



Effect of Mantram Repetition as Mindfulness Strategy on Psychological Wellbeing among Nurses in Psychiatric Wards

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ABSTRACT

Background: Nurses treating patients having psychiatric disorders experience numerous stressful events affecting patients' care. Mindfulness mantram repetition, where a sacred word or phrase is silently repeated, can be used as a stress management technique to retrain an individual's attention. **Aim:** To evaluate the effect of mantram repetition as mindfulness strategy on psychological wellbeing among nurses in psychiatric wards. **Design:** Quasi-experimental (one group pre-post). **Setting:** The research carried out at "The Psychiatry, Neurology and Neurosurgery Center, affiliated to Tanta University Hospitals, Gharbya governorate, Egypt. **Subject:** A convenience sample of 50 nurses. **Tools:** two tools used in this research **Tool I;** The Perceived Stress Scale (PSS). **Tool II;** Ryff's Psychological Well-Being Scales (PWB). **Results:** A high statistically significant differences between nurses' levels of stress before and after the mindfulness mantram repetition intervention (**P-value** = 0.000). A high statistically significant differences between nurse's psychological wellbeing before and after the mindfulness mantram repetition intervention (**P-value** = 0.000), and a statistically significant negative correlation between nurses' level of stress, and their psychological wellbeing $r = -.381$, $P\text{-value} = 0.06$. **Conclusion:** The mindfulness mantram repetition intervention had a considerable positive impact on reducing the nurses' stress and improving their psychological wellbeing. **Recommendations:** Enhancing nurses' coping mechanisms by making time for mindfulness activities and encouraging them to use this activity.

Key words: *Mantram Repetition, mindfulness, psychological wellbeing, Stress.*

Introduction

Nursing is a demanding profession with high levels of stress, particularly for nurses providing in-hospital care (**Jokwiro et al. 2021**). Nurses working with psychiatric patients face higher stress than those in other departments due to the unique nature of their work, increasing their work risk. The psychological and social stress experienced by these nurses is greater than that of general nurses (**Goldberg 2018**).

Nurses working in the field of psychiatry often report facing various stressors due to the demanding and high-risk nature of their job (**Badu et al., 2020**). These stressors are related to working with coworkers, patients, and their families, as well as the organizational structure, requirements, processes, and environment. For example, inpatient wards in psychiatry can be very stressful and chaotic (**Foster et al., 2018**).

Nurses in the psychiatric field often face a variety of stressors, such as managing emergencies, treating patients with complex needs who may display aggressive behavior, and dealing with potential suicides. Other sources of stress include inadequate referrals, insufficient supervision, security issues, conflicting job responsibilities, and communication problems. The high levels of stress experienced by psychiatric nurses have garnered significant attention due to its negative effects on the nurse, their work, and

the patients they care for (**Hasan & Tumah, 2019**).

Mindfulness is defined as a self-directed practice aimed at relaxing the body and calming the mind through focus on the present moment (**Mansor et al 2022**). It involves paying attention to one's thoughts, bodily sensations, and external stimuli without judgment or assigning meaning to them (**Zhang et al 2021**). Mindfulness therapy employs various techniques, such as meditation, physical awareness, yoga, and mantras, to increase inner focus and improve self-regulation, ultimately reducing stress, alleviating pain, and enhancing overall well-being (**Álvarez-Pérez et al., 2022**).

Mantram (also known as mantra) is an ancient practice that can be found in many spiritual traditions. It involves repetitively repeating a single word, phrase, or prayer and is sometimes referred to as a mantram in Eastern traditions or a holy name in Western traditions (**Oman & Bormann. 2020**). This mindfulness practice has been used for centuries in various religious traditions and can be done anywhere without the need for a specific time or place, unlike many meditation techniques (**Badu, 2022**).

A mantram is a personal, sacred word or phrase that a person repeats to themselves intermittently throughout the day to improve their focus and redirect their thoughts. The

practice of repeating the mantram involves slowing down and becoming more mindful, focusing on the present moment without distractions, and avoiding multitasking (Lynch et al., 2018 & Leary et al., 2018).

The mantram repetition program has been shown to alleviate stress and psychological distress and enhance quality of life in various populations. The program instructs individuals to slow down their thoughts and focus their attention by repeatedly saying a personal word or phrase with spiritual significance (Indradevi 2020 & Bormann et al 2014). The practice is simple and can be done discreetly, and is recommended to start during relaxed moments and before bed to facilitate relaxation, increase mindfulness, and improve sleep (Beck et al 2017). As the individual progresses, the technique can be used during stressful events or intrusive thoughts to regulate emotions and calm behavior (Indradevi, 2020).

The psychological well-being of nurses is a major concern in the nursing profession (Lee et al 2019). Nurses with higher levels of mindfulness are better equipped to maintain their well-being by having greater emotional awareness, understanding, acceptance, and the ability to improve negative moods (Foster et al. 2018). This study explored the impact of using mantram mindfulness therapy as a stress intervention for nurses working in

psychiatry on their psychological well-being (Oman & Bormann, 2020).

Significance of the study

The psychiatric nursing field has been recognized as a demanding and high-risk occupation due to stressors such as working with patients, colleagues, and carers in organizational environments (Jansen et al 2020, Ghaedi et al 2020). This has led to negative impacts on the psychological well-being of nurses, which in turn affects their health and the quality of patient care (Hasan & Tumah 2019). The stress is due to conflicting roles, aggressive behaviors from patients, and role conflict. To address these issues, mindfulness mantram repetition has been introduced as a stress intervention for nurses working with psychiatric patients, as spirituality has been recognized as a crucial factor for health and well-being (Lynch et al., 2018 & Indradevi, 2020).

Research aim

This research aimed to evaluate effect of mantram repetition as mindfulness strategy on psychological wellbeing among nurses in psychiatric wards **through:**

1. Assess the level of stress and the psychological wellbeing among nurses pre intervention
2. Develop and apply the mindfulness mantram repetition intervention on nurses.

- Evaluate the level of stress and the psychological wellbeing among nurses post intervention.

Operational definition

Mindfulness mantram repetition refers to the silent and intermittent repetition of a self-selected word or phrase with spiritual meaning throughout the day to train an individual's attention and redirect undesired thoughts.

Hypothesis

H1: Mindfulness mantram repetition intervention is expected to reduce the perceived stress among nurses working in psychiatric wards.

H2: Mindfulness mantram repetition intervention is expected to enhance psychological wellbeing of nurses working in psychiatric wards.

Subject and Method

Design:

The study followed a quasi-experimental design one group pre-posttest.

Setting:

Data collection was performed at "The Psychiatry, Neurology and Neurosurgery Center. This center is affiliated to Tanta University Hospitals. Gharbya governorate, Egypt. The center provides services as electroconvulsive therapy, diagnostic services (laboratory and radiology), intensive care department, the neurological diseases

inpatient department, the Department of Neurological and Psychological diseases for the Children, inpatient male and female psychiatric departments, and the Addiction department. The center provides health care services to all the admitted patients from Gharbya, Menofia, and KafrElsheikh governorates. It operates seven days a week, twenty-four hours a day.

Subject:

Fifty nurses (20 males & 30 females) providing direct care for patients with psychiatric disorders participated in the study, selected through convenience sampling.

Study tools: Two tools used to collect data of this study.

Tool I: The Perceived Stress Scale (PSS) adapted from the (*Cohen S., et al 1983*) to evaluate perception of stress, consisted of ten items. Each item is assessed on a 5 –point Likert scale, scored (from 0 to 4) as follows: never was scored (zero), almost was scored (1), sometimes was scored (2), fairly often was scored (3) and very often was scored (4).

Scoring system:

The total PSS score range from 0-40. Classified as follow

- < 50% = Low Percieved Stress
- 50: 75% = Moderate Percieved Stress
- > 75% = High Percieved Stress

Tool II; " Ryff's Psychological Well-Being Scales (PWB)". This scale was adopted from (Ryff , 1989) to evaluate nurses' psychological wellbeing. It consisted of 42 items divided into six subscales (autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance). Each item was scored on a 5-point Likert scale ranging from 1 "strongly disagree" to 5 "strongly agree". The total score was (42 to 210).

Scoring system of PWB scale was as follow:

< 50% = low Psychological well-being

50 %- 75% = average Psychological well-being

> 75% = high psychological well-being

Tools of the study were supported by nurses' sociodemographic and professional information such as age, gender, residence, income, level of education, and years of experience.

Method:

An authorized letter was allotted from faculty of nursing, kafrelsheikh University to setting of the study application to obtain approval for data collection.

The researchers translated the study's tools into Arabic and had them tested for content validity by a jury of five experts in the field of psychiatric nursing to ensure that the items were appropriate for measuring what

they were supposed to measure, and the tool was found to be valid.

Ethical consideration:

- Ethical committee acceptance letter was approved with code (MKSU 23-1-12).
- Written consent for voluntary participation was obtained from all nurses participating in the study.
- The subjects were informed about the purpose of the study and ensured that the information acquired would be kept confidential and utilized only for the purpose of the study.
- Respecting the right of the study subjects to refuse to participate or to withdraw from the study at any phase was emphasized.
- The nature of the study does not produce harm for subjects

A pilot study was carried out before embarking in the field of work on 10% from total subjects to ascertain the clarity and applicability of the study tool. Also, it served to estimate the approximate time required for filling study tool as well as to identify obstacles that might be faced during data collection. After pilot study, it was found that each nurse took 15- 20 minutes to fulfill tool of the study and no modification was done on study tool. The pilot subjects were excluded later from actual study sample.

Internal consistency of the study tools (tool I and tool II) was done using Cronbach's

Alpha coefficient, which yielded values of $r = (0.924, 0.782)$ respectively.

The data was collection over a period 3 months started from May 2022 to August 2022.

Actual study: The actual study divided into the four phases.

Phase one: Assessment phase (pretest)

The study subjects were given the tools individually and asked to fill out the scales in the presence of researchers for any clarification. The filling time for the scales was approximately 15 to 20 minutes. This phase aimed to assess the subjects' needs as a baseline for the intervention.

Phase two: Development of the mindfulness mantram repetition intervention program

The intervention was designed based on the results of phase one and a comprehensive review of relevant literature. (Álvarez-Pérez et al 2022, Duffy et al 2022, Harris et al 2021, Hallett 2021, Matko et al 2021, Indradevi 2020 & Bormann et al 2014).

- The mindfulness mantram intervention program was designed to reduce stress and improve psychological wellbeing of the participants.
- The program consisted of three core practices: mantram repetition, slowing down and one-pointed attention.
- Participants were divided into small groups of 3-5 individuals and conducted the

program in 5 sessions per group over two days of the week (Saturday and Wednesday).

- Each session lasted for approximately 60-90 minutes.

Phase three: Implementation of the mindfulness mantram repetition intervention program

The implementation phase was divided into five sessions.

The first session was an orientation aimed at building trust and introducing the objective of the program, while also discussing the major stressors faced by nurses in caring for patients with psychiatric disorders. At the session termination, the researchers revised the next sessions' schedule with the participants.

In the second Session: This session covered the concepts of stress management techniques, types and importance of relaxation techniques, and mantram intervention description. The researchers discussed with nurses the mindfulness mantram repetition concept and importance. Clarifying that mantram repetition intervention is supported by intentionally slowing down and emerging single mindedness. Slowing down conveys being intentional throughout the existing moment. One pointed attention is being focused without diversion on a self-selected task; one-

pointed attention is the opposed to multitasking.

The third session involved clarifying the application of the intervention and demonstration/re-demonstration by the researchers and nurses. Every nurse self-selected a word or phrase with a spiritual meaning as (In the name of Allah' the most Merciful, the most Compassionate, There is no might or power except with Allah, There is no God but Allah, Muhammad is the messenger of Allah, Oh God bless and bless our prophet Mohammed,etc). Every meaningful word or phrase is repeated silently throughout the session 3 times; each time continued 5 minutes.

The fourth session focused on enhancing the application of the mindfulness mantram intervention by every nurse for 10 minutes. Ensuring that mantram is portable and can be practiced anywhere; no special equipment, device applications, or specific practice locations are required. Feedback from the study subject was obtained. The researchers discussed with nurses their emotions regarding the mindfulness mantram intervention.

The fifth session aimed to emphasize the importance of repeating the intervention throughout the day. The researchers evaluate the mindfulness mantram intervention.

Throughout the program, the researchers served as facilitators and instructors, fostering critical thinking and encouraging participation and feedback from the participants. By the end of each session, the participants were asked to note any constructive changes they experienced.

Phase four: Evaluation phase

The evaluation phase of the mindfulness mantram intervention involved reapplying the study tools to all participants both immediately after the intervention and one month later. The purpose was to assess the effectiveness of the intervention.

Statistical Analysis:

The data was processed using SPSS (version 19) software for organizing, tabulating, and statistical analysis. Quantitative data was evaluated using range, mean, and standard deviation calculations. For qualitative data, the frequency, percentage, and comparison between categories were assessed using Chi square test. T-test was used for comparison between independent groups' means and paired t-test for related groups. ANOVA test was used for comparing means of more than two groups. Results were considered significant at $P < 0.05$ and highly significant at $P \leq 0.001$.

Results

Table 1 illustrates 60% of the studied nurses were females, 42% of them were in the

age category (31 – 40 years) with Mean \pm SD 36.04 ± 8.14 , 64% of them were married, 42% of them had nursing diploma, 68% of them reported having enough family income, and 64% of them had more than 10-years of experience.

Table 2: Demonstrates a significant difference between the studied nurses' mean scores of perceived stress pre and post intervention (2.44 ± 0.70 & 1.42 ± 0.67) respectively at $P \leq 0.001$.

Table 3 Demonstrates a significant difference between the studied nurses' mean scores of psychological wellbeing pre and post intervention (1.58 ± 0.70 & 2.56 ± 0.67 respectively) at $P \leq 0.001$.

Table 4 Demonstrates significant differences were found between the studied nurses' mean scores of psychological wellbeing subscales (autonomy, environmental mastery, personal growth, positive relation, purpose in life, and self-acceptance) pre and post intervention at $P \leq 0.001$.

Table 5: Reveals that a significant negative correlation was found between nurses' level of **perceived stress**, and their psychological wellbeing where $r = -0.381$ at $P \leq 0.001$

Table 6: The result revealed that, there were a statistically significant relation between nurses' level of stress and their residence, income, and years of experience

while ($F = 7.611$ & $P\text{-value} = 0.008$), ($F = 3.251$ & $P\text{-value} = .004$), ($F = 5.443$ & $P\text{-value} = 0.007$) respectively.

Table 7: The result demonstrated that, there were statistically significant relationship between nurses' level of psychological wellbeing and their marital status, education level, income, and years of experience while ($f = 8.051$ & $p\text{-value} = 0.000$), ($f = 8.918$ & $p\text{-value} = .001$), ($f = 7.562$ & $p\text{-value} = 0.003$), ($f = 4.899$ & $p\text{-value} = 0.012$) respectively

Table 1: Studied nurses' socio-demographic characteristics and work experience.

Studied nurses (n =50)			
Socio-demographic characteristics		N	%
Sex	Male	20	40%
	Female	30	60%
Age	20 – 30	15	30%
	31 – 40	21	42%
	41 –	14	28%
	Mean \pm SD: 36.0400 \pm 8.14652		
Marital status	Single	10	20%
	Married	32	64%
	Divorced	5	10%
	Widow	3	6%
Residence	Urban	31	62%
	Rural	19	38%
Education level	Deplom of nursing	21	42%
	Institute of nursing	18	36%
	Bachelor of nursing	11	22%
Income	Enough	34	68%
	Not enough	16	32%
Years of experience	1-5	12	24%
	5- 10	15	30%
	>10-	23	64%

Table 2: Comparison between mean scores of the studied nurses' perceived stress pre and post intervention

	Pre	Post	Mean Difference	Paired t-test	
	Mean \pm SD	Mean \pm SD	Mean \pm SD	T	P-value
Perceived stress	2.44 \pm 0.70	1.42 \pm 0.67	1.02 \pm 1.23	5.83	0.000*

*Pre = preintervention

*Post = post intervention

Table 3: Comparison between mean scores of the studied nurses' psychological wellbeing pre and post intervention

	Pre	Post	Mean Difference	Paired t-test	
	Mean \pm SD	Mean \pm SD	Mean \pm SD	T	P-value
Psychological wellbeing	1.58 \pm 0.70	2.56 \pm 0.67	0.98 \pm 0.99	6.931	0.000**

*Pre = preintervention

*Post = post intervention

Table 4: Comparison between mean scores of the studied nurses' psychological wellbeing subscales pre and post intervention.

	Pre		Post		Difference		Paired T-test	
	Mean	SD	Mean	SD	Mean	SD	T	P-value
Autonomy	1.3600	.66271	2.3600	.63116	-1.000	.75593	-9.354-	.000*
Environmental mastery	1.4400	.64397	2.6000	.49487	-1.1600	.71027	-11.548-	.000*
Personal growth	1.4400	.70450	2.3400	.65807	-.90000-	.78895	-8.066-	.000*
Positive relation	1.1600	.37033	2.6000	.49487	-1.4400	.64397	-15.812-	.000*
Purpose in life	1.6800	.65278	2.7000	.58029	-1.0200	.79514	-9.071-	.000*
Self-acceptance	1.4694	.64878	2.5918	.67449	-1.12245	.85714	-9.167	.000*

*Pre = preintervention

*Post = post intervention

Table 5: Correlation between nurses' perceived stress and psychological wellbeing total scores

	Correlation Coefficient	
	Stress	
	R	
Psychological wellbeing		-.381
	P-value	.006*

* Statistically significant

Table 6: Relation between studied nurses' level of stress and their socio-demographic characteristics.

Studied nurses (n =50)				Level of Stress	
				ANOVA test	
Socio-demographic criteria		N	%	F	P-value
Sex	Male	20	40%	.356	.553
	Female	30	60%		
Age	20 – 30	15	30%	1.305	.253
	31 – 40	21	42%		
	41 –	14	28%		
	Mean SD: 36.0400 ± 8.14652				
Marital status	Single	10	20%	2.643	.060
	Married	32	64%		
	Divorced	5	10%		
	Widow	3	6%		
Residence	Urban	31	62%	7.611	.008*
	Rural	19	38%		
Education level	Deplume of nursing	21	42%	2.666	.080
	Institute of nursing	18	36%		
	Bachelor of nursing	11	22%		
Income	Enough	34	68%	3.251	.004*
	Not enough	16	32%		
Years of experience	1-5	12	24%	5.443	.007*
	5- 10	15	30%		
	>10-	23	64%		

* Statistically significant

Table 7: Relation between studied nurses' level of psychological wellbeing and their socio-demographic characteristics.

Studied nurses (n =50)				Psychological wellbeing	
				ANOVA test	
Socio-demographic criteria		N	%	F	P-value
Sex	Male	20	40%	.007	.933
	Female	30	60%		
Age	20 – 30	15	30%	.765	.737
	31 – 40	21	42%		
	41 –	14	28%		
	Mean SD: 36.0400 ± 8.14652				
Marital status	Single	10	20%	8.051	.000*
	Married	32	64%		
	Divorced	5	10%		
	Widow	3	6%		
Residence	Urban	31	62%	.496	.485
	Rural	19	38%		
Education level	Deplume of nursing	21	42%	8.918	.001*
	Institute of nursing	18	36%		
	Bachelor of nursing	11	22%		
Income	Enough	34	68%	7.562	.003*
	Not enough	16	32%		
Years of experience	1-5	12	24%	4.899	.012*
	5- 10	15	30%		
	>10-	23	64%		

*Statistically significant

Discussion

A mantram is a mindfulness-body-spiritual technique to stress management as stress is high among nurses and has negative consequences on their and patients' health. Mantram mindfulness techniques allow persons to be more self-aware and present in the moment and manage their wellbeing (Oman & Bormann, 2020). The aim of this study was to evaluate effect of mantram repetition as mindfulness strategy on

psychological wellbeing among nurses in psychiatric wards. The research findings provide support for the study's research hypotheses.

The study found statistically significant differences in nurses' level of stress before and after the mindfulness mantram repetition intervention. The researchers attribute the significant reduction in perceived stress after the intervention to the ability of the nurses to better handle personal problems, cope with

daily duties, control daily irritations, and manage anger outbursts. This suggests that the intervention program helped in improving the nurses' stress management skills.

The results of the current study are in line with the research which highlighted that mantram repetition has beneficial effects on reducing stress **Malaktaris et al., (2022)** who also found that mantram repetition practice decreases stress symptoms. **Hulett et al., (2022a)** found in their study "Acceptability of the Mantram Repetition Program to Reduce Stress" that the study participants reported low to moderate levels of stress and anxiety after the intervention, compared to high stress levels before the intervention. **Leary et al., (2018)** in their study "The effect of mantram repetition on burnout and stress among VA staff" found that mantram repetition was effective in decreasing stress levels. Additionally, **Bormann et al., (2018)** in their research "Individual Treatment of Posttraumatic Stress Disorder Using Mantram Repetition" found that stress symptoms were improved after the intervention. These studies provided further support for the efficacy of mantram repetition in reducing stress among nurses.

The study showed significant improvements in nurses' psychological wellbeing after the implementation of the mindfulness mantram repetition intervention program. The researchers attribute this

improvement to a decrease in the nurses' stress levels, the effects of mantram repetition, training in one-pointed attention, increased enjoyment in daily events, more relaxed approach to responsibilities, strengthened relationships, better handling of daily life events, and increased self-acceptance. These findings suggested that the intervention program had a positive impact on the psychological wellbeing of the nurses.

These study findings aligned with the research on the benefits of mantram repetition on psychological wellbeing which conducted by **Hulett et al., (2022b)** and **Oman & Bormann, (2022)** as they showed that mantram repetition can enhance psychological wellbeing and improve mental health outcomes. Also, **Kostovich et al., (2021)** found that nurses who participated in an Internet Mantram Program reported increased mindfulness, compassion satisfaction, psychological well-being, and nursing presence. These results supported the current study conclusion that the mindfulness mantram repetition intervention program had a positive impact on the psychological wellbeing of the nurses.

The results of the current study indicated a strong correlation between the reduction in nurse's stress levels and the improvement in their psychological wellbeing. These findings were supported by the researches that showed a relationship between stress reduction

through mindfulness techniques such as mantram repetition and increased psychological well-being Lee, (2021) & Kim et al., (2018). The present study results suggested that the mindfulness mantram repetition intervention program played a significant role in this improvement.

The study found statistically significant relationships between nurses' level of stress and their residence, income, and years of experience. This may be due to the cultural and social differences between urban and rural areas, the impact of income on stress levels and ease of life, and the influence of work experience on coping with work conditions.

Additionally, the study also revealed statistically significant relationships between nurses' level of psychological well-being and their marital status, education level, income, and years of experience. This may be due to the social and psychological support provided by partners and families, the positive impact of higher education levels on career and social domains, the benefits of higher income on overall welfare, and the role of experience in improving familiarity with the work environment and social and professional skills.

The present study was supported by the findings of Duffy et al., (2022), Harris et al., (2021) & Hallett, (2021) that suggested the use of mindfulness mantram repetition as a

feasible and effective stress management strategy, as they are capable of improving psychological and social wellbeing in the workplace.

Conclusion

Based on the results of the present study, it can be concluded that the mindfulness mantram repetition intervention had a considerable positive impact on reducing the nurses' stress and improving the nurses' psychological wellbeing.

Recommendation

The findings of this study inspired a number of suggestions:

- The mindfulness mantram repetition intervention program should be used with general population
- Further researches with larger and higher-quality trials are needed to draw more conclusive and generalizable results.
- The mindfulness mantram repetition intervention should be used as a complementary treatment for nurses and patients.
- Postgraduate education curricula should cover this topics
- Encouraged nurses to participate in these programs, which should also be arranged in their work organizations.

Conflict of Interest

The authors reported no conflicts of interest regarding the research, authorship, or publication of the article.

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