

IMPACT OF MUROTAL AND MUSCLE RELAXATION THERAPY ON ANXIETY, DEPRESSION LEVELS, AND QUALITY OF SLEEP

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Abstract

The current investigation is aimed at exploring the effects of Murrotal therapy along with a combination of progressive muscle relaxation techniques on the quality of sleep, depression, and anxiety levels. To measure anxiety and depression the Hospital Anxiety and Depression Scale (HADS) was used. To assess the quality of sleep the Pittsburgh Sleep Quality Index (PSQI) was used. Two groups of individuals/patients were taken from the local hospital in Peshawar. One group was undergoing Murrotal therapy along with muscle relaxation. The other group was just using medications. The results of the study indicated that for the individuals who were using Murrotal therapy along with muscle relaxation their anxiety and depression levels were decreased.

Keywords: Anxiety, depression, quality of sleep, Murrotal therapy, and muscle relaxation therapy

Introduction and Literature Review

Insomnia is a frequent occurrence in modern culture, but scientists are just beginning to understand its far-reaching implications on brain functioning. While there is considerable agreement that sleep deprivation

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causes slowed responses and greater functional variability, especially with basic measures of monitoring, attention, and alertness, however there is less agreement on the influence of sleep deprivation on memory. There is little agreement on the impact of sleep deprivation on many intellectual capabilities, including cognition, memory, and management functions (Villablanca, 2004).

Sleep loss may influence specific cognitive systems, according to new data. Despite the restoration of alertness and vigilance by regeneration methods, some parts of high cognitive skills are typically harmed by sleep deprivation (Schulz, 2022). Several factors affect the quality of sleep, such as physical health status, environment, diet, lifestyle, medication, and depression, in addition, depression can be caused by numerous factors among them: economic status, relationships with family, anxiety in dealing with daily life and depression (Robbins & Judge, 2015).

Sleep quality problems that occur in people can have different effects on their health such as physical illness, confusion, and depression, which can lead to the development of various diseases (Handayani, Swasana, Purnomo, & Agustina, 2019). Intellectual disability, higher glucose, high frequency of high blood pressure, and Non-Disability Emotional Disorders are some of the health issues that people face when they don't get enough sleep (Luz et al; 2022). It is well-known fact that high levels of stress have a detrimental effect on physical and mental health (depression or unpleasant stress) (Behere, Yadav, & Behere, 2011). Studies show that Sleep has a vital role in mental and physical health (Ratcliff et al., 2009). Studies in the United States, Australia, and India report that students with poor sleep quality get worse grades on their tests and are more stressed than their peers (Vanderlind et al., 2014)

High levels of stress can interfere with mental functioning, concentration, and academic achievement (Dahlin, Joneborg, & Runeson, 2005). Depression can also cause physical and psychological symptoms such as anxiety, changes in appetite, headaches, mood swings, and, disturbed sleep patterns (Kurebayas al., 2012).

A Muslim prayed to God by reciting Quran to strengthen the bond between God and man (Hojjati et al., 2014). Praying to God is a way of finding peace of mind in the face of life's problems at work, in the family, and in the community. Reading the Qur'an can reduce stress and keep the mind in a state of calm (Kamal, Mahmood & Zakaria, 2013). Murottal treatment is listening to a voice recording of Al-Qur'an by a Qari (Muslim scholar) listening to Al-Qur'an gives comfort, peace, and tranquility (Wahid & Nashori, 2021).

According to Setiawan, Hospitalized patients' sleepiness improves by following Murottal treatment modalities. Surah Ar-Rahman, which comprises 78 verses, is one of the surahs of the Qur'an utilized in Murottal therapy. The line "Fa Bi ayyi Alai robbikuma Tukadzidziban," which means "Which, then,

of your Lord's benefits do you both refuse," is repeated several times in Surah Ar-Rahman. Surah Ar-Rahman verses 1-78 of the Al-Qur'an describe a pleasant emotional state, and the repeating of this verse highlights the strongest belief that can create the impact of calmness.

Progressive muscle relaxation is a relaxing method that incorporates breathing techniques as well as a variety of other muscle relaxation techniques. Muscular contraction promotes tranquility, and meditation enhances sleep quality, particularly in elder people (Handayani, Swasana, Purnomo, & Agustina, 2019). Daud, & Warjiman (2016) identified that even if continuous relaxation muscle treatment was used, 52.4 percent of elderly adults even had poor sleep quality. As a result, any additional therapy must be combined with it, and it could be a Murottal therapy.

A non-blind randomized controlled trial was done in Iran, which indicates that the voice of the Quran greatly affects the level of anxiety in cardiac patients (Babaii, Abbasinia, Hejazi, Seyyed Tabaei, & Deghani, 2015). This is also supported by a study conducted by Majidi (2004), that concluded the state of anxiety significantly decreases by listening to the Quran in cardiac patients undergoing open-heart surgery.

In the Qur'an, there have been many references regarding the connection between remembering Allah and reading the Qur'an, which gives relaxing effects and decreases nervousness. "We have sent down the Qur'an on that which is a healing and a mercy for the believers. (Al-Isra/ 82), it seems like listening to the Quranic verses can distract the negative thoughts which create anxiety and depression and hence help the individuals in improving from psychological distress and lowering the intensity of anxiety and depression (Mirbagher Ajorpaz, & Aghajani, 2011).

Murottal is the reading and listening to the Quranic verses according to Islamic teaching. And listening to the rhythmic reading of the Quran gives peace and calmness according to Islamic believers (Babamohamadi et al., 2017).

This is in accordance with a study published in 2017 by Jayus et al., the study was conducted to look at the impact of hearing the Qur'an on stress and depression in forty cardiac patients. They listen to Quranic Verses five times for 24 hours, the results indicate a decrease in stress levels among the patients (Jayus et al., 2017).

A study carried out by Babamohamadi et al. (2017), found that administering Murottal treatment for at least one month in hemodialysis patients resulted in a substantial decline in the level of anxiety and unease. The Depression level of the individuals after the Murottal therapy substantially decreased. The results of another study also showed that women's depression levels decreased significantly after the Murottal therapy was used for four weeks (Rafique, Anjum, & Raheem, 2019). A study was conducted to assess the effectiveness of using progressive muscle relaxation with Murottal therapy in improving sleep quality. It was found that elderly

individuals have much better sleep quality who were taking Murottal along with muscle relaxation and the aged one who was getting only muscle relaxation (Handayani, Swasana, Purnomo, & Agustina, 2019).

Objective

The goal of this research investigation is to see how sleep quality, anxiety, and depression were affected by a combined therapy (progressive muscle relaxation therapy and surah Rehman recitation).

Hypotheses

1. Anxiety and depression level of the people who are taking Murottal therapy in combination with the progressive muscle relaxation therapy, will decrease as compared to the people who are taking medication.
2. Sleep quality of the people who are taking Murottal therapy in combination with progressive muscle relaxation therapy will also increase as compared to the people who are not taking these therapies.

Methodology

This was a quasi-experimental study with pre and post-control group design. The Pittsburgh Sleep Quality Index (PSQI) scale was used to measure sleep quality and the Hospital Anxiety and Depression Scale (HADS) was used to measure the features of depression and anxiety respectively. A total of 50 individuals were recruited, who came to the Naseeru-din Babar Memorial hospital Peshawar with sleep issues, anxiety, and depression. Individuals were divided into two groups of 25, and 25 individuals in the experimental group and the control group respectively. The mean age of the patients was 38.36. The age range of patients was 17 and 60 years of age who were suffering from sleep issues, depression, and anxiety were included in the study. All the participants included in the study were Muslims and they all have the facility of the handset and mobile phones. Surah Rahman and progressive muscle relaxation technique were used as an intervention. The total study duration was one month. The experimental group was directed to listen to surah Rahman for 30 minutes daily along with practicing progressive muscle relaxation techniques and the control group was only taking medication prescribed by the consultant. After one month their sleep was rated again on PSQI and depression, and anxiety on HADS.

Informed Consent

Informed consent in the Urdu language was signed by participants, given complete information about the study, its nature, and its purpose. They were ensured that all the information would not be shared with anyone and will be used purely for research purposes.

Demographic Information Sheet

The demographic sheet was used to gather required information about the client, such as gender, age, educational level, employment, and marital status.

Scales

Pittsburgh Sleep Quality Index (PSQI) (Buysse, Reynolds, Charles, Monk, Berman, & Kupfer, 1989).

The Pittsburgh Sleep Quality Index was used to measure sleep quality (PSQI). Subjective sleep quality, sleep latency, sleep length, habitual sleep efficiency, sleep disruption, medication use, and daytime dysfunction are all included in the PSQI measures (Majid, 2014). The greater the score the poorest quality of sleep was. Good quality of sleep has a score of 1 – 5, mild was from 6 – 7, moderate from 8 – 14 and bad was 15 – 21.

Hospital Anxiety and Depression scale (HADS) (Zigmond, & Snaith, 1983).

The HADS is a fourteen-item scale with seven questions each for anxiety and depression subscales that are used to measure anxiety and depression symptoms. Each item is scored on a scale of zero to three. Anxiety or sadness is indicated by a subscale score of >8.

Procedure

The participant was recruited from the outpatient department (OPD), they approached a psychiatrist for sleep disturbance and with the symptoms of mixed features of Anxiety and Depression. They all were briefed about the study and about the interventions. Those who agreed to participate were supposed to fill in their informed consent and demographics. These patients were then randomly assigned to the 2 groups. The study participants were first assessed on scales The Pittsburgh Sleep Quality Index (PSQI) and Hospital Anxiety and Depression scale (HADS) as a pre-test without giving intervention (Murottal therapy, progressive muscle relaxation technique) as a baseline/level The Pittsburgh Sleep Quality Index (PSQI) was administered to measure sleep quality and Hospital Anxiety and Depression scale (HADS) were administered to measure symptoms of Anxiety and Depression both in pre and post-tests. Among these groups, one group practiced Murottal therapy with the combination of progressive muscle relaxation techniques, and the

other group was used as a control group and have advised only medication for sleep deprivation and mixed features of Depression and Anxiety. Later these participants were assessed after one month.

The members in the experimental group were supposed to listen to the surah Rehman for 30 minutes before sleeping for one month with practicing progressive muscle relaxation in combination. The participants of the control group were only taking medicines prescribed by consultants without practicing Murottal therapy and progressive muscle relaxation.

Results

The present study was conducted to assess whether Murottal therapy is given in combination with progressive muscle relaxation therapy, which would decrease the rate of anxiety and depression and improve the quality of sleep. In this regard, two groups were taken. One group (n=25) only used medication prescribed by the doctor and another group (n=25) was given Murottal therapy in combination with muscle relaxation therapy. At the start of treatment tests i.e., Pittsburgh Sleep Quality Index (PSQI), and Hospital Anxiety and Depression Scale were administered, these tests were also administered after four weeks.

On the first administration, no differences were found between the anxiety and depression levels of the participants on the Hospital Anxiety and Depression scale i.e. On the anxiety items the finding was $t(48)=-.239, p=.812$, Depression= $t(48)=.516, p=.608$. The Pittsburgh Sleep Quality Index (PSQI) measures seven domains of sleep. On the global sleep score, there was no difference ($t(48)=.972, p=.336$) found between the experimental and control group.

After four weeks both the questionnaires were administered again and it was found that the experimental group who was using Murottal therapy along with muscle relaxation therapy was less anxious ($t(48)=-13.19, p=.000$), less depressed ($t(48)=-10.44, p=.000$) and their quality of sleep ($t(48)=-9.60, p=.000$) has also improved as related to the control group.

The pre-post-tests of the experimental and control groups were also conducted and both the groups showed improvements i.e., their anxiety, depression level, and sleep disturbances were reduced (table no 2 and 3).

Table-1: Mean scores, Standard Deviation, and t-values of the experimental and control groups on the Hospital Anxiety and Depression Scale and Pittsburgh Sleep Quality Index (PSQI) (N= 50)

Scales	Experimental (n=25)		Control (n=25)		<i>t(df)</i>	<i>P</i>	95%CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
Anxiety (HADS)	4.28	1.51	10.28	1.69	-13.19 (48)	0.000	-6.91	-5.08	3.755
Depression (HADS)	4.36	1.28	10.20	2.48	-10.44 (48)	0.000	-6.97	-4.70	2.99
PSQI	10.04	1.30	14.92	2.17	-9.60	.000	-5.90	-3.85	2.72

Note: CI = Confidence interval; LL = Lower limit; UL = Upper limit., PSQI= Pittsburgh Sleep Quality Index

Table no 1 implies that the experimental and control groups are significantly different. Here is a substantial decrease in the anxiety and depression level of Individuals who are using Murottal therapy along with muscle relaxation therapy as compared to the individuals who were just using medication and the sleep quality of the individuals in the experimental group was also improved.

Table-2: Mean Differences between Pre and Posttest in the experimental group on the Hospital Anxiety and Depression Scale and Pittsburgh Sleep Quality Index (PSQI)

Scale	Pre (n=25)		Post (n=25)		<i>t(24)</i>	<i>p</i>	95%CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
Anxiety (HADS)	13.60	2.38	4.28	1.51	16.7	.000	8.17	10.46	4.67
Depression (HADS)	14.08	2.15	4.36	1.28	25.23	.000	8.92	10.51	5.49
PSQI	18.28	1.33	10.04	1.30	21.69	.000	7.45	9.02	6.26

Note: CI = Confidence interval; LL = Lower limit; UL = Upper limit, PSQI= Pittsburgh Sleep Quality Index

The above-mentioned table indicates that the anxiety, depression level, and sleep disturbance of the individuals who were taking Murottal therapy along with muscle relaxation decreased.

Table-3: Mean Differences between Pre and Posttest in Control group on Hospital Anxiety and Depression Scale and Pittsburgh Sleep Quality Index (PSQI)

Scale	Pre		Post		<i>t</i> (24)	<i>p</i>	95%CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
Anxiety (HADS)	13.76	2.35	10.28	1.69	6.90	.000	2.44	4.52	1.70
Depression (HADS)	13.76	2.22	10.20	2.48	6.57	.000	2.44	4.67	1.51
PSQI	17.88	1.56	14.92	2.17	6.59	.000	2.03	3.88	1.56

Note: CI = Confidence interval; LL = Lower limit; UL = Upper limit, PSQI= Pittsburgh Sleep Quality Index

The table indicates that the anxiety, depression level, and sleep disturbance of the individuals in the control group who were just using medication were also improved.

Discussion

The goal of this research was to look into and investigate the effects of Murottal treatment combined with progressive muscle relaxation techniques on sleep quality, depression, and anxiety.

Research findings supported the proposed hypothesis i.e., the Sleep quality of the people who are taking Murottal therapy in combination with progressive muscle relaxation therapy would be improved as compared to the people who are not taking these therapies. The results also supported the other hypothesis of the present study, according to the findings, the individuals who were taking Murottal therapy along with muscle relaxation therapy become less anxious and depressed as compared to the individuals who were just using medication (table 1).

Secure attachments have been connected to human well-being, according to Bowlby (1988). Individuals who seem to have a strong bond with someone are happier, healthier, and have a positive self-image.

According to Kirkpatrick (2005), because various religions and beliefs aggravate the attachment system in human beings, the connection of a person to their religion has a huge impact on their thoughts, belief systems, and rational argument about the creator, as well as their relationships with their own creator. Individuals who have a positive relationship with their creator have a higher level of mental well-being (Sabry & Vohra 2013).

Relaxation therapies and Islamic therapies help in reducing mental disorders like stress, depression, and anxiety. Progressive muscle relaxation is based on the concept that physical relaxation can promote mental relaxation. Progressive muscle relaxation is practiced to achieve mental relaxation and it may also help in getting better sleep. Several studies show that progressive muscle relaxation may help in reducing stress. Murottal therapy is also working as relaxation therapy. Recitation and listening to Al Quran make people relaxed and calm, the sense of calmness produces confidence. The Quranic therapy helps in decreasing anxiety and also speeds up the healing process.

Murottal therapy is a type of treatment that involves the use of the Al-Qur'an as a form of relaxation treatment in which the therapy is delivered in the form of a sound wave that has the ability to relax and soothe those who listen to it. Murottal therapy has the power to make people calm and relax as it works like a sound wave. According to a study, hearing and reciting Quran can reduce anxiety. Practicing Murottal therapy makes the heart and mind calm and promotes relaxation (Sabry, & Vohra, 2013).

As evident by another research study (Mayrani & Hartati, 2013) indicates that hearing the Quranic verses at a slow tempo can excite the hypothalamus to release the endorphin hormone which makes people feel happy. The hormonal arousal from listening Quran gives a sense of tranquility and helps reduce the level of anxiety. The recitation of the Quran in Islam has a vital role in assisting Muslims in dealing with damaging and unpleasant happenings, which aids Muslims in both avoiding and treating mental illnesses such as depression. Listening to the Quran positively affects both the heart and mind which develop calmness through neural pathways and improve mental well-being (Tabataba'i, & Tabataba'i, 1988).

Various studies also reveal that there is a significant link between religiosity and the reduction of mental health issues. An individual's belief system is strongly linked to lower levels of sadness and anxiety (Koenig, 2015). Religion has been linked to lower levels of anxiety and depression, decreased symptoms of post-traumatic stress disorder, and other indicators of psychological well-being (Mitchell, & Romans, 2003).

Conclusion

A large number of people are suffering from mental disorders i.e., anxiety, depression, stress, etc., for which medication is used. The present study established that people who are suffering from mental disorders like anxiety and depression can improve by taking Murottal therapy and muscle relaxation techniques. Murottal therapy with a combination of progressive muscle relaxation can also help in improving the quality of sleep. Therefore, it would be better to advise the patients to undergo Murottal therapy or to use other relaxation techniques. It is important to strengthen the bond with the

Creator, which alone can bring peace of mind to the patients and cure their ailments effectively.

Limitations and Suggestions

1. It would be more appropriate if instead of taking two groups, three groups of the patients should be taken, instead of giving Murottal therapy and relaxation therapy in combination to one group, one group should be given Murottal therapy and muscle relation therapy should be administered to another group so that the effects of each can be assessed separately. In the present study, we cannot say which therapy is more effective Murottal or muscle relaxation.
2. For future studies, a large study sample should be taken.

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