

## EFFECTIVENESS OF KNEADING TECHNIQUE ON JOINT PAIN AMONG ELDERLY PEOPLE AT SELECTED URBAN COMMUNITY, CHENNAI

**DR. C. SUSILA<sup>1</sup>, MRS. JOSE AMALA ANILDA<sup>2</sup>, MS. JEBISHA F S<sup>3</sup>, MS. RIBEE GRACELINE P<sup>3</sup>, MS. SANDHIYA G<sup>3</sup>, MR. SURIYA PRAKASH D<sup>3</sup>**

<sup>1</sup>M.sc(N), Ph.D, Principal, Billroth college of nursing, <sup>2</sup> M.sc(N) Assistant Professor, Department of community health nursing, <sup>3</sup>B.sc Nursing, Final year students

### ABSTRACT:

**Background:** Joint pain is widespread among older adults. A report from the National Poll on Healthy Aging indicates that 70% of adults aged 50 and above experience joint pain, with 45% enduring symptoms daily. The present study was intended to assess the effectiveness of kneading technique the level of joint pain among elderly people at selected urban area.

**Objectives:** 1.To assess the level of joint pain before and after administration of kneading technique in experimental and control group. 2.To determine the effectiveness of kneading technique upon joint pain among elderly people. 3.To associate the post test level of joint pain among elderly people with demographic variable.

**Materials and Methods:** A quasi experimental research with one experimental group and one control group for one week. The level of joint pain among elderly people was assessed by using modified lower extremities functional scale- 20 standardized questionnaire tool.

**Results:** The obtained data was analyzed through descriptive statistics and inferential statistics. In post test the level of joint pain mean was 46.66 with standard deviation of 9.94 the paired test value was statistically 2.94 at  $p < 0.05$  level. It indicates the effectiveness of kneading technique on decreasing the level of joint pain among elderly people.

**Keywords:** elderly, kneading technique, joint pain

### 1.INTRODUCTION

Aging is a biological inevitable process that results in continuous or irreversible decline in functioning of the all-organ system in the body and significantly raise the risk of various health problems such as neurodegenerative disease, cardiac diseases, metabolic diseases, musculoskeletal disease, etc., specifically after the age of 60, many older adults develops multiple comorbidities. In 2019, the population of people aged 60 and above was 1 billion. This will increase to 1.4 billion by 2030 and 2.1 billion by 2050 (WHO).

Joint pain is most common issue among the elderly and affects their quality of life. The joint pain occurs due to various reasons such as osteoarthritis, rheumatoid arthritis, osteoporosis and

etc.,. As we age the joints get stiffen and losses its flexibility over time because the amount of lubricating fluid in the joints reduces and the cartilages also become thinner.

Joint pain was more prevalent among the older adults in Uttarakhand 67.5% and least prevalent in west Bengal 26.8%. In accordance with evident that shows individuals in obese population were more prone to experience joint pain than the normal. Excessive weight exerting substantial stress on weight bearing joints results in joint pain. Significantly the Prevalence of joint pain in Tamilnadu is 64.8% with respect to physiological, psychological, socioeconomical characteristics. ( **Amitkumar goyal,2024**)

Kneading technique is a particular type of massage technique that includes compressing soft superficial tissues. It is a circular massaging technique where the deep tissues are rolled and squeezed in a compressive manner. This technique is used to treat tightness of muscle, increases flexibility, decreases pain and produce relaxation.

## 2.NEED FOR THE STUDY

Joint pain is the massive musculoskeletal condition among the older adults. Joint pain can affect any part of the body or one or more joints, likely knee joint pain, hip joint pain, spine joint pain, feet and ankle joint pain. Commonly the pain arises with the swelling and inflammation, stiffness of muscles, loss of movement in the joints. Joint pain can leads to wide range of conditions such as osteoarthritis, rheumatoid arthritis, bursitis, gout, strains, sprains, and other injuries. Many reports shows that joint pain were more worsen in the morning because of body's stiffness

Kneading techniques was first recorded in the works of the Italian physician fabricius of aquapendente (1537-1619). Kneading technique is the one of the best ways to relieve muscle tension and stimulate blood circulation. But there is no proper research on its actual effects of the technique. There is a strong need to joint pain among the older adults.assess the effectiveness of kneading technique in order relieve joint pain among the elderly.

**Anushap (2015)** conducted a quasi-experimental study to assess the effectiveness of kneading technique on joint pain among oldage people with arthirits in selected oldage homes at Kanyakumari district. To evaluate the effectiveness of kneading technique on joint pain among old age people with arthritis in selected old age home at kanyakumari. Quasi-Experimental with pre-test post-test control group design was adopted in this study. The study was conducted among the oldage people at Trinity oldage home, Thirithuvapuram for experimental group and Home for the aged, Pilankalai for control group. 30 samples for each group was selected using convenience sampling technique. Data collection was done by using Modified Extremities Functional Scale. Kneading technique was administered for experimental group. The data gathered were analyzed by descriptive, inferential statistical 4 method and interpretation was done on the basis of the objectives of the study.The result shows the mean post test score in experimental group was 25.10 whereas in the control group, the mean post test score is 52.48. The mean difference was 27.38. The obtained independent „t“ value was

13.89 which is more than the table value ( $p=2.00$ ) with the degree of freedom 58 at 0.05 level of significance. Hence the Research Hypothesis (H1) is accepted. From the results of the study, it is concluded that rendering Kneading technique to the old age people with Arthritis was effective in reducing the joint pain.

### 3.STATEMENT OF THE PROBLEM

Effectiveness of kneading pain on joint pain among elderly people

#### Objectives:

- To assess the pre test level of joint pain among elderly people with joint pain before kneading technique in experimental and control group.
- To determine the effectiveness of kneading technique upon joint pain among elderly people at selected community areas.
- To associate the post level of joint pain among elderly people with demographic variables at selected community areas.

#### Hypothesis :

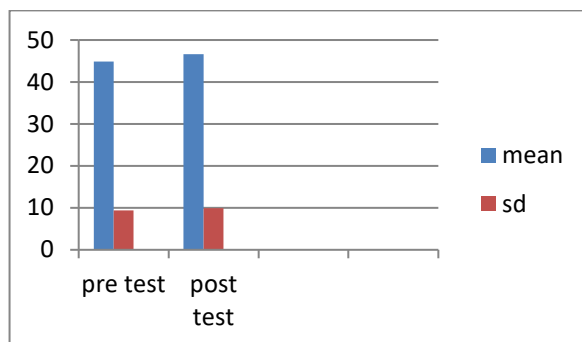
Non directional hypothesis: there is a significant differences between on the level of joint pain before and after kneading technique among elderly people.

### 4. METHODS AND MATERIALS USED

The research approach was quantitative approach by using quasi experimental research design. The study was conducted at selected urban community area with 30 samples. Out of which 15 samples in experimental group and 15 sample in control group and the sample were selected by using purposive sampling technique. The tool used for the study was demographic variables and modified lower extremities functional scale to collect data. Explained the study to the sample and got consent from the sample. Demographic variables and joint pain level were assessed for both experimental and control group. Kneading technique was given for five consecutive days for experimental and control group. Post test was done by using same modified lower extremities functional scale at the end of fifth day. The data were analysed by using descriptive and inferential statistics.

### 5.RESULTS

Out of 15 samples in experimental group, 11(73%) have a moderate level of joint pain and 04(27%) have a mild level of joint pain .In control group, 11(73%) have a moderate level of joint pain and 04(27%) have a mild level of joint pain. The pre-test mean value of experimental group 44.86 with 9.428 and the post test mean value of 46.66 with 9.940. The paired-t test reveals that there is effectiveness of kneading technique on reducing the level of joint pain among elderly people at the level of  $P<0.05$ .



## 6. CONCLUSION

The study concludes that the kneading technique is used for relieving the joint pain for elderly people, which can reduce the need of pharmacological intervention. The kneading technique is easy to do and used to treat tight muscles, increase flexibility and decrease pain. Kneading can also be used to produce a therapeutic response to help reduce emotions of stress and anxiety. Thus the kneading technique find great relief without drugs at home for elderly.

## 7.RELEVANCE OF CLINICAL PRACTICE

Based on the findings of this study, the community nurses can collaborate with the community to implement this non pharmacological intervention to enhance the health and wellness of the elderly at the community areas.

## 8.CONFLICT OF INTEREST

The authors have no conflict of interest

## 9.RECOMMENDATION

- Similar kind of studies can be conducted on large group
- The same study can be conducted in different setting such as nursing home old age homes.

## ACKNOWLEDGEMENT

We wish to render our first and foremost sincere gratitude to the almighty for his holiness, his showers of love and blessing on us, the strength given us, the everlasting divinely presence, all throughout the study which led us for the successful achievement of our project.

We offer our earnest gratitude to the founder Dr.RAJESH JAGANATHAN , Managing Director and Dr. A. NARAYANASWAMY , Managing Trustee of Billroth College of Nursing, Chennai for giving opportunity to pursue our Nursing. We express our heartfelt gratitude to

our beloved Principal Prof . Dr. C.SUSILA , M.Sc (N) , PhD , Billroth College of Nursing , for her excellent guidance , compassionate spirit of sustained support throughout the study. We also express our sincere thanks to all the head of the departments and all faculty of Billroth College of Nursing for providing their suggestions.

## 10. REFERENCES

- 1) Kajal Brar,Kalpana Mohan, A Study to Assess **the Effectiveness of Kneading Technique on Joint Pain Among Old Age People Residing in Selected Village at Panipat. (2022).** International Journal of Nursing Education, 14(3), page no 92-97. Available: <https://doi.org/10.37506/ijone.v14i3.18357>
- 2) S.Pavithra, Mrs.Gowari P"**a study to assess the effectiveness of kneading technique on joint pain among old age people** ", ijnrd - international journal of novel research and development ([www.IJNRD.org](http://www.IJNRD.org)),ISSN:2456-4184,Vol.8,Issue 12, page no.b620-b634, December-2023, Available:<https://ijnrd.org/papers/IJNRD2312178.pdf>
- 3) Babolat .KA **Comprehensive Examination of Sports Massage Therapy and Muscle Energy Techniques in Alleviating Joint Pain and Restoring Range of Motion,** Journal of pain and Relief,Vol 12(5),JPAP-23-97145
- 4) S Anusha,**A study to assess the effectiveness of kneading technique on joint pain among oldage people with arthritis in selected oldage homes at Kanyakumari District**
- 5) [www.wikipedia.com](http://www.wikipedia.com)
- 6) [www.nlm.nih.gov/medlineplus/](http://www.nlm.nih.gov/medlineplus/)
- 7) [www.Pubmed.com](http://www.Pubmed.com)
- 8) [www.researchgate.net/publication/](http://www.researchgate.net/publication/)