R Sindhuja
Associate Professor,
Rajalakshmi College of
Nursing, Chennai, Tamil Nadu,
India

D Shanthakumari
Assistant Professor,
Rajalakshmi College of
Nursing, Chennai, Tamil Nadu,
India

Dr. Gopinath Subramanian
Principal, Mydhili College of
Nursing, Gudur, Andhra
Pradesh, India

Effectiveness of olive oil versus mustard oil massage on pain perception among people with arthritis

R Sindhuja, D Shanthakumari and Dr. Gopinath Subramanian

DOI: https://doi.org/10.33545/26649187.2023.v5.i2a.51

Abstract
The purpose of the study was to evaluate how well massages with olive oil and mustard oil affected the way that arthritis sufferers perceived their pain. Purposive sampling was used in conjunction with a quasi-experimental, non-randomized control group design to carry out the investigation. Information was gathered from arthritis patients who met the requirements for inclusion using the Western Ontario and McMaster Universities Osteoarthritis Index Scale (1964) Modified (WOMAC). Study groups I and II had mean post-test scores on pain perception of 47.60 and 38.00, respectively. The result of the unpaired "t" test was 3.567, meaning that it was highly significant at $p{\leq}0.01$, $p{\leq}0.001$, and significant at $p{\leq}0.05$. It demonstrated that both olive oil and mustard oil massages were successful in lowering the sense of pain, with mustard oil massage being more successful than olive oil massage.

Keywords: Pain perception, arthritis, mustard oil and olive oil massage

Introduction

As people age, both men and women can get arthritis, a degenerative disease that is universal and gradually worsens. It results in joint pain and difficulties moving, muscle weakness, restricted range of motion, joint deformities, abnormalities in gait, and sleep disorders. Roughly 80% of senior citizens have arthritis, which can cause excruciating pain when moving around and make it difficult for them to carry out their everyday tasks. In India, endemic arthritis is likely to be seen, with 80% of people over 65 likely to experience joint pain; of these, 40% likely to experience severe arthritis that interferes with everyday activities. Roughly 80% of the population in India has arthritis, which can cause excruciating pain when moving and make it difficult for the sufferer to carry out daily tasks. Massage with oil those with knee arthritis can benefit from massage. Essential oils, or highly concentrated plant oils, are used in massage therapy through the use of oil or lotion. As a result of the essential oil molecules being absorbed through the skin during the oil massage, arthritis pain is lessened.

Like aspirin or ibuprofen, olive oil functions as a natural NSAID (non-steroidal anti-inflammatory medicine) anti-inflammatory. An ingredient in mustard oil known as allyl isothiocyanate has the ability to both analgesically relieve pain and lower inflammation in the body (6). Mustard seeds are used to make mustard oil. Omega 3 fatty acids, which are found in mustard oil, have been shown in studies to increase blood flow, lessen stiffness and swelling in the affected area, and ease muscle and joint discomfort. The majority of the individuals the investigator saw during the community visit were experiencing arthritis pain, which was interfering with their regular daily activities.

Statement of the problem

A quasi-experimental study comparing the effects of massage with olive oil and mustard oil on the perception of pain in individuals with arthritis in a few villages in the Tirupati District

Objectives of the study

1. To evaluate and compare the pain perception scores from study groups I and II's pre- and post-tests for individuals with arthritis.
2. To assess how well massages with olive and mustard oils affect the way that individuals with arthritis in study groups I and II perceive their pain.

Corresponding Author:
R Sindhuja
Associate Professor,
Rajalakshmi College of
Nursing, Chennai, Tamil Nadu,
India

3. To correlate the pre-test results on pain perception among individuals with arthritis in study groups I and II with the chosen demographic variables.
4. To correlate the chosen clinical factors with the pretest scores on pain perception in study groups I and II, which consist of individuals with arthritis.

Hypotheses

H_1: Among individuals with arthritis in study groups I and II, there is a statistically significant difference in pain perception scores between the pre- and post-test results.

H_2: Among individuals with arthritis in Study Group I and Study Group II, there is a statistically significant variation in the post-test scores on pain perception.

Research Methodology

The study used a quantitative research design. The research methodology employed was to conduct the study, a quasi-experimental comparative research design was used. The two villages of Chennur and Chillakur, which are part of the Upgraded Block Primary Health Centre in Gudur, served as the study's setting. The population consisted of people with arthritis who were between the ages of 40 and 75.40 participants in study group I and 35 participants in study group II made up the study's sample. During the data collection phase, two individuals from study group II and ten individuals from study group I was dropped. There were 30 samples in the experimental group. Techniques for sampling were employed. Technique of convenience sampling

Description of tool

The tool used in the study was Modified (WOMAC) western ontario and mc master university osteoarthritis index scale) through observational checklist
The scoring was categorized as follows

S. No.	Pain Perception	Score	Percentage
1	Mild	0-39	0-36%
2	Moderate	40-70	37-72%
3	Sever	71-100	73-100%

Results

Table 1: Comparison of mean, standard deviation and unpaired 't' test on post test score on pain perception among people with Arthritis in study group I and study Group II.

Variables	Group	Mean	SD	Unpaired 't' test
Pain Perception	Study group 1(n=30)	47.90	12.60	3.567***
	Study group 11 (n=30)	38.00	7.32	

Significant at* $p \leq 0.05$, **$p \leq 0.01$***$p \leq 0.001$

Discussion

The purpose of the study was to compare how well massages with olive oil and mustard oil affected the way that arthritis sufferers perceived their pain. According to the data collection, study group I's post-test mean score on pain perception among individuals with arthritis was 47.60 with a standard deviation of 12.77, and study group II's post-test mean score was 38.00 with a standard deviation of 7.32. It was significant at $p \leq 0.05$ and highly significant at $p \leq 0.01$, $p \leq 0.001$ that the estimated unpaired "t" value was 3.567***. Therefore, mustard oil was more useful in helping arthritis sufferers perceive their pain.

Conclusion

The study's objective was to evaluate how well massages with olive oil and mustard oil affected arthritis patients' perceptions of pain. Patients with arthritis will feel less pain when massage therapy is incorporated into nursing interventions. This study showed that the benefits of mustard oil massage over olive oil massage were greater, and since mustard oil is widely accessible, it can be used as a home remedy.

Acknowledgement
Not available

Author's Contribution
Not available

References

1. Anne W. Anatomy and physiology in health and illness. 10th ed. China: Elsevier; c2008.
2. Basavanthappa BT. Nursing Theories. 2nd ed. Bangalore: Jaypee; c2008.
3. Brunner & Sunddarth's. Medical Surgical Nursing, 12th ed. New Delhi: Wolters Kluwer; c2010.
4. David J Hunter, Jason J McDougall, Francis J Keefe. The symptoms of Osteoarthritis and the genesis of pain [internet]; c2008. (cited 2009 Aug. 01) Available from: https://www.ncbi.nlm.nib.
5. Rathna M. Essential oils for knee and joint pain [internet]; c2019. (cited 2020 Feb. 16) Available from: https://www.webmd.com.
6. Breslin P. Olive oil may have pain relieving properties [internet]; c2005. (cited 2005 Aug. 31) Available from: https://www.webmd.com.
7. Polit F Demise, Hunglers P Bernadette. Nursing Research and principles and method. 6th ed. Philadelphia: Lippincott Williams and Wilkin; c1999.