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A STUDY TO ASSESS THE EFFECTIVENESS OF GUIDED IMAGERY IN TERMS OF REDUCTION OF JOINT PAIN AMONG OLDAGE PEOPLE WITH ARTHRITIS IN SELECTED OLDAGE HOME, BELONIA, SOUTH TRIPURA

Nursing

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ABSTRACT

In response to the escalating challenges posed by joint pain among the elderly population, particularly those afflicted with arthritis, this study adopts a quasi-experimental design employing a pre-test-post-test control group structure. The research was conducted at 'Ashray' old age home, where the primary focus was to assess the efficacy of guided imagery as an intervention for reducing joint pain among the elderly residents. **Aims and Objectives** The overall aim of the research was to assess the effect of guided imagery in reducing level of joint pain among old age people with Arthritis. **Methodology:** A Quasi experimental with pre test - post test control group design was used to assess the effectiveness of guided imagery to reduce the level of joint pain among the old age people, conducted at 'Ashray' old age home. The data were collected from 60 old age people by using simple purposive sampling technique for both experimental (20) and control (20) group by using modified WOMAC scale. **Results:** Descriptive and inferential statistics, including t-tests and chi-square tests, were employed to analyze the data. The results revealed highly significant differences in pre-test and post-test scores within both the experimental and control groups. In the experimental group, the mean pre-test score for old age individuals was 73.8±7.4, representing 68.2% of the total mean score. Following the intervention, the post-test mean score decreased to 25.3±5.5, constituting 47.8% of the total mean score. Comparatively, in the control group, the pre-test scores for old age individuals were 66.05±7.9, accounting for 58.4% of the total mean score. After the study period, the post-test mean score increased to 51.8±8.5, representing 61% of the total mean score. **Conclusion:** Based on the study findings, it is concluded that guided imagery proves to be effective in reducing the level of joint pain among the elderly. The observed changes in pre-test and post-test scores highlight the potential efficacy of guided imagery as an intervention for alleviating joint pain in the elderly population.

KEYWORDS

Guided imagery, Joint pain, Old age people, Arthritis, old age home

INTRODUCTION

Arthritis is a common chronic condition that affects millions of people, especially in older age. It is characterized by joint pain, stiffness, and swelling, which can significantly impact the quality of life of those affected. With the aging population on the rise, there is a growing need to find effective ways to manage arthritis pain in older adults.[1] One potential non-pharmacological intervention that has gained attention in recent years is guided imagery. Guided imagery is a relaxation technique that involves using mental images and visualizations to induce a state of deep relaxation, leading to a reduction in pain and other symptoms.[3] This study aims to assess the effectiveness of guided imagery in reducing joint pain among older adults with arthritis in a selected old age home in Belonia, South Tripura.[4]

Need Of Study:

Guided imagery is a mind-body therapy that has been used in healthcare for centuries. It involves using positive mental images and visualizations to create a state of deep relaxation, leading to a reduction in physical and emotional symptoms.[2] It is believed that guided imagery can help reduce pain by altering the perception of pain in the brain and promoting relaxation, which can reduce muscle tension and joint stiffness.[6]

Previous studies have shown promising results for the use of guided imagery in reducing pain and improving the quality of life in adults with chronic pain conditions, including arthritis.[3] However, there is limited research on the effectiveness of guided imagery specifically for older adults with arthritis in the context of an old age home. Hence, this study aims to fill this gap and provide evidence for the potential use of guided imagery in managing arthritis pain in older adults.[5]

OBJECTIVES

1. To assess the intensity of joint pain among people with arthritis in experimental and control group.
2. To administer guided imagery in terms of reduction joint pain among people with arthritis in experimental group.
3. To evaluate the effectiveness of guided imagery on intensity of joint pain among people with arthritis in experimental group.
4. To find out the association between the level of joint pain among people with arthritis in their selected demographic variables.

HYPOTHESIS

H_1: There will be a significant difference in the level of joint pain after guided imagery among people with arthritis in experimental group than the control group.

H_2: There will be a significant association between the post test level of joint pain among people with their selected demographic variables.

METHODOLOGY

Research Design:

In this study, a quasi-experimental pre-test-post-test control group design was employed. The design involved two groups: the experimental group (E) and the control group (C). The experimental group underwent the intervention, consisting of guided imagery administered for 15 minutes over 15 consecutive days. Assessments of joint pain levels were conducted before (O1) and after (O2) the intervention. The control group received no intervention between the pre-test (O1) and post-test (O2) assessments.

Research Setting:

The study was conducted at "Ashray" old age home in Belonia, South Tripura, chosen for the availability of older adults and the cooperation extended by the management of the religious group. The setting provided 60 beds, and the sample included 40 elderly individuals with arthritis, selected based on accessibility, geographical proximity, cooperation and availability of subjects, time and subject economy, transport facilities, ethical clearance, and administrative approval.

Variables:

The independent variable in this study was guided imagery, while the dependent variable was the level of joint pain among the old age people. **Demographic variables** such as age, sex, educational status, marital status, dietary pattern, duration of arthritis, and medication for pain relief were considered.

Population and Sample:

The population consisted of old people aged 60 years and above with arthritis residing in Ashray old age home. The sample comprised 40 individuals with arthritis and joint pain, with 20 participants in the experimental group and 20 in the control group.

Sample Size:

The sample size was determined as 40 old age people with arthritis and joint pain, with 20 individuals in each group (experimental and control). The selection aimed to strike a balance between the expense of data collection and the need for sufficient statistical power.

Sampling Technique and Sample Selection Criteria:
Non-probability purposive sampling was employed, allowing the researcher to select participants based on specific criteria. The inclusion criteria encompassed individuals diagnosed with arthritis, both males and females aged 60-85 years, and those proficient in Bengali, English, or Hindi.

Description of the Tool:
The tool employed in this study comprises three sections, each serving a distinct purpose.

Section-A: Demographic Variables
This section includes demographic variables such as age, sex, educational status, marital status, dietary pattern, duration of arthritis, and the use of medication for pain relief. These variables provide essential contextual information about the participants.

Section-B: Modified WOMAC Scale
The Modified WOMAC Scale is a validated instrument designed to quantify joint pain in patients. It consists of 24 items, each scored from 0 to 4. The total score is calculated as the sum of the individual item scores. The scale focuses on three key areas:
1. Pain (5 items)
2. Stiffness (2 items)
3. Physical function (17 items)

Results Of The Study
The demographic table summarizes key characteristics of the study participants. The sample includes elderly individuals with arthritis, with a total of 40 participants divided equally between the experimental and control groups. Demographic variables such as age, sex, educational status, marital status, dietary pattern, duration of arthritis, and medication for pain relief were considered. The majority of participants were aged between 60-85 years, and both male and female individuals were included in the study.

The selected population is representative of those residing in the "Ashray" old age home in Belonia, South Tripura, providing a comprehensive overview of the demographic composition of the study sample.

Regarding pre-test and post-test joint pain scores in the experimental and control groups. In the experimental group, 60% had severe and 40% had extreme severe pre-test joint pain, shifting to 25% moderate and 75% severe post-test. The control group showed 75% severe and 25% extreme severe pre-test, changing to 40% moderate and 60% severe post-test. Guided imagery proved effective in reducing joint pain in the experimental group, contrasting with an increase in pain levels in the control group without intervention. The modified WOMAC scale facilitated pain level categorization.

Table 1 Comparison of mild, moderate and severe level of pre and post test score of joint pain on guided imagery among old age people in experimental group

Area	Experimental Group							
	Pre Test				Post Test			
	Mild	Moderate	Severe	Extreme Severe	Mild	Moderate	Severe	Extreme Severe
Pain	0%	15%	85%	0%	85%	15%	0%	0%
Stiffness	0%	0%	70%	30%	55%	45%	0%	0%
Physical Function	0%	0%	95%	5%	80%	20%	0%	0%

Table 2 Comparison of mild, moderate and severe level of pre and post test score of joint pain on guided imagery among old age people in both control group

	Control Group							
	Pre Test				Post Test			
Area	Mild	Moderate	Severe	Extreme Severe	Mild	Moderate	Severe	Extreme Severe
Pain	0%	40%	60%	0%	15%	70%	15%	0%
Stiffness	0%	10%	85%	5%	10%	40%	50%	0%
Physical Function	0%	35%	65%	0%	0%	75%	25%	0%

Table 3. The study compares pre and post-test scores of joint pain using the Modified WOMAC scale in the experimental and control groups.

Area	'T' Value	Level Of Significance
Pain	13.47	Highly Significant
Stiffness	18.7	Highly Significant
Physical Function	30.90	Highly Significant

Group	Mean	SD	Mean Difference	't' Value	Table Value
Pretest	73.8	7.4	48.5	8.26	2.09
Post test	25.3	5.5			
Control Group					
Pretest	66.05	7.9	14.25	1.48	2.09
Post test	51.8	8.5			

Chi-square analysis was conducted to examine the association between post-test scores of joint pain among old age individuals and selected demographic variables. The results indicated that there was no significant association between post-test scores and demographic factors such as age, sex, educational status, marital status, dietary habits, duration of arthritis, and medication for pain relief. The null hypothesis was accepted for some demographic variables, suggesting that there is no substantial relationship between post-test joint pain scores and the specified demographic characteristics. In conclusion, the findings suggest that there is no significant association between post-test joint pain scores and demographic variables following guided imagery intervention among the elderly**.**

Ethicalclearance
Ethical clearance for the study was obtained from the institutional ethical committee.

DISCUSSION:
Comparisons using the Modified WOMAC Scale illustrate significant reductions in joint pain post-guided imagery. Specific factors like pain, stiffness, and physical function are analyzed, showcasing positive impacts. Hypothesis testing affirms guided imagery's effectiveness through statistical significance. Chi-square analysis finds no significant association between post-test joint pain scores and demographic variables. In summary, the study supports guided imagery's efficacy in alleviating joint pain among the elderly, emphasizing statistical significance and demographic independence.

CONCLUSION:
Concluded that level of joint pain decreases with the administration of guided imagery and it is one of the good therapy that helps to reduce the level of arthritis pain.

REFERENCES

1. Centers for Disease Control and Prevention. (2021). Arthritis by the numbers. Retrieved from https://www.cdc.gov/arthritis/data_statistics/arthritis-related-stats.htm
2. National Center for Complementary and Integrative Health. (2019). Relaxation techniques for health. Retrieved from https://www.nccih.nih.gov/health/relaxation-techniques-for-health
3. Garland, E. L., & Howard, M. O. (2018). Mindfulness-based treatment of addiction: current state of the field and envisioning the next wave of research. Addiction Science & Clinical Practice,13(1),14.
4. Official Journal of the American Holistic Nurses' Association, 23 Oct 2016, 35(4):342-351DOI: 10.1177/0898010116675462 PMID: 30208778
5. World Health Organization; (2011). Health Determinants. Retrieved from www.ncbi.nlm. nih.com.
6. Brosseau, L. (2009). Symptoms among Arthritis. Orthopedics Today, 10 (3), 119-125.
7. Cetin. (2009). Therapeutic Effects of Physical Agents. Helpage India Research and Development Journal, 14(2),