## Original Research Paper

Nursing

# EFFECTIVENESS OF ANULOM VILOM PRANAYAMA ON QUALITY OF SLEEP AMONG GERIATRICS AT SELECTED OLD AGE HOME

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**ABSTRACT** Background: Aging is a universal phenomenon, and it is a natural and inevitable process. According to the 2011 census, about 10.1% of the population is over 60 years; this is expected to increase to 20% in 2050. Globally 1% of the population average of 60 years, is rising, and it is likely to reach 30% of the world population by 2050. Sleep is a biological necessity; it is nature's gift of a particular time for rest, restoration, and recreation. As the age progresses towards senility, people experience several psycho-physiological problems. Often these problems create sleep disturbances among the elderly. Methods: The present study focused on evaluating Anulom Vilom Pranayama's effectiveness on the quality of sleep among geriatrics at Inba Illam and Geriatric home at Christian mission Hospital, Madurai. The research design adopted for the study was a quasi-experimental pre and post-test control group design. The selected samples were 60, of which 30 were allotted to the experimental group, and the remaining 30 were in the control group. The samples were recognized based on the inclusion criteria and picked up with Non-probability – convenience sampling technique. The sleep quality index rating scale was a tool for data collection. Results: The comparison of the mean post-test score of quality of sleep between the experimental and control group's unpaired "t" value was 14, which was highly significant at p<0.001 level. It infers that the Anulom Vilom Pranayama effectively increases sleep among geriatrics. Conclusion: From the result, it was concluded that AnulomVilom Pranayama is an easily practicable and effective intervention method for the elderly population to improve the sleep quality

### KEYWORDS: quality of sleep, Anulom Vilom Pranayama, Geriatrics,

#### INTRODUCTION

Aging is a natural and inevitable process. In the holy Bible," Old age is not considered a curse, but a blessing and long life are felt to be a gift from God. The aging experience is unique to every individual because of the individual difference in personalities, varying social support networks, and different cultures to which one belongs. In India, 89 million above 60 years of age constitute 9% of the total population; this is likely to reach 179 million by 2026, forming 13.3% of the population.

Sleep is a biological necessity and a nature's gift for rest. As the age progresses towards senility, experience several psycho-physiological problems, creating sleep disturbances. Many aged populations are interested to know the measures for undisturbed sleep. The Government of India of health survey and development committee reported that pharmacologic management might have deleterious effects on older adults. The NSF poll found that the better the health of older adults, the more likely they are to sleep well. There are many measures to aid and promote sleep. One of them is AnulomVilom Pranayama, which is the easiest to do without any aids and supervision or help than other measures.

#### **OBJECTIVES**

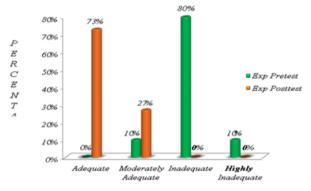
- To assess the quality of sleep among geriatrics before and after Anulom Vilom Pranayama in control and experimental groups
- To assess the effectiveness of Anulom Vilom Pranayama on quality of sleep among geriatrics by comparing the post-test score between the control and experimental group.
- To find out the association between the effects of Anulom Vilom Pranayama on quality of sleep and demographic variables of geriatrics.

L. STUFFLEBEAM (1971) CIPP (Context, Input, Process, and Product) Model.

#### **MATERIALS AND METHODS**

The study was conducted at Inba Illam Geriatric home, Madurai. The research design adopted for the study was a quasi-experimental pre and post-test control group design. The selected samples were 60, of which 30 were allotted to the experimental group, and the remaining 30 were in the control group. The samples were recognized based on the inclusion criteria and picked up with Nonprobability – convenience sampling technique. The sleep quality index rating scale was used for data collection after confirming its validity and reliability. Anulom Vilom Pranayama was demonstrated to the experimental group only for 14 days in both morning and evening.

#### RESULTS



QUALITY OF SLEEP

The conceptual framework of this study was based on DANIEL

Fig 1: Distribution Of Geriatrics In The Experimental Group

Fig 1 concedes the geriatrics distribution based on the experimental group's pre-test and post-quality sleep. The result shows that 24(80%) had inadequate sleep during the pre-test, whereas 22(73%) had adequate sleep after Anulom Vilom Pranayama therapy. The overall pre-test means score (35  $\pm$  3.6) and the post-test mean score (23  $\pm$  2.5) with a mean difference 26.

healthcare setups to help patients and family members cope with sleep disturbances. This study generalizes the findings on Anulom Vilom Pranayama and its use as a complementary therapy to increase sleep in other patient populations.

Table 1 Comparison of pretest and post test quality of sleep mean scores among geriatrics in experimental group

						-		
Quality	Exper	ime	ntal	Experimental post			Difference	
of sleep	pretest			test			in mean	
	Mean	SD	Mean%	Mean	SD	Mean%	%	
	35	3.6	74	23	2.5	48	26	

The overall pretest mean score (35  $\pm$  3.6) and post test mean score (23  $\pm$  2.5) with the mean difference 26, which refers that Anulom Vilom Pranayama is an effective one in increasing the sleep among geriatrics

Table 2: Unpaired "t" test between post test score of quality of sleep between experimental and control group

Quality Control of post test			Experimental post test					"p" val-	
Sleep	Mean	SD	Mean %	Mean	SD	Mean %	in mean %	ue	ue
	34	3.8	71	23	2.5	48	23	14	0.00 0***

The mean post-test score 71(SD=3.8) was higher in the control group than the mean post-test score 48(SD=2.5) in the experimental group among geriatrics. The mean difference in the quality of sleep was 23. The "t" value was 14, which showed a statistical significance at p <0.000. It was inferred that the Anulom Vilom Pranayama was significantly effective in improving sleep in the experimental group compared to the control group. The chi-square test revealed no significant association between quality of sleep and demographic variables of geriatrics at p < 0.05 level.

#### DISCUSSION

During post-test, out of 30 samples in the experimental group, 22(73%) had adequate sleep, 8(27%) had moderately adequate sleep, and none had highly inadequate sleep. The comparison of mean post-test score on quality of sleep among geriatrics between experimental and control group using unpaired 't' test revealed that 't' value  $14(p=0.000^{***})$  which was highly significant.

This result was supported by Susma et al. (2003), a quasi-experimental pre-test and post-test in the school of Nursing, Fooyin University, Taiwan. A convenience sample of 69 elderly residents of assisted living facilities was divided randomly into a Pranayama breathing exercise (n = 38) and a control group (n = 31) based on residence location. After six months of performing Pranayama breathing exercises, participants' overall sleep quality had significantly improved, and depression, sleep disturbances, and daytime dysfunction had significantly decreased.

Thus the study results show that there was significant improvement in the quality of sleep among geriatrics after Anulom Vilom Pranayama in experimental group. Hence Anluom Vilom Pranayama was highly effective in improving the quality of sleep.

#### CONCLUSION

The study results revealed a significant difference in the quality of sleep between geriatrics in the experimental and control groups. The study concluded that Anulom Vilom Pranayama would increase sleep and enhance geriatric comfort. Thus our study highlighted that Anulom Vilom Pranayama could be practiced in nursing homes and other