors may contribute to serious health issues, including heart disease, increased blood pressure, diabetes, and psychological disorders such as depression and anxiety (Kaushik et al., 2021).

ICU nurses are particularly subject to job-related stress due to various factors. These include being directly and indirectly involved in traumatic and critical incidents, handling heavy workloads, meeting high demands of patient care, working extended shifts, dealing closely with death and severe illnesses, and even encountering medical violence. Despite these challenges, their authority within the ICU remains limited (Xiong et al., 2016). Routine stressful actions combined with negative emotions which results in more stressed environment. High-level job stress often leads to burnout in health care workers. Huge number of studies shown that ICU nurses have often experience burnout (Parizad et al., 2021).

Self-esteem is all about having belief in one's own worth and abilities. When you have a confident self-esteem, it means you believe in your thinking, judgement, and decision-making skills. This attribute is essential in creating harmonious interpersonal relationships and enhancing the work environment. Conversely, when you have low self-esteem, it's easy to engage in overly compliant or rebellious behavior. This type of conduct makes the work environment less enjoyable and decreases productivity. Moreover, poor self-esteem can lead to different kinds of mental health issues (Johnson et al., 2020).

Low self-esteem and high stress level are the analysts of burn-out at the workplace it is need to access the workers for the self-esteem and stress to raised their efficiency at workplace and improves the outcome (Johnson et al., 2020).

Burnout is often defined on the basis of three dimensional disorder, which is characterized by emotional exhaustion which is reported in 73% of critical area nurses, depersonalization which is reported in 48% of nurses and lack of personal accomplishment reported in 60% of nurses working in critical care areas. Nurses working in critical care areas are having more level of stress as compared to other nurses working in other departments of hospital. Stress stimulators of critical area nurses are different from those working in other departments of hospital, as nurses in critical areas encounter increased patient diseased and death ratio, and a more complex and challenging environment (Rodríguez-Rey et al., 2019).

Nurses facing challenges with their self-esteem might demonstrate unprofessional actions in the workplace. Within the nursing field, rising levels of pressure can push these caregivers towards burnout, which can significantly impact their mental and physical health (Johnson et al., 2020).

It's true that some pressure is bound to exist in any workplace, especially in today's fast-paced work environment. However, when this pressure becomes unmanageable or excessive, it can lead to stress and have negative consequences on an employee's health as well as their work performance (Johnson et al., 2020). Excitingly, a revolutionary approach to tackling psychological distress and improve Self-esteem can now be found in The Emotional Freedom Techniques (Church & Brooks, 2010; Krauss et al., 2020).

Gary Craig developed the Emotional Freedom Technique (EFT) in 1990 as a psychological energy therapy that combines elements of acupuncture and mind-body medicine. Emotional Freedom Technique can be used to address a variety of issues, including emotional symptoms and physical discomfort. The current form of energy therapy is known as Emotional Freedom Technique. Although it is based on principles similar to acupuncture and acupressure, Emotional Freedom Technique differs in its approach. Acupuncture involves using tiny needles to stimulate the body's meridians, while acupressure relies on massage. In contrast, Emotional Freedom Technique involves gently tapping on meridian points, allowing for stimulation without causing pain (Bach et al., 2019).

It's almost hard to believe, but studies indicate that a huge 98% of cases utilizing this approach have shown incredibly significant results in managing psychological distress (Rancour, 2017). The amazing thing about emotional freedom technique is that it stimulates specific points on your skin which have distinctive electrical properties. By doing this, it sends activating and deactivating signals directly to your brain, all while just tapping on them (Feinstein, 2019). Discover the acupressure spots that are believed to regulate the energy flow throughout the body. By tapping or pressing on these points, the energy within the body, mind and emotions can be balanced and harmonized to promote relaxation and optimize overall well-being (Blacher, 2023).

Emotional freedom technique is a powerful tool to alleviate anxiety, phobias and stress. It is a quick and effective intervention technique for emotional healing. With its remarkable therapeutic outcomes and discomfort relief, emotional freedom technique helps individuals to overcome their emotional difficulties in a meaningful and engaging way (Wati, Sansuwito, Riyanto, et al., 2022).

1.2. PROBLEM STATEMENT

One of the major factor which affects the work efficiency of the nurses at their workplace is increased stress level and low self-esteem. Low self-esteem heavy workload increased patient ratio can lead to burn-out and stressful working environment which ultimately leads to the poor patient prognosis wrong decision making and loss of self-confidence. Self-esteem is the ability of having confidence on one skill to do the work with self-assurance. Low self-esteem interrupts the person's ability to perform their work, due to lack of confidence the person is unable to do the task with full efficiency. High self-esteem helps to deal with the workplace stress and increase the productivity to the work. To improve patient outcome one of the important factor is to improve the self-esteem of the nurses which indirectly improve their work efficiency and help them to provide quality care to the patients. Nurses having low self-esteem are less likely involve in activities such as learning making new innovations and avoid to take part in organizational learning activities just because the fear of failure and missing the outstanding chances of their professional growth while those having high self-esteem are more commonly participate in learning activities (Hahn & Mathews, 2022).

Emotional freedom technique is one of the emerging technique which is helpful in reducing stress and burn out and many other psychological symptoms. Over 5000 researches reveal that emotional freedom technique helps in the reduction of psychological symptoms anxiety depression and physical symptoms (Church & House, 2018).

SIGNIFICANCE OF THE STUDY:

An effective emerging and research based intervention which is used for stress and anxiety management among nurses is emotional freedom technique which is more commonly known as tapping. Emotional freedom technique uses some of the cognitive behavior therapy strategies which includes mindfulness building, imaginal exposure, re-examines of understanding and systematic desensitization, it also includes to educate the individual to self-stimulate specific recognized acupoint. Within last few years, research results show that emotional freedom technique helps in minimizing the anxiety and stress related to achieving the goals and improve self-esteem and compassion after taking few sessions (Gaesser, 2020).

Emotional freedom technique is itself a simple therapy in which a person uses herself as a self-help tool it encourages person to add their energies in healing and development process. This technique is simpler and easier to relieve from the symptoms of anxiety. These techniques don't discredit the medical and psychotherapeutic professions, but relatively serve to contribute to a holistic healing process (Balha et al., 2020).

The implementation of emotional freedom technique helps in minimize stress anxiety and depression and maximize positive or high self-esteem level. This high self-esteem enables nurses to make accurate decision making about patient's health related concerns which promotes patient's prognosis. Nurses with high self-esteem enhances confidence level among patients and minimize their disease related stress level. This technique helps to boost up the self-esteem level of the nurses which benefits both the patient and nurses.

OBJECTIVE:

To assess effects of Emotional Freedom Technique in reducing stress and enhancing self-esteem among Nurses working in tertiary care hospital Lahore.

HYPOTHESIS:

Null Hypothesis: Emotional Freedom Technique may not have effects on stress and Self Esteem of Nurses working in tertiary care hospital Lahore.

Alternative Hypothesis: Emotional Freedom Technique may have effects on stress and Self Esteem of Nurses working in tertiary care hospital Lahore.

CHAPTER 2: LITERATURE REVIEW

LITERATURE REVIEW:

Self-esteem encompasses the positive or negative perceptions individuals hold about themselves and serves as a crucial asset in combating stress and preserving overall health. Those with high self-esteem tend to view themselves favorably and take pride in their accomplishments, whereas individuals with low self-esteem often struggle with feelings of inadequacy and a diminished sense of confidence. Research has highlighted self-esteem as a safeguard against psychological strain among nurses, showing a positive association with their overall well-being and job satisfaction, both directly and indirectly (Serafin et al., 2022).

Self-esteem in the work place refers to the value an employee places on their own abilities and contributions within the organization. This perception of self-worth is critical

because it can affect an individual's confidence and performance. When an employee has a high level of self-esteem, they feel comfortable, competent, valuable, and recognized for their contributions, making them an essential asset to the organization (Kim & Beehr, 2018).

50.8% of nurses experienced stress, while 74% reported anxiety, and 70.8% indicated depression. Additionally, 79.1% of nurses experienced at least one of these conditions. Nurses who reported feeling stressed, anxious, or depressed were particularly concerned about issues such as job satisfaction and conflicts with supervisors. Workplace stressors were found to differ across various work settings: in private hospitals, issues included lack of job satisfaction and conflicts with doctors and patients; in government hospitals, concerns revolved around acquiring infectious diseases; in ICUs, inadequate salary was a common stressor; and in non-ICU settings, factors such as workplace odors and sounds, as well as conflicts with patients, were highlighted (Kaushik et al., 2021).

A cross-sectional study which was conducted to check the stress anxiety and depression level among nurses shows 78% cases of depression. It is also observed that severe and extreme severe depression present in 6% & 25% cases respectively. 78% cases show anxiety with sever & extreme severe anxiety present in 28% & 12% cases respectively. 54% nurses were having stress and an extreme stress level present in 13% cases (Jan et al., 2021).

According to different studies which is conducted in past few years shown an alarming increased in level of stress and anxiety among nurses working in critical areas of hospital which is approximately 30% in France, 16% of critical area nurses and 10% of assistant in Spain, 56% of those working in pediatric ICU have reported severe level of stress in Spain, 84.4% nurses who are working in Argentina, 25 to 33% nurses working in united states reported severe burnout syndrome symptoms. According to an estimation approximately 86% of nurses working in critical areas have experienced one of the three symptoms of burnout (Torre et al., 2019). Various researches shown that high self-esteem enables employees to cope up with the stressful working environment depression and anxiety and also helps to enhance their work efficiency and productivity (Kim et al., 2021).

The emotional Freedom Technique combines energy and psyche of mind. According to a study conducted in 2019 the fundamental rule of emotional freedom technique is to convey activation and deactivation messages to the cerebrum through stimulation of meridian places, normally by tapping (Dincer & Inangil, 2021).

Traditional Chinese medicine has been used from last 2000 years to diagnose treat and prevent illnesses they also believed that tapping the acupressure points relax the body mind and emotions.(Hartmann, 2016).More than 100 studies prove the effectiveness of emotional freedom technique in minimizing the physiological and psychological symptoms. Previous studies have also proven that emotional freedom technique is statistically significant in dealing with psychological distress based on more than 98% of related studies (Dincer & Inangil, 2021).

In a systematic review and meta-analysis of both randomized and non-randomized trials examining the clinical application of Emotional Freedom Techniques (EFT) for depression treatment, it was found that Emotional Freedom Techniques demonstrated comparable effectiveness to cognitive behavioral therapy (CBT). This suggests that Emotional Freedom Techniques can be a valuable alternative or adjunctive treatment option for individuals experiencing depression. Additionally, Patterson's study focusing on

nursing students revealed that Emotional Freedom Techniques interventions were associated with reductions in stress and anxiety levels among participants. This highlights the potential of Emotional Freedom Techniques not only in clinical settings but also in educational contexts, such as nursing education, to address psychological distress and promote well-being among students (Dincer et al., 2022).

A retrospective study conducted over a population of 5000 patients which are taking treatment from 11 different clinics from last 5.5 years, patients taking treatment in the form of cognitive behavioral therapy with medications and emotional freedom technique or acupoint tapping without any medications. Relieve of symptoms are seen in 90% of patients who have acupoint tapping sessions as compared to 63% who are taking cognitive behavioral therapy. In comparison with cognitive behavioral therapy patients shows relieve from anxiety symptoms after three sessions of emotional freedom technique or acupoint tapping and an average of 15 sessions cognitive behavioral therapy needed for showing same results (Riedel et al., 2021).

According to meta-analysis of 14 randomized controlled trials of emotional freedom technique which is done for the treatment of different anxiety disorders a large therapeutic effect of 95% for emotional freedom technique. Emotional freedom technique treatment is also helpful in significantly reduction in symptoms of anxiety related disorders (Bach et al., 2019). To evaluate the effect of emotional freedom technique a randomized controlled trial of emotional freedom technique is done on 56 university students. The students are randomly allocated in experimental group and control group. The students who receive emotional freedom technique reported 39.3% reduction in stress symptoms as compared to those students who are in control group (Aloufi et al., 2021).

According to a randomized controlled Emotional freedom technique trials which is conducted to study the effects of Emotional freedom technique on reduction of stress and burnout level shows 42% reduction in symptoms of stress and burn out after implementation of Emotional freedom technique (Johnson et al., 2020).

According to a cross-sectional study which is conducted to study the effect of emotional freedom technique among students in the reduction of stress symptoms shows a reduction of stress symptoms among 39.9% students after implication of emotional freedom technique. While past research has examined the effect of emotional freedom technique on stress and anxiety among nurses, little attention has been given to the impact it can have on nurses' self-esteem. This is crucial as self-esteem is vital to helping them feel confident and empowered to carry out their duties in both clinical and community settings. Nurses must feel good about themselves in order to communicate effectively with colleagues and patients. In this study, we delve into the intriguing effects of emotional freedom technique therapy on self-esteem among nurses (Wati, Sansuwito, Rai, et al., 2022).

CHAPTER 3: MATERIAL AND METHODS

3.1. Study Design:

Quasi-experimental study design will be used to assess the effect of emotional freedom technique on stress and self-esteem of nurses in tertiary care hospital Lahore.

There are three basic forms of experimental research design: **Pre-experimental**, **quasi-experimental** and **true experimental**. The type of research design among them is chosen by the degree to which investigator assigns the research subjects into groups of conditions. The primary and fundamental type of experimental design is pre-experimental research design in which basic steps of experimental research are

implemented but there is no control group (Croucher & Cronn-Mills, 2021). In this research design researcher use a single group and does not have comparison between groups (Bloomfield et al., 2019). The second type of experimental research design is quasi experimental design that seems to be like true experimental design as having intervention and control group but the lack of randomization. True experimental design is the third and much important research kind with intervention, control and randomization (Rogers et al., 2020).

3.2. Study Variables:

Emotional freedom technique, Stress, Self-esteem, Nurses

3.2.1. Independent Variables:

Emotional freedom technique

3.2.2. Dependent Variables:

Self esteem

Stress

Anxiety

Patient prognosis

3.3. Operational Definitions:

Self-esteem of nurses will be measured using the modified Rosenberg Self Esteem Scale (RSES) questionnaire, which was customized to the nursing practice of the respondent. The number of questions is 10 (05 positive, 05 negative) each typically paired with four response choices ranging from "strongly disagree" to "strongly agree." The total score ranging from 10-40. The higher the score the lower self-esteem.

Perceived stress scale (PSS-10) is one of the most used scale for assessing perceived stress in individuals. This scale consists of 10 items which is used to assess one's feelings and thoughts during last month. Participants expressed their opinion regarding each question using a five-point Likert-type scale, ranging between never (0) and very often (4). The total scores ranged between 0 and 40. The higher scores suggest a higher stress perception during the last month.

3.4. Study Setting:

The study will be conducted after taking data from nurses of both gender working in critical areas (MICU, SICU, CICU & NICU) of Bahria international hospital in Lahore Pakistan. Critical areas are selected because the nurses in these departments working under high pressure. Nurses regularly confront illness, grief and mortality all of them lead to maximize stress, anxiety and minimize self-esteem among nurses. Hectic working hours' decision making regarding patient care and poor patient prognosis are identified source of anxiety among nurses working in critical areas.

3.5. Study Population:

The study population will be females and males working in critical areas of Bahria International Hospital Lahore.

3.6. Sample size:

By keeping standard deviation 9.64, 8.73 and mean 68.95, 71.94 respectively from pre and post therapy (Johnson et al., 2020).

Effect size (Cohen's d) was calculated by effect size calculator (available at <https://www.socscistatistics.com/effectsize/default3.aspx>). By keeping effect size 0.33,

level of significance 0.05 and power of test 80% the proposed sample size is 59 calculated by g- power software.

3.6.Sampling Technique:

Data will be collected by universal sampling technique from selected population. The purpose of using universal sampling technique is that, it is possible to get deep understandings into the phenomenon you are interested in. With such wide coverage of the population of interest, there is also a reduced risk of missing potential understandings from members that are not included (Ramoso & Ortega-Dela Cruz, 2019).

3.7.Study Duration:

The study will be completed within 9 months after approval of synopsis.

3.8.Eligibility Criteria:

3.8.1. Inclusion Criteria:

- Registered nurses working in MICU, SICU, CICU & NICU.
- Registered nurses who have at least one year of experience in respective department.
- Age 20-40 to study the differences in stress level.

3.8.2. Exclusion Criteria:

- Those nurses who are already on a therapy for a major psychiatric disorder or having recovery from any kind of major psychiatric illness like schizophrenia bi-polar disorder and schizotypal disorder.
- Nurses which do not respond after three calls which made one week apart.
- Those nurses whose probation period is not completed yet.
- Head nurses
- Those nurses who have planned leaves.

3.9.Research Tool:

Rosenberg scale is used to assess the self-esteem of the participants. This is a 10 item questionnaire which is used to assess the self-esteem of the participants. Each item is scored on a 4-point scale, with responses ranging from “strongly agree” (0) to “strongly disagree” (3).

Perceived stress questionnaire is used to assess the stress level of nurses. This is a 30 item questionnaire which is used to assess the stress of the participants. Each item is scored on a 4-point scale, with responses ranging from “almost” (1) to “usually” (4).

3.10. Validity and Reliability:

The scale was proved internally highly consistent and reliable in both studies as Cronbach’s alpha was 0.92 in Chinese sample and 0.80 in Pakistani sample. The split half reliability coefficient in Chinese sample was 0.89 and 0.85; and in Pakistani sample was 0.75 and 0.65 (Khalid et al., 2023).

This scale was proved internally highly consistent and reliable with Cronbach’s alpha .86 (Siddique et al., 2021).

This scale was proved internally highly consistent and reliable with Cronbach’s alpha = 0.78–0.89 (Lakhdar et al., 2022).

DATA COLLECTION PROCEDURE: Data was collected at two points, pre and post educational intervention. Nurses were observed for signs of stress and low self-esteem.

Pre interventional phase:

In this phase permission taken from nursing director of Bahria international hospital to conduct a session of emotional freedom technique therapy on nurses working in critical areas (MICU, SICU, NICU & CICU) of Bahria international hospital. After taking permission from the nursing director a short meeting done with the departmental head to take their nurses for this session. All the registered nurses were selected in the study following the inclusion and exclusion criteria of the study. The aims and objectives of the study were shared with participants. Consents were taken from all the study participants. Total 59 registered nurses were selected. The participants were divided into five groups; each group have twenty-four participants. Day date venue was shared with them to avoid any kind of inconvenience. Intervention was given 04 days in a week. Pre-interventional data were collected by researcher, each participant assessed for practices at their original working place by maintaining anonymity. Pre-education data of patients was recorded from patient's charts. Before educational intervention, participants were assessed for practices and patients for complications. The lecture is conducted at auditorium of Bahria international hospital. Multimedia is used to giving a demonstration of points which is used for tapping in emotional freedom technique. It is a 45 mints session.

Intervention plan:

In this phase a session is given about what is self-esteem. why high self-esteem is important in achieving tasks at workplace. How self-esteem helps to achieve better patient outcomes and how low self-esteem effects your work efficiency. After giving a complete overview of self-esteem a brief introduction of emotional freedom technique is given and explain them how emotional freedom technique helps to maintain self-esteem and overcome work related stress and anxiety. Educational intervention was delivered during morning and evening shift in auditorium of selected research setting. Participants were reminded for not to attend any additional educational session regarding specialty of practice to avoid the interference of confounding factors. Educational intervention was prepared for participants from the third edition of EFT manual. Educational intervention included two sessions for four days in each week. First session was face to face PowerPoint presentation, audio visual demonstration (AVD) and second session participants were taught for practices changes by researcher under presence of expert via hands on practice. One hour per day was given for this educational intervention. Total 40 lectures were delivered by researcher. The performance errors were corrected immediately.

Post assessment plan:

In the fourth week of the therapy feedback taken from the participants after two weeks of the therapy about how the therapy helps to relieve symptoms of stress and burnout and how it helps to boost up the self-esteem. Ask them for how many times they use this technique in these two weeks. Feedback taken about how this technique helps to achieve their daily tasks and how it helps to improve patient outcomes. Guide the participants to continue this technique and share this technique to other participant and give feedback about how this technique helps in stress reduction and maintaining positive self-esteem.

DATA ANALYSIS PROCEDURE

Statistical package for social sciences (SPSS) version 27 was used to enter and analyze data. For quantitative variables mean and standard deviation were computed, while for categorical data, frequencies and percentages were calculated. The normality of the data was tested using the shapiro-wilk test, which revealed that the data was normally distributed (P-value >0.05). The paired sample t-test was used to compare pre and post scores.

CHAPTER 4: RESULTS

Results:

The sample population of 59 nurses was chosen for the study from Bahria International Hospital (BIH) Lahore. This chapter consists of three sections. This Section I deals with demographic characteristics, section II deals with practices scores, section III deals with EVD related complication among patients.

Section I: Socio-Demographic Characteristics

This section showed Demographic Characteristics of participants and patients.

Table 4.1: Age in years

Age in (Years)	<i>F</i>	Percentage
18-22	00	0.00%
23-27	44	74.6%
28-32	13	22.0%
33-37	2	3.4%
Total	59	100.0

Table 4.1: showed that 59 participants were involved in the study. Participants were both females and males. The mean age of participants was 2.29 with a SD of ± 0.527 . 44(74.6%) The majority 74.6% of participants were between the ages of 23-27 years, 22.0% participants were from age group of 28-32 while 3.4% participants were from age group of 33-37.

Table 4.2: Gender of participants (n=59)

Gender	<i>f</i>	Percentage
Male	29	49.2%
Female	30	50.8%
Total	59	100%

Table 4.2: showed that 59 participants were involved in the study. The majority (50.8%) of participants were females and 49.2% were male.

Table 4.3: marital status (n=59)

Gender	<i>f</i>	Percentage
Single	33	55.9%
Married	26	44.1%
Total	59	100%

Table 4.3: showed that 59 participants were involved in the study. The majority (55.9%) of participants were single and 44.1% were married.

Table 4.4: Total years of Job Duration (n=120)

Total years of job Duration	f	Percentage
1-3 Years	21	35.6%
4-6 Years	31	52.5%
> Than 10 Years	7	11.9%
Total	59	100.0

Table 4.4: showed the results of total years of job experience. Results revealed that majority of the 52.5% participants had experience of 4-6 years. 35.6% participants had experience of 1-3 years whereas 11.9% participants had experience of > Than 10 years.

Table 4.5: Name of department, Participant working (n=59)

Name of department	f	Percentage
MICU	19	32.2%
SICU	17	28.8%
CICU	12	20.3%
NICU	11	18.6%
Total	59	100%

Table 4.5: showed that 32.2% participants were working in MICU department, 28.8% participants were working in SICU department, 20.3% participants were working in CICU department whereas 18.6% participants were working in NICU department.

Test for Normality

The shapiro-wilk test was used to check the normal distribution of the data because sample size was >50. The findings revealed that data was normally distributed. Since P-value was > 0.05. Therefore, paired sample t- test was used to test the hypothesis.

Table 4.6: Normality statistics

Variable	Statistic	df	Sig
Stress	0.978	59	0.377
Self-esteem	0.972	59	0.186

Stress:

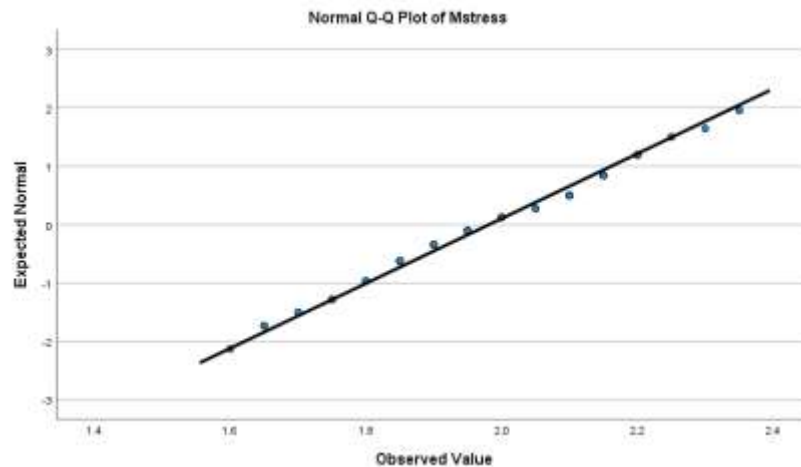


Figure:4.1 showed the normality of stress graphically. As the data points are closed to the diagonal line it means the data is normally distributed. It is evident by the P-value which is 0.37.

Self-esteem:

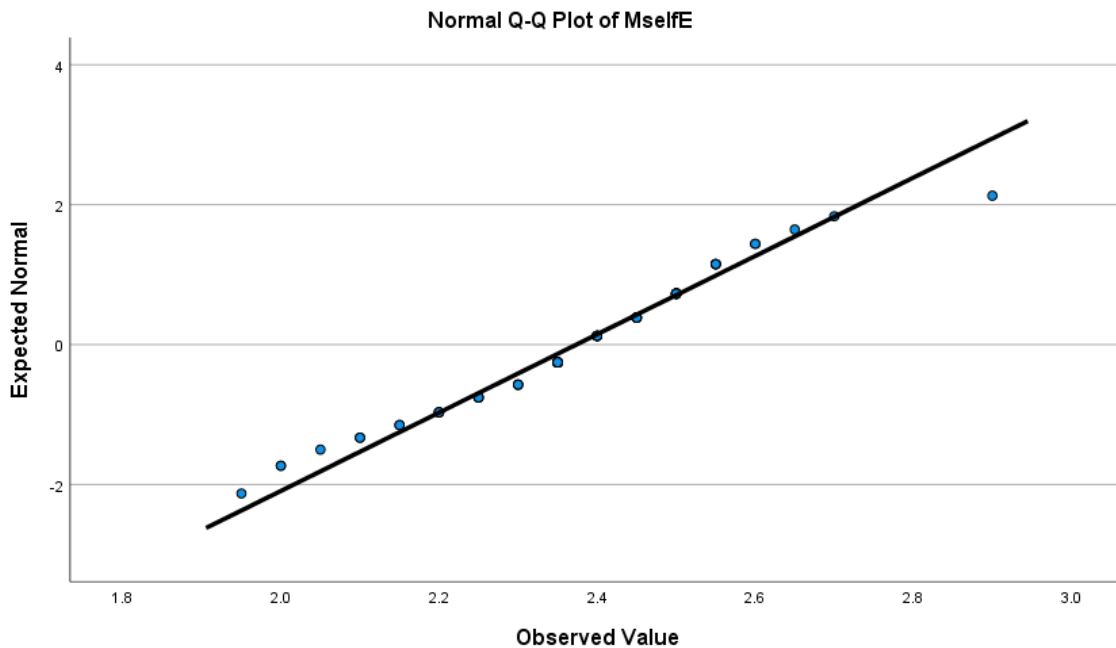


Figure: 4.2 showed the normality of self-esteem graphically. As the data points are closed to the diagonal line it means the data is normally distributed. It is also evident by p-value which is 0.18.

Treatment intervention:

Emotional Freedom Techniques (EFT) is a form of therapeutic intervention that blends cognitive and somatic approaches, often referred to as "tapping" therapy. It aims to alleviate stress by having the participant focus on a specific emotionally troubling event while tapping on various acupressure points on the body. In the first step of the emotional freedom technique session, participant recall a disturbing event for example, "When I was in 1st grade, my mother got angry and slapped me when I said I didn't want to become a nurse." After this the participant self-assess the degree of stress associated with this incident on a 10 point perceived stress scale. Perceived stress scale ranging from 0 to 40. The higher score represents higher stress level and vice versa. On perceived stress scale scoring range from 0-13 would be considered low stress, scoring range from 14-26 would be considered moderate stress, scoring range from 27-40 would be considered high stress. Once participants have determined their perceived stress scale score, they craft a brief verbal summary of the issue they aim to address, intertwining it with a declaration of self-acceptance. In Emotional Freedom Technique, this is known as the "setup statement." This powerful statement fuses the problem with acceptance, such as, "Even though I have (this problem), I fully and completely accept myself." For instance, one might say, "Even though I feel angry when I think about my mother's actions, I fully and completely accept myself."

After addressing the cognitive component, it's time to dive into the somatic part, which can be done solo or with the help of a therapist. This involves a fascinating technique where you tap your fingertips on thirteen specific points on your body—a process known

as a “round” of “tapping.” These points are actually the endpoints of acupuncture meridians used in Traditional Chinese Medicine (TCM). In acupuncture, needles are inserted at these points to alleviate stress and address various physical issues. However, Emotional Freedom Technique, as its founder puts it, is like “acupuncture without the needles.” Instead of using needles, pressure is applied to these acupuncture points, much like in traditional therapies. Interestingly, this method has been found to be just as effective as needling.

Start by tapping on the fleshy outer edge of your hand, which we’ll call the “karate chop point” for simplicity. While tapping this spot on your other hand, repeat your setup statement three times. Next, focus on five points on your face, tapping each about seven times: the inner end of either eyebrow, the side of the eye socket, the center of the bony ridge below the eye, the middle of the upper lip just below the nose, and the center of the chin.

Now, move to your torso and tap two crucial points: the junction where your collarbone meets the sternum, and the ribcage under your arms. Finally, tap five points on your hand: the part of the cuticle closest to your body on each finger (except the ring finger), and finish with the groove between the bones of your last two fingers on the back of your hand.

After completing a round of tapping, participants provide a second PSS (Perceived Stress Scale) score. Typically, they experience a noticeable drop in the distress linked to a negative emotion or traumatic event. For instance, someone might say, “My anger was an eight, but now it’s a three.” To further reduce the PSS score, two or more rounds of EFT may be applied. In this study, most participants completed one or two rounds of tapping during the first ten-minute session, and just one round in the shorter five-minute follow-up session.

Table 4.7: Comparison of practices score pre-post educational intervention (n=59).

Stress Deviation	n	Mean	Standard
Pre-intervention score	59	21.49	±3.047
Post-intervention score	59	18.13	±1.99

Table 4.6: showed the results for reducing stress that were calculated to determine the amount of improvement or decline from pre-test. Independent samples two-tailed t-tests were conducted on the change score to determine if there were significant group differences. The findings revealed that there was a significant difference between pre and post interventional scores regarding stress among nurses working in critical areas of tertiary care hospital The mean score of stress after implementation of emotional freedom technique from, mean, 21.49 standard deviation ±3.04774, to mean 18.1356 standard deviation ±1.99532 according to paired sample t-test, the P-value based on the mean difference before and after the intervention is 0.00 indicating that there is a significant difference in stress before and after implementation of emotional freedom technique.

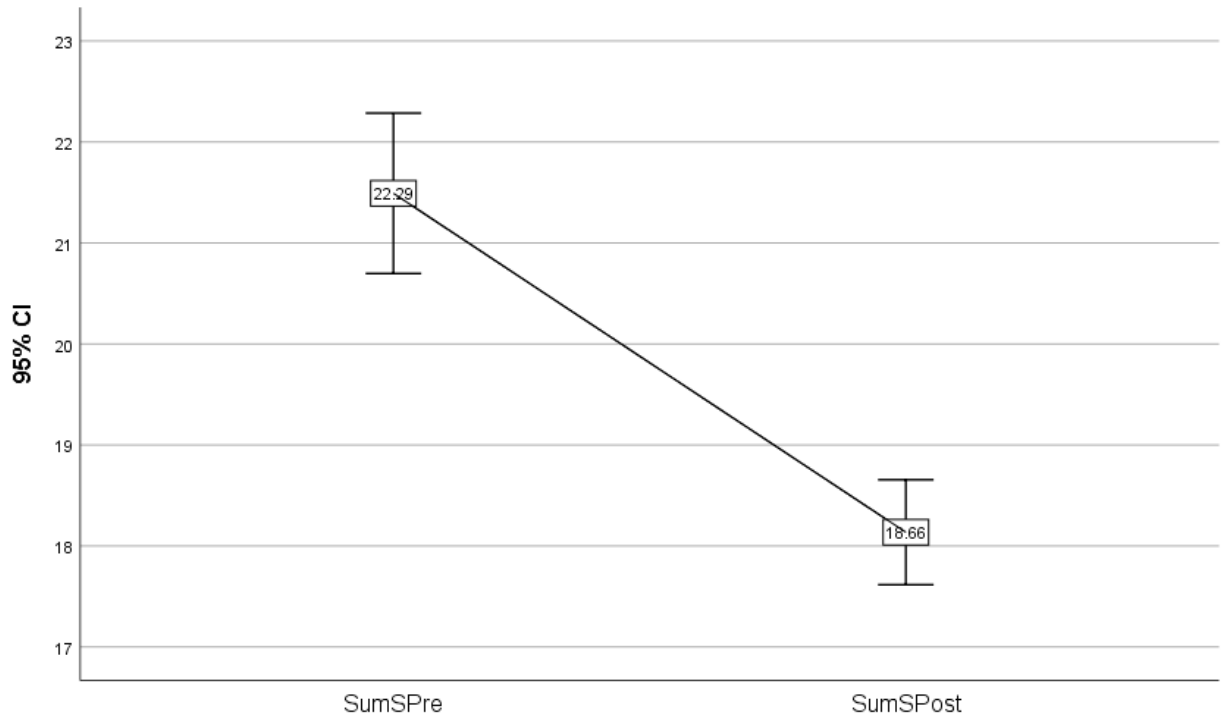


Figure 4.3: the above mentioned figure indicate the pre and post stress level score among nurses working in critical areas of a tertiary care hospital. It indicates that there was significant difference among stress level after implementation of Emotional Freedom Technique.

Table 4.8: Comparison of practices score pre-post educational intervention (n=59).

Self-Esteem Deviation	n	Mean	Standard
Pre-intervention score	59	23.01	± 0.38
Post-intervention score	59	24.45	± 0.27

Table 4.7: showed the results for enhancing self-esteem that were calculated to determine the amount of improvement or decline from pre-test. Independent samples two-tailed t-tests were conducted on the change score to determine if there were significant group differences. The findings revealed that there was a significant difference between pre and post interventional scores regarding self-esteem among nurses working in critical areas of tertiary care hospital. The mean score of self-esteem changes after implementation of emotional freedom technique from, mean, 23.01 standard deviation ± 0.38 , to mean 24.45 standard deviation ± 0.27 according to paired sample t-test, the P-value based on the mean difference before and after the intervention is 0.005 indicating that there is a significant difference in stress before and after implementation of emotional freedom technique.

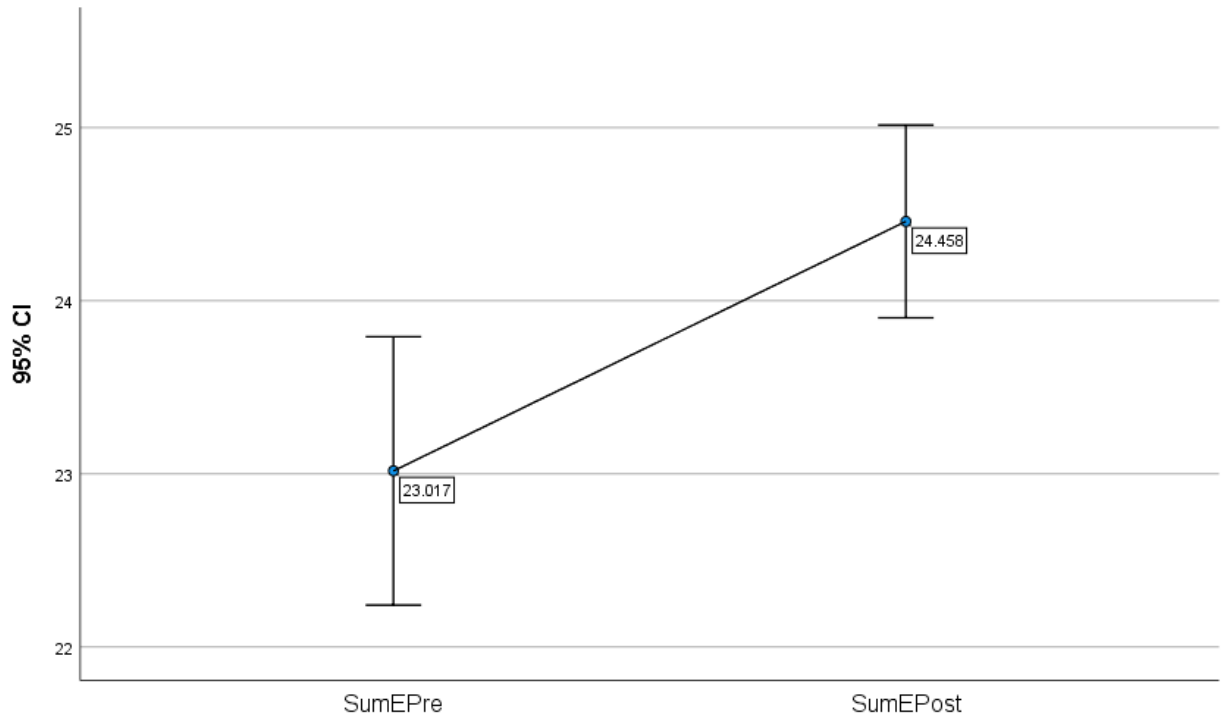


Figure 4.4: the above mentioned figure indicate the pre and post self-esteem score among nurses working in critical areas of a tertiary care hospital. It indicates that there was significant difference among self-esteem after implementation of emotional freedom technique.

CHAPTER 4: DISCUSSION

Discussion:

This chapter focused on discussion of the current study with relevance to the literature. In intensive care units, high stress level and low self-esteem are two important elements which effect the nurse’s practices. Low stress level and high self-esteem among nurses play a major role in the provision of good quality care to the patients.

The basic aim of the study was to evaluate the effect of Emotional Freedom Technique in reducing stress and enhancing self-esteem among nurses working in tertiary care hospital. In the present study, there was a significant ($P < 0.001$) difference among the pre and post intervention score in stress and self-esteem among nurses working in critical areas of tertiary care hospital. The discussion was divided into two parts; the first part of which was concerned with the findings related to the nurses’ stress level. The second part related to the nurses’ self-esteem working in critical areas of tertiary care hospital.

In first part, the findings related to the nurses’ stress level. The findings of the study revealed that before educational intervention nearly all nurses had moderate level of stress. This finding was due to lack of training of nurses in hospital regarding how to reduce their stress level after hectic routine in critical care areas. The findings of the study can be justified as nurses had no previous educational intervention regarding how to reduce stress level.

However, the present study indicated that registered nurses' stress level reduced significantly after receiving educational intervention. The findings of our study was supported by Nazish Saher (2022) who reported that 55.4% nurses who was working in

critical areas experience moderate level of stress. The findings may be due to lack of training regarding how to reduce workload related stress. After educational intervention there was a significant reduction in nurses' stress level. The findings of our study was supported by Naimat Ullah (2022) who reported that prolonged working hours, lack of knowledge regarding instrument operating and conflict with co-workers causing high level of stress among nurses working in critical areas.

Meanwhile, the findings of our study disclosed that nurses under study was not connected to any educational session or any intervention which was helpful for them to control their stress level after long hectic work routines. The result was similar to Kaushik (2021) who reported nurses experienced moderate level of stress working in critical areas of tertiary care hospital.

Conversely, the findings of our study before educational intervention, that majority of nurses had moderate level of stress and was found to be significantly associated with working in critical areas. After educational intervention the stress level of nurses was reduced as evident by mean from 21.49 to 8.13. The findings were supported with Berna Dincer (2021) who found in a study which entitled "The effect of Emotional Freedom Techniques on nurses' stress, anxiety, and burnout levels" that those nurses working in critical areas have moderate level of stress. After educational intervention the stress level of nurses were significantly reduced as evident by mean from 7.82 to 2.85.

The second part related to the self-esteem of nurses working in critical areas of tertiary care hospital. The introduction of Emotional Freedom Technique (EFT) significantly enhanced self-esteem in our study as evident by the mean value changes from 23.01 to 24.45. The findings of our study was align with a study revealed enhancement in self-esteem as evident by the changes in mean value from 68.9 to 71.9. Emotional Freedom Technique may influence the body's physiological systems that regulate stress, emotional intensity, and neural transmission frequencies. When combined with cognitive strategies and systems like acupuncture, a synergistic effect occurs, leading to changes in the cognitive, behavioral, and neurochemical foundations of psychological issues. Emotional Freedom Technique seems to reduce amygdala activity, calming the threat response to emotional triggers. Similar to cognitive behavioral therapy and mindfulness, Emotional Freedom Technique is based on the idea that accepting a condition or problem can alleviate suffering rather than resisting it. It is effective in addressing mood disorders, anxiety, and negative thoughts, and can also enhance self-esteem, particularly in nurses (Bach et al., 2019) (Dincer & Inangil, 2021).

The findings of our study were in the same line with another study conducted in a tertiary care hospital, among 115 nursing professionals with a single non-equivalent group. After the educational intervention, the nursing professionals were more assertive and have high self-esteem ($P=0.00$). The findings were aligning with our study as nurses were confident ($P=0.005$).

When a nurse has low self-esteem, it can lead to several negative outcomes. These may include experiencing anxiety, neglecting to finish necessary or assigned tasks, being disorganized and neglectful of responsibilities, having an aversion to structure and schedules, resisting change, rejecting new ideas, showing a lack of concern for others' feelings, and displaying a diminished interest in others' issues, including those of their patients (Wati, Sansuwito, Rai, et al., 2022).

A nurse with high self-esteem will develop self-confidence, trust in their abilities, a sense of usefulness, and a belief that their presence is valuable in the world. Such a nurse is likely to achieve the desired performance levels. An employee with self-esteem will exhibit greater enthusiasm, independence, capability, and empowerment. They will be more willing to accept challenges, exhibit confidence, persist through difficulties, readily take responsibility, face life more effectively, and feel equal to others. These positive feelings will influence their behavior, leading to optimal performance in patient care (Wati, Sansuwito, Rai, et al., 2022).

To our knowledge, this is the first study to evaluate the effectiveness of the American Psychological Association (APA) guidelines of EFT and evaluating the outcomes regarding stress and self-esteem among nurses in a private tertiary care hospital Lahore, Pakistan. The study is useful for nurses to manage their workload stress and to enhance their self-esteem. Though, there are certain limitations, such as the study is a single center and lack of a control group, which may restrict its actual usefulness.

CHAPTER 5: CONCLUSION & RECOMMENDATIONS

5.1: Conclusion The current study demonstrated that Emotional Freedom Technique (EFT) had significantly reduced stress and improved self-esteem among nurses working in tertiary care hospital Lahore. EFT guidelines had significantly reduced the stress and enhancing self-esteem among critical care area nurses. EFT guidelines are feasible and helpful for nurse to update their knowledge regarding to control stress and enhancing self-esteem in clinical care settings.

5.2: RECOMMENDATIONS

Further research and replication of the study is needed to generalize the result and outcomes of the study on larger sample size. The current study contributes to the existing literature regarding use of the third edition of Emotional Freedom Technique (EFT) manual guidelines for nurses working in critical areas of tertiary care hospital Lahore. The periodic in-service educational training programs and hands on practice workshops should be provided to nurses so as to keep their stress level reduced and high self-esteem. Furthermore, guidelines of EFT should be provided to critical care units. The study should be conducted in multi-center settings to assess effectiveness of EFT in reducing stress and enhancing self-esteem in clinical settings.

LIMITATIONS:

The study was a single setting, including only one hospital, which may limit its generalizability. Nurses from other organizations can be included for more generalization of the results.

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