

## EFFECTIVENESS OF MASSAGE ON GINGER OIL ON LEVEL OF KNEE PAIN AMONG ELDERLY PEOPLE

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DOI: [10.5281/zenodo.10991969](https://doi.org/10.5281/zenodo.10991969)

### Abstract

**Aim:** The present study aim is to a study to assess the effectiveness of massage on ginger oil on level of knee pain among elderly people at selected community area. **Methods and Materials:** A Quantitative with experimental one group pre-test post-test was used in present study. A Total 30 samples were collected using convenience sampling technique. The demographic variable Assessment of level of knee pain among patients undergoing massage on ginger oil Effectiveness of ginger oil massage on level of knee pain among elderly people was assessed using structured questioner, followed by that data was gathered and analysed. **Results:** The results the study revealed that there is a significant of Effectiveness of massage on ginger oil on knee pain among elderly women is at the level of  $p < 0.001$ . **Conclusion:** Thus, the present despites that there is a difference in effectiveness of ginger oil massage between the pre-test and post-test which clearly interferes that effectiveness of ginger oil massage on knee pain among the elderly people undergoing was found effective in reducing the knee pain in elderly people in the post test.

**Keywords:** Massage, Ginger Oil, Knee Pain, Elderly People.

### INTRODUCTION

The most valuable treasure for humans is their health, as it serves as the foundation for happiness. A healthy individual is typically cheerful, finds joy in activities, possesses mental strength, maintains a positive outlook, and remains hopeful without easily losing heart. Aging is an inherent aspect of the human life cycle, involving changes in the body, mind, thoughts, processes, and lifestyle patterns that affect functional abilities and lifespan. People worldwide aspire to live longer lives, a goal facilitated by advancements in socio-economic conditions and medical science, both in developed and developing countries.

India, the world's second most populous country with 1.2 billion inhabitants according to the 2011 census, is on track to become the most populous nation by 2020, eventually surpassing even China by 2030. Presently, the elderly population (those aged 65 and older) constitutes 5% of the total population, equating to approximately 60 million individuals. Nevertheless, this demographic segment in Indian society is growing rapidly, and by 2030, the aging population is expected to double in size. Understanding the dynamics of population aging is critical, particularly for economies undergoing transition. The economic and social well-being of the elderly and society as a whole appears fragile due to factors such as a declining workforce, reliance on younger generations for support, and the emergence of new diseases. India has initiated significant policy measures to address this demographic shift, but both challenges and opportunities lie ahead for the country.

Aging is an inevitable and natural process characterized by the cumulative changes that make individuals increasingly susceptible to mortality. While aging is an irreversible process, it should not be viewed solely in negative terms. It is a stage in the life cycle where individuals transition from birth, childhood, adolescence, and adulthood to enter a phase of gradual aging. However, the onset of aging is not uniform among individuals, and even within the same person, different organs may age at varying rates. For practical and administrative purposes, old age is typically defined as reaching 60 or 65 years of age or older.

## **METHODS AND METHODOLOGY**

The study used with quantitative research approach and true experimental research design with the purposive sampling technique and who were satisfied with inclusive criteria. The inclusive criteria were the patients who are willing to participate in the study. The patients who can understand Tamil / English. The elderly people who are having knee who are in the age group of 55 and above and the exclusive criteria is the patient who are not experiencing knee pain during massage, the patients who are uncooperative the patient who do not understand Tamil / English. The data collection was done by prior permission from the hospital authority and ethical clearance was obtained from the institution of saveetha college of nursing and department of community health nursing and village panchayat leader The purpose of the study was explained to the samples and written form consent from them. The demographic data were collected using semi structured interview questionnaires' and then in Effectiveness of massage on ginger oil on knee pain among elderly people The data were analysed using descriptive and inferential statistics. The sample characteristics were described using frequency and percentage. Chi square was used to associate the post-test level of among selected demographic variables.

## **RESULTS**

### **SECTION A:**

#### **Distribution of Demographic Variables Among Elderly Women:**

Most of elderly women, 14(46.7%) in the experimental group and 16(53.3%) in the control group were aged between 45 – 50 years, 18(60%) in the experimental and 17(56.7%) in the control group were Hindus, 18(60%) and 20(66.7%) in the experimental and control group had primary education, 20(66.7%) in the experimental and 22(73.3%) in the control group were sedentary workers, 27(90%) and 25(83.3%) in the experimental and control group were non-vegetarian, 21(70%) in the experimental and 19(63.3%) in the control group had family monthly income of above Rs.10,000, 15(50%) and 14(46.7%) in the experimental and control group had BP as previous history of lifestyle disease, 22(73.3%) in the experimental and 24(80%) in the control group had moderate body, 25(83.3%) in the experimental and 24(80%) in the control group had no lifestyle practice, 19(63.3%) in the experimental and 17(56.7%) and 18(60%) in the control group had knee pain for 1 – 3 years and 13(43.3%) in both the group had taken external application as type of treatment.

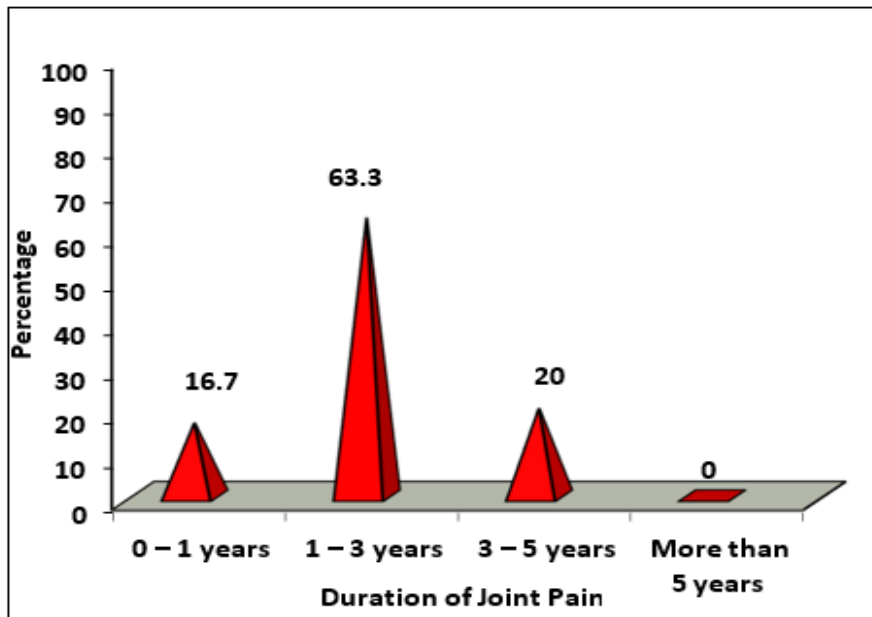


Figure 1: Percentage distribution of level of pain among elderly women

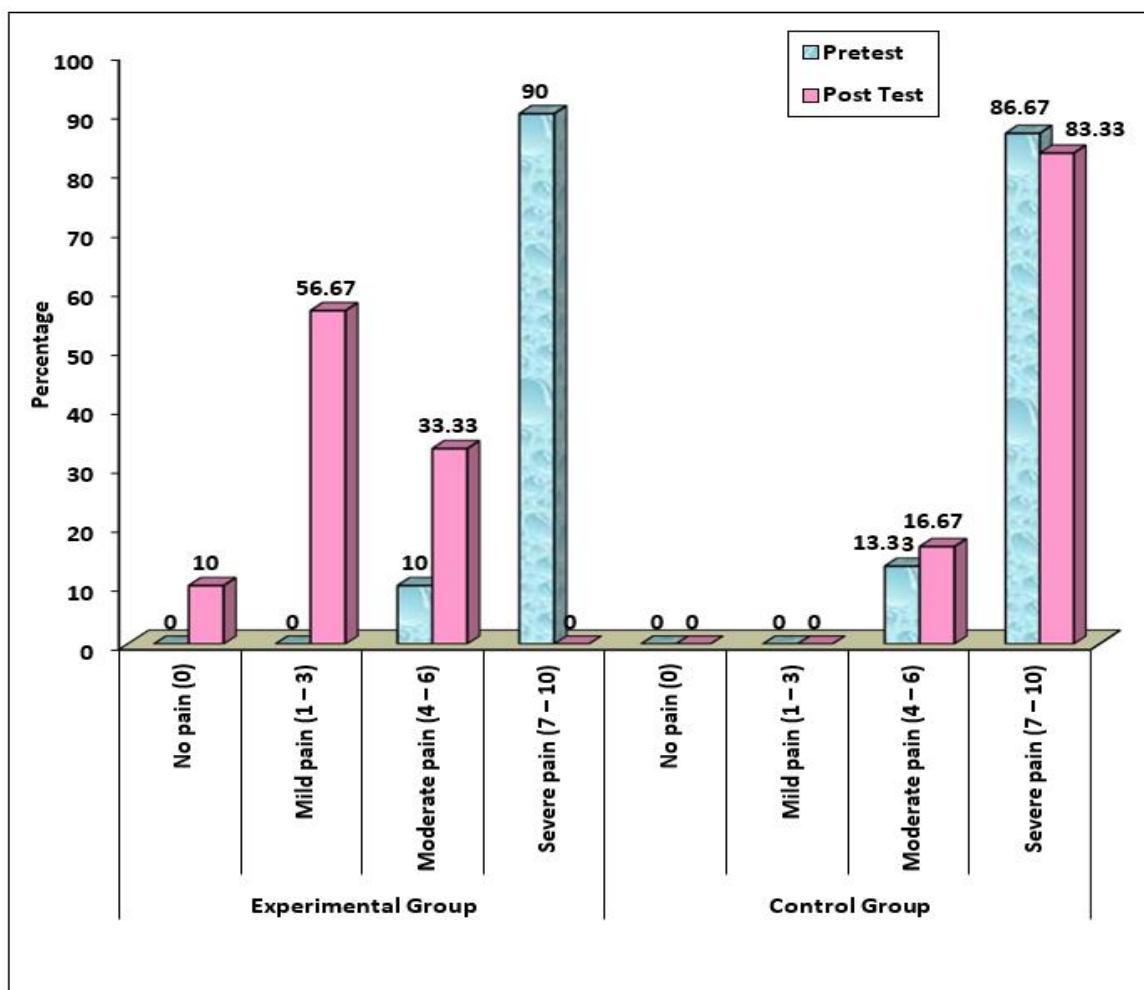


Figure 2: Percentage distribution of pre and post test among elderly women

**SECTION B:**

**Table 3: Distribution of mean and standard deviation of level of knee pain among kneepain among elderly women**

**N=60(30+30)**

Group	Pretest		Post Test		Mean Difference score	Paired 't' test & p-value
	Mean	S.D	Mean	S.D		
Experimental Group	8.56	1.07	3.17	1.51	<b>5.40</b>	<b>t = 40.854 p=0.0001, S***</b>
Control Group	8.63	1.15	8.40	1.19	0.23	t = 2.041 p=0.050, N.S
<b>Mean Difference score</b>	0.07		<b>5.23</b>		***p<0.001 S – Significant N.S – Not Significant	
<b>Student Independent 't' test value</b>	t = 0.231 p=0.818 N.S		<b>t = 14.897 p=0.0001 S***</b>			

The table 2 depicts that the pretest mean score of knee pain in the experimental group was  $8.56 \pm 1.07$  and post test mean score was  $3.17 \pm 1.51$ . The mean difference score was 5.40. The calculated paired 't' test value of  $t = 40.854$  was statistically significant at  $p < 0.001$  level. This clearly shows that after the administered with ginger oil there was significant reduction in the level of knee pain among elderly women in the experimental group.

The table 2 depicts that the pretest mean score of knee pain in the control group was  $8.63 \pm 1.15$  and post test mean score was  $8.40 \pm 1.19$ . The mean difference score was 0.23. The calculated paired 't' test value of  $t = 2.041$  was not statistically significant at  $p < 0.05$  level. This clearly infers that there was no statistically significant reduction in the level of knee pain between the pretest and post test in the control group who had undergone normal routine measures.

The calculated student independent 't' test value of  $t = 0.231$  in the pretest shows that there was no statistically significant difference between the pretest level of knee pain between the two groups.

The calculated student independent 't' test value of  $t = 14.897$  in the post test shows that there was statistically significant difference between the post test level of knee pain between the two groups which clearly indicates that after the administration of ginger oil in reduction of elderly women in the experimental group was found to be effective in the reduction of pain than the elderly women in the control group who had undergone normal routine measures.

**SECTION C:**

**Association of post test level of pain among elderly women with selected demographic variables in the experimental group.**

The demographic variable duration of knee pain ( $\chi^2=13.491, p=0.009$ ) had shown statistically significant association with post test level of knee pain among elderly women at  $p < 0.01$  level. The demographic variables age ( $\chi^2=9.774, p=0.044$ ) and lifestyle practice ( $\chi^2=6.904, p=0.032$ ) had shown statistically significant association with post test level of knee pain among elderly women at  $p < 0.05$  level and the other demographic variables had not shown statistically significant association with post test level of knee pain among elderly women in the experimental group.

## CONCLUSION

The role of community health nurses in promoting health and preventing diseases among the elderly population is of great significance. Knee pain is a prevalent issue among geriatric individuals, and it frequently leads to disruptions in their daily activities. In terms of statistical analysis, this research has demonstrated a reduction in knee pain levels following the application of aromatic ginger oil massages in elderly individuals when compared to their pre-test conditions. From the results of present study shows significant improvement for researcher.

### Acknowledgement:

Authors would like to appreciate all the study participants for their cooperation to complete the study successfully.

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