



Efficacy Of Reflexology Therapy In The Management Of Insomnia: A Clinical Study

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ABSTRACT: Background: Reflexology is a therapeutic technique that involves applying pressure to certain locations on the hands and feet to affect the health of linked body regions. Every pressure point on the hands and feet serves as a sensor and is connected to a specific bodily region. The reflexology technique will be used to stimulate these sensors in order to maintain homeostasis, promote relaxation, and enhance blood and energy circulation. **Materials and Methods:** The Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital is located in Kulasekharam, Tamil Nadu, India. Five female patients between the ages of 19 and 25 were eligible to participate in the study. After the goal of the study was explained, verbal consent was obtained. Ten days were allotted for the investigation. Among the characteristics of this investigation are a PSQI and the routine documentation of symptom changes. **Results:** The data analysis was conducted using JASP software version 0.95.0. It's clear that the reflexology treatment significantly decreased insomnia ($t_{11.50}$, sig 2tailed. < 0.001). **Conclusion:** It would

be prudent to add reflexology to conventional treatment regimens in light of its benefits, in order to mitigate the side effects of pharmaceutical use and effectively control insomnia, in order to alleviate and prevent sleeplessness. Its goal is to reduce its root cause by adopting a lifestyle that includes reflexology and methods for reducing sleeplessness.

Keywords: Insomnia, Reflexology, Sleeplessness, Pressure points, Energy flow, Nerve stimulation.

INTRODUCTION

A reflexology intervention that has been practiced for thousands of years in many different civilizations across the world is foot and hand reflexology. All the reflexology points, which correlate to various body parts, are taken into consideration in this form of therapy, which is focused on stimulating the body's nerves and circulatory system¹. In zone therapy, the reflex zone is the area that best demonstrates how each part of the body is interconnected. Applying pressure to this area will help a certain organ or part reduce discomfort and disease symptoms. The theory holds that, rather than using reflexology maps, where each point on the soles of the hands and feet corresponds to a particular organ, there is an invisible road that travels along the body in a vertical form based on the lines². Five zones on each side of the foot are represented by reflex zone therapy. There are 10 reflex zones throughout the body, and this zone extends from the top of the head to the points of the fingers and toes.

MATERIALS AND METHODS

STUDY DESIGN

Case study → Pre assessment → Reflexology Intervention → Post assessment → Statistical analysis by JASP 0.95.0 software and interpretation of results.

SETTING

The study was conducted at the Sree Ramakrishna Medical College Hospital for Naturopathy and Yoga , Kulasekharam , India.

STUDY PARTICIPANTS

For the study, five individuals who were diagnosed with insomnia and were enrolled in the Sree Ramakrishna Medical College Hospital for Naturopathy and Yoga were chosen. The study was carried out for 45 minutes in the evening, two hours after dinner, for each sample. Professionals with training in naturopathy administered the intervention. Every participant has insomnia and is devoid of any other

illnesses. All the patients gave their verbal consent. The SRKMCNYS Institutional Ethics Committee gave their approval to the project.

INCLUSION CRITERIA

- The study participants has been selected between the age group of 19 to 25 yrs.
- Patients with Insomnia.
- Does not develop cold intolerance.
- Willing to participate in the study.
- Participants are well conscious.
- Study participants who were unwilling or obstinate were not allowed to participate.

EXCLUSION CRITERIA

- Subjects with Narcolepsy, Parasomnias, Psychiatric disorders.
- History of stroke
- Abnormal thyroid function
- Female subjects during menstruation
- Pregnant women
- Patients undergone any medications.
- Any Heart diseases, sensory disorders.

TOOLS

Both prior to and following the intervention, the Pittsburgh sleep quality index (PSQI) was recorded. A chart with designated reflex zones, a reflexology stick, towels, and a bowl of warm water. A digital water thermometer was used to track the water's temperature. Results were interpretation and statistical analysis using the JASP software version 0.95.0 program.

TREATMENT PROTOCOL

REFLEXOLOGY INTERVENTION

Wash your hands and feet with warm water, then pat dry with a fresh, sterilized towel. The patient should be positioned comfortably on the cot. The practitioner sits in front of the patient. Techniques for warming up five minutes. Encourage the hands and feet to relax. Toe stretches and mild ankle rotations. 35 minutes of reflex point stimulation. Put consistent, comfortable pressure on particular reflex areas. Techniques for relaxation five minutes. Massage gently again. Press the solar plexus point lightly at the end of the session.

RESULTS

The purpose of this study was to assess reflexology's efficacy as an insomnia treatment. Both at the benchmark and after the intervention, data were collected. There were five participants with insomnia who were between the ages of 19 and 25. The data were analyzed using the JASP software version 0.95.0. The findings unequivocally demonstrate that 45 minutes of reflexology application reduced insomnia (t 11.50, sig 2tailed < 0.001).

Abbreviations:{COV- Coefficient of variation, SEM- Standard error of mean, SED- Standard error of difference MD- Mean difference}

Table:1 Statistics for Samples:

Pre PSQI Score	N	Mean	SEM	Std.Deviation	COV	Variance
	5	10.8	0.583	1.304	0.121	1.7

Post PSQI Score	N	Mean	SEM	Std.Deviation	COV	Variance
	5	6.2	0.735	1.643	0.265	2.7

Table:2 Paired sample statistics:

Pre-Post PSQI Score	N	MD	SED	95% CI for Mean difference		t	df	P-value
				LOWE R	UPPE R			
				3.489	5.711			
	5	4.6	0.583	3.489	5.711	11.50	4	< 0.001

DISCUSSION

The main objective of the study was to evaluate the effects of reflexology therapy on sleep quality. PSQI was used. A special kind of massage called foot and hand reflexology uses the fingers, especially the thumbs, to apply pressure to the reflex zones, which are frequently located in the hands and feet. Every aspect of the body is believed to be related to these areas, and pressure applied to them can change how the body reacts physiologically. They are meant to restore balance and encourage recovery. Diseases are caused by energy blockages in the body; reflex point stimulation can assist clear these blockages and increase the body's energy production³. Reflexology alters how pain is perceived, encourages relaxation, and releases endorphins. Relaxation may therefore affect fatigue and the quality of sleep. Reflexology triggers the parasympathetic nervous system and reduces autonomic hyperarousal. Heart rate, cortisol, and blood pressure decreases are accompanied by increases in heart rate variability and subjective relaxation during this neurophysiological shift. Particularly in populations with stress-related insomnia, these modifications are closely linked to improvements in both the onset and maintenance of sleep. However, compared to the first day, the degree of insomnia was less intense on the tenth day. The results showed that when utilized as an alternative treatment for insomnia, the reflexology intervention was effective.

CONCLUSION

An increase in the overall amount of time spent on foot and hand reflexology has been shown to reduce anxiety and enhance the quality of sleep. It might be recommended to use foot reflexology as an extra tactic to improve sleep quality. However, future planning and execution for sensitive individuals that might not be able to employ other forms of therapy and benefit from such care should give top priority to long-term monitoring, advanced evidence strength, and future understanding of the mechanisms underlying foot and hand reflexology.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to Dr. R. Anusha BNYS, M.Sc. (psychology), Professor in the Naturopathy Department at Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital in Kulasekharam, Tamil Nadu, for her insightful advice, thought-provoking and insightful recommendations, and helpful critique. The tool's selection and development were the result of thoughtful, persistent, and relevant efforts. She witnessed the start of the study and its successful completion. With amazing grace, she truly enhanced her perception as the project went on.

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