



Assess the Effectiveness of Hot Water Footbath Therapy for Quality of Sleep among Geriatric Staying in Old Age Home in Jabalpur MP

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Abstract

Hot water footbath therapy (HWFBT), one of the hydrotherapeutic measures, improves peripheral blood circulation and provides warmth and comfort for the patients. The aim of the study was to assess the effect of warm water footbath therapy on quality of sleep among old age people with disturbance of sleep. Quasi experimental, post -test only control group design was adopted for the study. 60 sample were selected by using purposive sampling technique.

The sample were alternatively assigned to experimental group and control group so as to include 30 sample in each group. The quality of sleep was assessed by using Groningen sleep quality scale. Warm water foot-bath therapy was administered by the researcher for 15 min. for five consecutive days in experimental group for control group, routine care without warm water foot-bath was given. Post-test was done to assess the quality of sleep in experimental group and control group by using Groningen sleep quality scale. The results show highly significant difference in the quality of sleep among old age people with disturbance of sleep after warm water foot-bath. Hence it was concluded that warm water foot-bath was an effective therapeutic intervention for improving the quality of sleep among old age people with disturbance of sleep.

Keywords: Elderly, modified sleep quality, hot water foot bath therapy

Introduction

Normal human sleep is divided into non rapid eye movement [NREM] and rapid eye movement [REM] sleep. The sleep cycle starts with a period of NREM sleep. Rapid eye movement sleep occurs after a short period of NREM sleep. This alteration between NREM and REM takes place about 4-5 times during a normal night's sleep. The first REM period may be less than 10 min. in duration, while the last one may exceed 60 minutes. Awakening after a full night's sleep is usually from REM sleep. The sleep pattern changes as a child grows. poly-cyclic sleep pattern of the new born changes to a mono-cyclic adult pattern. In new- born, the total sleep duration can be 14-16 hours, in a day of 24 hours.

Hot water foot-bath provides a good sleep, because it relaxes the body and mind. It works by slightly raising. The body temperature and after 15min, it starts to drop slowly. This can promote sleep indirectly. Gradual drop of body temperature makes us feel drowsy and there for we feel more prepared for sleep. A warm foot-bath also diverts some blood from the head to lower part of the body, reduces brain activity and mimics the pre sleep state. A warm water foot-bath is a local moist heat application. It is a non-invasive and easy technique to apply home. The findings provide empirical support that a warm water foot-bath relieves fatigue and insomnia problem of old age people undergoing disturbance of sleep.

Objectives

- Assess the quality of sleep before warm water foot bath therapy among elderly staying in selected old age homes of Jabalpur city.
- Assess the quality of sleep after warm water foot bath therapy among elderly staying in selected old age homes of Jabalpur city.
- Assess the effectiveness of warm water foot bath on quality of sleep, among elderly staying in selected in old age home.
- Compare effectiveness of warm water foot bath post-test among elderly staying in selected old age home.
- Associate the quality of sleep of elderly people with selected demographic variables.

Hypothesis

H₁: There will be effectiveness of warm water on sleep.

H₂: There will be significant difference between pre-test and post-test.

H₃: There will be significant association between quality of sleep of elderly people with selected demographic variables.

Review of Literature

The review of literature is a crucial look at the existing research that is significant of the investigation that are carrying out. The review of literature is designed to disseminate the investigator with any appropriate information

pertaining to the topic being studied. The scope of a literature review should be expansive for the investigator to become knowledgeable about the research problem and narrow enough to include predominantly relevant sources.

Jeenath Jastin Dosk (2017) The reduction in the insomnia levels and improving the sleep onset time of the elderly clients has an important role to play in enabling effectiveness of warm foot bath intervention as an independent nursing intervention. The objective of the study is to assess the effectiveness of warm foot bath on sleep onset time among old age people with insomnia. Purposive sampling technique has been adopted to select the desired sample. The sample size was 30. As an intervention of 15 min of warm foot bath was administered for experimental group. The data was collected through general sleep disturbance scale.

Mr Sudip Das Miss Minerva Yembem (2021) A quasi experimental study to assess the effectiveness of hot water foot bath therapy on quality of sleep among the elderly in a selected old age home, Agartala, Tripura West. The objectives of the study are to assess the quality of sleep among the elderly and to determine the effectiveness of hot water foot bath therapy on quality of sleep among the elderly. The conceptual framework was used based on Wiedenbach's modified Prescription theory.

TVDL(2023)-A foot bath is effective in increasing sleep quality levels of patients who have undergone degenerative lumbar spine surgery and may be used as a simple and practical non-pharmacological nursing strategy for improving patients' sleep quality.

Major Findings of the Study

- In the experimental group 10(33.3%) people belong to age group of 66-75 year and in control group 8(26.6%) people belonged to the age group of 66-75year.
- In experimental group majority, 10(33.3%) people were males and in control group, 17(56.65) people were also males.
- In the experimental group, 16(53.3%) people and in control group, group 11(36.6%) people were a business person.
- In the experimental group, 27(90%) people had monthly income below Rs. 10,000 and in the control group, 4(13.3%) people had monthly income between Rs. 16,000-20,000.
- In the experimental group 4(13.3%) and control group 7(23.3%) were normal sleep cycle.
- The majority of the people both 1(3.3%) and control group 5(16.6%), use techniques of sleep of old age people.
- In the experimental group, 14(46.6%) and control group 2(6.6%) less than 1 year disturb sleeping pattern.
- In experimental group, 9(30%) people and in control group 6(20%) factor influencing of sleep by pain.

The Below table depicts the quality of sleep among old age people with disturbance of sleep in the experimental group after warm water foot bath. The result shows that in the experimental group, on the group on the 18(60%) people had normal sleep. And 6(20%) people had disturbed sleep, and 6(20%) had people poor sleep.

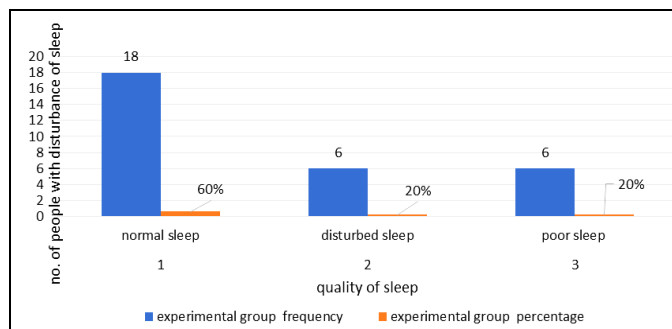


Fig 1: Assessment of quality of sleep in experimental group after warm water footbath.

Table 2: Comparison on quality of sleep among old age people with disturbance of sleep in experimental and control group after warm foot-bath.

S. No.	Quality of Sleep	Experimental group		Control group	
		Frequency	Percentage	Frequency	Percentage
1	Normal sleep	18	60%	11	36.66%
2	Disturbed sleep	6	20%	5	16.66%
3	Poor sleep	6	20%	14	46.66%

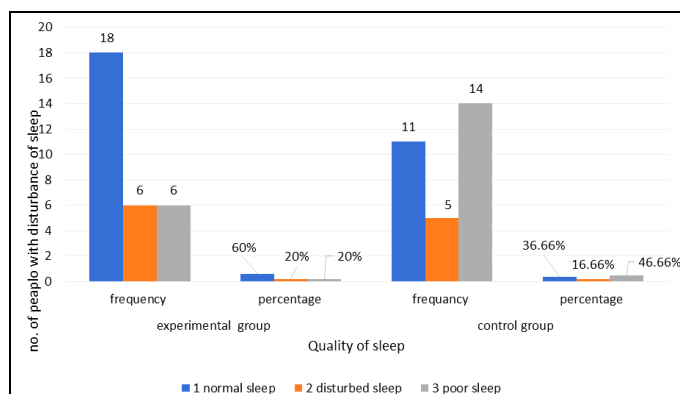


Fig 2: Comparison on quality of sleep among old age people with disturbance of sleep experimental and control group after warm foot bath.

The above table depicts the quality of sleep among old age people with disturbance of sleep in the experimental and control group. The results reveal that in the experimental group 18(60%) people had normal and 6(20%) people had poor sleep. In the control group 11(36.66%) people had normal sleep and 5(16.66%) people had disturbed sleep and 14(46.66%) people had poor sleep.

Nursing Research

The study has tested the effectiveness of warm foot bath in improving the quality of sleep among old age people with disturbance of sleep. There is a great need of research to be conducted on the areas of sleep disorders among people with disturbance of sleep and on non-pharmacological nursing intervention like warm water foot-bath. The nursing research need to focus more on the evidence based and holistic practice understanding the various technique that can bring improvement in quality of sleep among old age people with disturbance of sleep. the nursing is intend to offer up to date suggestions in implementing warm foot bath as one of the nursing intervention thus it is an affordable and effective way for improving the quality of sleep.

Conclusion

Disturbance of sleep has a reputation as deadly disease. People with disturbance of sleep often undergo physical and emotional disturbance due to their sleep. Disturbance sleep has functional consequences as it has been associated with poor quality of life. The non-pharmacological intervention such as complimentary treatments produce reliable changes in sleep pattern among old age people with disturbance of sleep. Warm water foot-bath therapy gives a good sleep, by relaxing body and mind. According to the present study conducted, warm water foot-bath results in improved quality of sleep among old age people with disturbance of sleep. This indicates the warm water foot-bath is an important non pharmacological method to enhance the quality of sleep among old age people with disturbance of sleep

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