

# A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EFFECT OF WARM WATER FOOT BATH THERAPY ON QUALITY OF SLEEP AMONG ELDERLY PEOPLE STAYING IN SELECTED OLD AGE HOMES OF MEHSANA DISTRICT

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## Abstract

Health is a very important aspect in the life of every one and human survivor to five basic need like, food, water, clothing, sleep, and shelter. Sleep is one of the most essential part of our lives, now days sleep disorderly and sleep problems are most commonly. In according to American sleep association statically 50-70% million as adults have a sleep disorders, but sleep problems in a large percentage of the elderly population in 40-70%, In India prevalence of insomnia in elderly population to be 32%. In elderly to main cause is sleep disturbance is life stage, aging fatigue, insomnia change the sleeping pattern physical and mental condition including. so our study is done to check whether there is any Warm water footbath therapy on quality of sleep among Elderly. A quantitative approach using Pre experimental one group pre-test post-test research design. 100 selected Elderly of Mehsana district using Non-Probability Convenience sampling technique. TOOL: Self- Structured Knowledge Questionnaire. With regard to pre-test level of knowledge it shows that, maximum 51(51%) participants were having poor knowledge, 49(49%) participants were having average knowledge. During post-test maximum 59(59%) of participants were having good knowledge and remaining 41 (41%) of participants were had average knowledge. In pre-test, participants mean was 5.46, with standard deviation 2.33. In post-test, participants mean was 10.10, with standard deviation 3.17. There was an increase in knowledge score after structured teaching program. There is significant moderate co-relation between the Knowledge of the Elderly regarding Effect of warm water footbath therapy on quality of sleep.

**Keywords:** Assess Effect of warm water footbath therapy on quality of sleep, Effectiveness, Elderly.

## INTRODUCTION

***“The earth, the air, the land and the water are not an inheritance from our fore fathers but on loan from our children. So we have to handover to them at least as it was handed over to us.”***

*- Mahatma Gandhi*

He who has health has hope, and he who has hope has everything. A life without health is like a river without water. The secret of health for both mind and body is no to mourn for the past, worry about the future, or anticipate troubles but to live in present. To keep body in good health is a duty otherwise we shall not be able to keep our mind strong and clear. Health is something that should be taken into serious consideration and also it become one of the most concerned issues of human being.<sup>1</sup>

The age pyramid of world population is changing. Sleep is a physiological mechanism of regaining energy and recovering from fatigue and it has an important role in people health. Sleep is the basic human need . it is a universal biological process common to all the people. A human spends about one-third of their live asleep .We require sleep for more reasons :to cope with daily stresses, to prevent fatigue, to conserve energy, to restore the mind and body , to enjoy life more fully. Sleep can be defined as a normal state of altered consciousness during which the body rests, it is characterized by decreased responsiveness to the environment and a person can be aroused from it by external stimuli.<sup>2</sup> Sleep is a physiological mechanism of regaining energy and recovering from fatigue, and it has an important role in people’s health.<sup>3</sup>

A human life is divided into five main stages namely infancy, childhood, adolescence, adulthood and old age. In each of these stages an individual find himself in different situations and face difficult problems. The old age is not without any problems. In elderly people, the physical strength deteriorates, mental stability diminishes money power becomes break coupled with negligence from younger generation.<sup>4</sup>

Old age refers to ages nearing or surpassing the life expectancy of human beings, and is thus the end of the human life cycle. Old people often have limited regenerative abilities and are more susceptible to disease, syndromes, and sickness than younger adults. The organic process of ageing is called senescence; the medical study of the aging process is called gerontology.<sup>5</sup> In older people, undiagnosed and untreated insomnia may cause impaired daily function and reduced quality of life. Insomnia is also a risk factor for accidents and falls that are the main cause of accidental death in older adults and therefore, is associated with higher morbidity and mortality rates in older populations. Individual aged 60 years and above are considered elderly in India. They are considered as disadvantaged population and are ignored in most of the families. They need special attention and care due to increasing health issues .This has lead to the focus of health care professionals and researchers from different fields to pay attention towards elderly in developing countries. <sup>6</sup>

Sleep plays an important role in physical health. For example, sleep is involved in healing and repair of heart and blood vessels. Ongoing sleep deficiency is linked to an increased risk of heart disease, kidney disease, high blood pressure, diabetes, and stroke.Sleep is a cyclical physiological process that alternates with longer periods of wakefulness. The sleep wake cycle influences and regulates physiological function and behavioural responses. sleep disturbance increases with ageing due to various psychological and biological factors. Elderly have initial insomnia, wake up earlier than usual , have higher time spent in bed, have night time awakenings, nap more and have decreased total sleep as compared to the younger adults. sleep plays an important role in our lives, allowing us to relax. Sleep is a physiological mechanism of regaining energy and recovering from fatigue, and it has an important role in people’s health. Poor sleep quality can have profound physical effects on the elderly, including fatigability and an increased risk of falls. these effects threaten both mobility and independence .poor sleep quality and sleep deprivation are also associated with effects on activities of daily living and cognitive impairment in the elderly. <sup>7</sup>

### NEED OF THE STUDY

Health is a very important aspect in the life of everyone. Nothing is more important than health and

fitness for any human being. with increasing age the older population begins to struggle with various health problems and in the absence of appropriate care the older population suffer more from health problems that could have been prevented. Sleep play a vital role in good health and well-being throughout your life.

According to Indian journal of applied research (2020) published research conducted on warm water footbath therapy on quality of sleep among elderly in old age home canter part of Gujarat in this study show that a 100 samples of elderly were selected by simple random sampling method that one group pre test post test design the results shows that out of 100 samples in pre test 0(0.0%) have mild sleep quality 52(52.0%)have moderate sleep quality and 48(48%)have severe sleep quality, in post test 15(15.0%) have mild sleep quality 77(77.0%) have moderated sleep quality and 8(8.0%) have severe sleep quality.

According to Original Research Article (2020) prevalence of quality of sleep among the elderly 57.3% of the participant were female and 40.6% were from 60-69 year age group . the mean PSQI score was 5.6+1.9. Sleep quality was poor among females, smokers, window and those with no physical activity. With advancing age sleep quality came out to be significantly poor.

According to international journal of science and Research in medical science, (2019) prevalence of national sleep foundation suggest that along with fatigue because of the physical changes old aged people tend to have a harder time falling asleep and more trouble staying asleep than when they were younger. The foundation confirmed the prevalence of insomnia 46% of community dwelling adults aged between 65-74 reported insomnia symptoms.

According to Journal of clinical sleep medicine (2018) about sleeping disorders is believed that between 30% and 48% of older adults suffer from insomnia. Women have a lifetime risk of insomnia that is an much as 40% higher than that of man

According to sleep medicine clinics (2016) that 40-70% of older adults have chronic sleep problems and up to 50% of cause are undiagnosed. The major sleep complaint will depend on the cause of the sleep disturbance.

According to Journal of caring sciences (2013) the results show that sleep disturbance decreased from 69.6% to 39.1% in the footbath group and it decreased from 56.5% to 47.8% in the control group .this decreasing was more visible in the footbath group compared to the control group.

A warm water foot bath therapy are a cheap, simple way to increases nourishment to the tissues. So The present study aim to provide basic awareness to Elderly regarding effect of warm water foot bath therapy on quality of sleep its very helpful in increasing level of sleep and sleep quality among elderly people.

### **STATEMENT OF THE PROBLEM**

“A study to assess the effectiveness of Structured Teaching Programme on knowledge regarding Effect of Warm Water Foot Bath Therapy on Quality of Sleep among Elderly people staying in selected old age homes of mehsana district.”

### **OBJECTIVE OF THE STUDY**

- To assess the knowledge regarding effect of warm water foot bath therapy on quality of sleep among elderly.

- To evaluate the effectiveness of Structured teaching programme on knowledge regarding effect of warm water footbath therapy on quality of sleep among elderly.
- To find out association between knowledge with their selected demographic variables.

## HYPOTHESIS

H0: There will be no significant difference between pre-test and post-test knowledge score regarding effect of warm water footbath therapy on quality of sleep among elderly at 0.05 level of significance.

H1: There will be significant difference between pre-test and post-test knowledge scores regarding effect of warm water foot bath therapy on quality of sleep after administration of structured teaching program among elderly at 0.05 level of significance.

## MATERIAL AND METHODS

Quasi experimental one group Pretest / Post test research design and Quantitative Approach. A study to assess the effectiveness of Structured Teaching Programme on knowledge regarding Effect of Warm Water Foot Bath Therapy on Quality of Sleep among Elderly people staying in selected old age homes of mehsana district. The data were collected from 100 people. Sampling technique:- Non probability convenient sampling technique. Tools: self-structured Knowledge questionnaire.

## RESULTS

Demographic data was analyzed using frequency and percentage. Frequencies, percentage, mean, mean percentage (%) and standard deviation was used to determine the awareness score. The 't' value was computed to show the effectiveness of Self- instructional module and chi-square test was done to determine the association between the pretest awareness of people with selected demographic variables.

Finding related to demographic data

### MAJOR FINDINGS OF THE STUDY

Percentage distribution of sample characteristics:

Distribution of respondent in relation to age revealed that highest percentage (38%) of Elderly were in the age group of 65-70 years and least (12%) were in the age group of 85 above, (33%) were in the age group of 71-75 years and (17%) were in age group of 80-85 years. Distribution of respondent in relation to Gender revealed that sample belongs to the majority of Elderly (56%) were female and least (0%) were transgender and (44%) male.

Distribution of respondent in relation to general education status revealed that the highest percentage (38%) of Elderly has primary and secondary education and (05%) Elderly have graduation, (27%) Elderly have post higher secondary education, (30%) Elderly have Illiterate and least (0%) Elderly have post graduation and above.

Distribution of respondent in relation to type Marital Status revealed that the highest percentage (38%) of Elderly are window/windowr and least (06%) of Elderly are Unmarried, (10%) Elderly are Separated, (18%) Elderly are divorced.

Distribution of respondent in relation to type Field Experience revealed that the highest percentage (32%) of Elderly was Worker and least (10%) of Elderly was Business experience (29%) Elderly was other experience, (17%) Elderly was private job Experience and (12%) Elderly was government job experience.

Distribution of respondent in relation to total number of year living in old age homes that highest percentage (39%) of Elderly are group of 06-10 years are living in old age homes and least (00%) Elderly group of 11-15 year (34%) are group of 06-10 years living in old age homes .

Distribution of respondent in relation to total number of hours take a sleep per day revealed that the highest percentage (62%) of elderly 1-3 hours and least (0%) of elderly 06-08 hours take a sleep per day, (10%) Elderly 5-6 hours and (16% Elderly are 3-5 hours Take the sleep per day.

Distribution of respondent in relation to knowledge regarding Effect of warm water footbath therapy on Quality of sleep revealed that most of Elderly belongs to the No category (85%) whereas least Elderly belongs to Yes category (15%).

Finding related to pre and post knowledge score:

The findings related to the level of Knowledge regarding Effect of warm water therapy on quality of sleep among the Elderly:

In the present study knowledge of Elderly was assessed by using self structured questionnaire. The data was analyzed using Descriptive statistics. Total score was arbitrarily classified as good (14-20), average (07-13), and poor (0-6).

In the self structured questionnaire tool, in the pre-test 51% Elderly had poor knowledge score, 49% Elderly had average score. In the post-test 41% Elderly had average knowledge score and 59% Elderly had good knowledge score.

Finding related to effectiveness of structured teaching programme:

**Table 1: Distribution of subject on paired 't' test between pretest and posttest awareness score regarding Effect of warm water footbath therapy on quality of sleep.**

Parameter	Mean	Standard Deviation	Mean %	't' value
Pre-test	5.46	2.33	27.3%	t=16.89*
Post-test	10.10	3.17	50.5%	

**Finding related to association between pretest awareness score of people with selected demographic variables:**

Based on the third objective used to chi-square test to association between pre-test level of knowledge and selected demographic variables (The calculated chi-square value was more than the table value at the 0.05 level of significant.) The chi-square value of other demographic variable shows that there is no any significant (The calculated chi-square value was less than the table value at the 0.05 level of significant.).

## CONCLUSION

The conclusion drawn from the finding of the study is as follows:



The “t” tests done to find the effect of structured teaching programme on knowledge among Elderly of Sneh-kutir old age home and shree Sachidaanand old age home of Mehsana district. It revealed that there is highly significant gain in knowledge of the Elderly, after the administration of the structured teaching program regarding Effect of warm water footbath therapy on quality of sleep. The knowledge score of Elderly regarding Effect of warm water footbath therapy on quality of sleep as revealed in the pre-test showed average knowledge score, where as in post-test the knowledge scores of the samples showed marked increase, which indicates that the structured teaching programme is effective in increasing the knowledge of the samples regarding Effect of warm water footbath therapy on quality of sleep.

Also the calculated “t” value is 18.79, which is significantly higher than the “t” table value of at 0.05 level of significance which means that researcher rejects  $H_0$  and accepted  $H_1$ .

Therefore, there is significant difference between average values of pre-test and post- test regarding general knowledge on Effect of warm water footbath therapy on quality of sleep which gives an interpretation that there is significant gain in knowledge score of the sample in the post-test phase. This indicates that the structured teaching program was effective in increasing the knowledge of the samples. From all the above findings it can be concluded that most of the Elderly had average knowledge regarding Effect of warm water footbath therapy on quality of sleep. In the pretest, after administration of structured teaching programme, knowledge of majority of the Elderly had considerably increased to a higher score in post-test than compared to the pre-test scores.

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