Content is available at: CRDEEP Journals
Journal homepage: http://www.crdeepjournal.org/category/journals/ijls/

International Journal of Life Sciences
(ISSN: 2277-193x) (Scientific Journal Impact Factor: 6.106)

UGC Approved-A Peer Reviewed Quarterly Journal

A Descriptive Study to Assess Knowledge Regarding Exercise on Joint Pain among Middle Age People in Shri Mahant Indresh Hospital Dehradun.

Sheeba Philip[1]; Renjith Thomas[2*] and Kanchan Negi[3]

[1-]Ph.D Scholar, Desh Bhagat University, Gobindgarh District Fatehgarh Sahib, Punjab/Professor, SGRRIM & HS College of Nursing, SGRR University, Patel Nagar, Dehradun, Uttarakhand.

[2-]Associate Professor, Department of Community Health Nursing, SGRRIM&HS College of Nursing, SGRR University, Patel Nagar, Dehradun, Uttarakhand.

[3-]Tutor, Department of Medical Surgical Nursing, SGRRIM&HS College of Nursing, SGRR University, Patel Nagar, Dehradun, Uttarakhand.

ARTICLE DETAILS

Corresponding Author:
Renjith Thomas

Key words:
joint pain, exercise, middle age

ABSTRACT

Bone and joint pain can occur in response to numerous conditions including trauma, infection, inflammation, autoimmune disease, genetic driven disease states, joint and bone pathology associated with aging, and cancer. Bone and joint associated pain can be acute (e.g. due to trauma), recurring, or chronic in nature. Indeed, musculoskeletal pain such as osteoarthritis is the most common form of chronic pain and disability worldwide. It is important to recognize that bone and joint pain is very complex, with multiple types of pain as well as multiple etiologies that may require different treatment strategies for complete pain management. This study aims to assess the level of knowledge among middle – aged individuals regarding the relationship between exercise and joint pain. A total of 100 samples were enrolled by convenient sampling technique. Data was collected with the help of a Structured Knowledge questionnaire which was analyzed by differential and inferential statistics. Descriptive statistics will be used to summarize participant's knowledge levels regarding exercise and joint pain. Study result show that people had favorable level of attitude regarding exercise on joint pain. 20% of them are adequate level of knowledge regarding exercise on joint pain. 64% of them were having moderate and 16% were having inadequate level of knowledge. The following conclusion were drawn from the findings of the study the people had favorable level of attitude regarding exercise on joint pain. 20% of them are adequate level of knowledge regarding exercise on joint pain 64% of them were having moderate and 16% were having inadequate level of knowledge. The booklets were distributed among people to improve their knowledge. There by they can improve themselves from illness and improve their health status.

1. Introduction

Bone and joint pain can occur in response to numerous conditions including trauma, infection, inflammation, autoimmune disease, genetic driven disease states, joint and bone pathology associated with aging, and cancer. Bone and joint associated pain can be acute (e.g. due to trauma), recurring, or chronic in nature. Indeed, musculoskeletal pain such as osteoarthritis is the most common form of chronic pain and disability worldwide. It is important to recognize that bone and joint pain is very

* Author can be contacted at: *Department of Community Health Nursing, SGRR University, Patel Nagar, Dehradun, Uttarakhand.*

Received: 18-March-2024; Sent for Review on: 25-March-2024; Draft sent to Author for corrections: 10-April-2024; Accepted on: 20-April-2024; Online Available from 23-April- 2024

DOI: 10.13140/RG.2.2.16967.30888

complex, with multiple types of pain as well as multiple etiologies that may require different treatment strategies for complete pain management. Some patients also report development of persistent background pain and/or breakthrough pain episodes that are resistant to currently available medications (1). Pain management is to alleviate joint pain, improve daily function and quality of life by increasing muscle strength, physical activity and emotional functioning. Pain relief often involves a mix of surgical treatment (arthroscopy, joint fusion, osteotomy, joint replacement) and non-pharmacological treatment (physical therapy and self-management education (2). After an initial evaluation and treatment plan, it is extremely important to have follow-up medical monitoring by your health care professional if requested. During these visits, the results of tests are reviewed and the effects of medications are monitored. Further testing may be indicated based on the symptoms present at the time of follow-up. Everyone needs exercise, but it's especially important for people with joint pain. Exercise increases strength and makes moving easier. Exercise reduces joint pain and helps fight tiredness (3).Regular exercise can help keep the muscles around the joints strong, lower the risk of bone loss and help keep joint swelling at bay. Staying consistent with exercise can help lubricate the joint cartilage, which can help reduce stiffness and pain. Regular exercise helps keep you flexible and strong, which can delay or avoid surgery on the affected joint. Cycling, Elliptical machine, Golf, Hiking ,Pilates, Rowing, Stretching, Swimming,Tai chi. Walking,Yoga etc.(4).

This study was conducted with an aim:

- *To assess the level of knowledge regarding exercise on joint pain among middle age people.*
- *To find out the percentage wise distribution of demographic variables among the samples.*

2. Methods

A quantitative research approach is used for this study. The research design selected for the study is the descriptive design, the study tends to measure the level of knowledge regarding exercises on joint pain among middle age people in Shri Mahant Indresh Hospital, Dehradun from 1/08/2023 to 25/08/2023. In the present study the population was 100 middle age people in Shri Mahant Indiresh hospital Dehradun with the formula of $n=t^2(p \times q)/d^{2\cdot\cdot}$ Non probability convenient sampling technique was used for this study.

3. Results

The aim of our study to assess the knowledge regarding exercise on joint pain at Shri Mahant Indriesh Hospital ,Dehradun. Collected data were analyzed using descriptive and inferential statistics and presented in the form of tables and diagrams.

The first objective of the study was to assess the level of knowledge regarding exercise on joint pain the table 2 show the level; of knowledge among people of joint pain. 20% had adequate knowledge, 64% had moderate, and 16% had inadequate knowledge regarding exercises on joint pain.

The second objective was to find the association between demographic variables and level of knowledge regarding exercise on joint pain. The table number 3 show the level of knowledge association according to their demographic characteristics.

1 As per the age group in 41-45 years age group, 15% had adequate knowledge, 30% had moderate knowledge, 25% had inadequate knowledge, age group of 46-50 years age group 9% had adequate knowledge, 8% had moderate knowledge, and 3% had inadequate knowledge. The age group in 51-55 years age group, 1% had adequate knowledge, 3% had moderate knowledge, 1% inadequate knowledge. The age group in 56-60 years age group, 1% had adequate knowledge, 2% had moderate knowledge, and 2% had inadequate knowledge.

2 As per the gender, in male 20% had adequate knowledge, 30% had moderate knowledge, 10% had inadequate knowledge. In females 10% had adequate knowledge, 20% had moderate knowledge, and 10% had inadequate knowledge.

3 As per the religion, in Muslim20% had adequate knowledge,15% had moderate knowledge, 15% had inadequate knowledge. In Hindu 15 % had adequate knowledge, 8% had moderate knowledge, 7% had inadequate knowledge. In Sikh 5% had adequate knowledge, 10% had Moderate knowledge, 5% had inadequate knowledge. In Christian 00% had adequate knowledge, 00% had Moderate knowledge, 00% had inadequate knowledge.

4 As per the family type, in Joint family 20% had adequate knowledge, 40% had moderate knowledge, and 20% had inadequate knowledge. In Nuclear family 5% had adequate knowledge, 10% had Moderate knowledge, and 5% had inadequate knowledge. In extended family00%had adequate knowledge, 00% had moderate knowledge , 00% inadequate knowledge.

5 As per the occupation, in Government job 10% had adequate knowledge, 20% had moderate knowledge, and 10% had inadequate knowledge. In Private Job 10% had adequate knowledge, 5% had moderate knowledge, 5% had inadequate knowledge In others 8% had adequate knowledge, 24% had Moderate knowledge, 8% had inadequate knowledge.

6 As per the Monthly income in less than 5000,00% had adequate knowledge,00 % had moderate knowledge, 00% had inadequate knowledge. In 5000-10000, 00% had adequate knowledge, 00% had moderate knowledge, and 00% had inadequate knowledge. In 10000-15000, 5% had adequate knowledge, 10% had Moderate knowledge, 5% had inadequate knowledge. In above 15000 20% had adequate knowledge, 40% had Moderate knowledge, 20% inadequate knowledge.

7 As per the Area of residence in rural area 10% had adequate knowledge, 20% had moderate knowledge, 5% had inadequate knowledge. In Urban area 20% had adequate knowledge, 30% had moderate knowledge, 15% had inadequate knowledge.

8 As per marital status in married 30%had adequate knowledge, 55% moderate knowledge, 15% adequate knowledge. In unmarried 0% had adequate knowledge, 0% had moderate knowledge, 0% had inadequate knowledge.

9 As per period of illness in 3-6 months 6% had adequate knowledge, 3% had moderate knowledge, 1% had inadequate knowledge. In 6-12 months 11% had adequate knowledge, 6% had moderate knowledge, 3% had inadequate knowledge. In 1-2 years 16% had adequate knowledge, 13% had moderate knowledge, 11% had inadequate knowledge. In more than 2 years 11% had adequate knowledge, 12% had moderate knowledge, 3% had inadequate knowledge.

SECTION-A

Table -1 Frequency and Percentage Distribution of Sample Demographic Characteristics Validity. N=100

S NO.	Demographic variable	Frequency(f)	Percentage(%)
1	AGE		
	(a) 41-45	70	70%
	(b) 46-50	20	20%
	(c) 51-55	5	5%
	(d) 56-60	5	5%
2	SEX		
	(a)Male	60	60%
	(b)Female	40	40%
3	RELIGION		
	(a) Hindu	30	30%
	(b) Muslim	50	50%
	(c) Sikh	20	20%
	(d) Christian	0	00%
4	TYPE OF FAMILY		
	(a) nuclear	20	20%
	(b) joint	80	80%
	(c) extended family	0	00%
5	OCCUPATION		
	(a) Government Job	45	45%
	(b) Private Job	20	20%
	(c) Other	35	35%
	MONTHLY INCOME		
6	(a) Less than 5000	0	00%
	(b) 5000-10000	0	00%
	(c) 10000-15000	20	20%
	(d) More than 15000	80	80%
7	RESIDENTIAL AREA		
	(a) Urban	65	65%
	(b) rural	35	35%
8	MARITAL STATUS		
	(a) Married	100	100%
	(b) Unmarried	0	00%

9	PERIOD OF ILLNESS		
	(a) 3-6 month	10	10%
	(b) 6-12 month	20	20%
	(c) 1-2 years	40	40%
	(d) More than 2 years	30	30%

SECTION-B

Table -2 -Percentage Wise Distribution of Middle Age People In Shri Mahant Indresh Hospital According to their Level of Knowledge.

Level of knowledge	Total no. of sample	Percentage (%)
Adequate knowledge	20	20%
Moderate knowledge	64	64%
Inadequate knowledge	16	16%

SECTION C

This section deals with the testing of the hypothesis to find the association between the level of knowledge and their selected demographic variables.

Table 3: Association between the knowledge score and demographic variables**.** N=30

S. No.	Demographic variables	Inadequate knowledge	Moderate knowledge	Adequate knowledge	DF	Chi-square	Tabular value	Level of association
1.	**Age**							
	41-45	25	30	15				
	46-50	3	8	9	9	16.919	2.26	*
	51-55	1	3	1				
	56-60	2	2	1				
2.	**Sex**							
	Male	10	30	20	2	5.991	4.30	*
	Female	10	20	10				
3.	**Occupation**							
	Government job	10	20	10				
	Private job	5	5	10	4	9.488	2.78	*
	Others	8	24	8				
4.	**Monthly income**							
	Less than 5000	0	0	0				
	5000-10000	0	0	0	6	12.592	2.45	*
	10000-15000	5	10	5				
	>15000	20	40	20				
5.	**Type of family**							
	Joint	20	40	20				
	Nuclear	5	10	5	2	5.991	4.30	*
6.	**Religion**							
	Hindu	7	8	15				
	Muslim	15	15	20	6	12.592	2.45	*
	Sikh	5	10	5				
	Christian	0	0	0				
7.	**Residence**							
	Rural	5	20	10	2	5.991	4.30	*
	Urban	15	30	20				
8.	**Marital status**							
	Married	15	55	30	2	5.991	4.30	*
	Unmarried	0	0	0				
9.	**Period of illness**							

3-6 month	1	3	6				
6-12 month	3	6	11	6	12.592	2.45	*
1-2 year	11	13	16				
Above 2 year	3	12	11				

4. Conclusion

A descriptive study was undertaken among knowledge regarding exercises on joint pain among middle age people in Shri Mahant Indiresh Hospital, Dehradun .100 samples were selected by unstructured questionnaire. The following conclusions were drawn from the findings of the study. The people had favorable level of attitude regarding exercise on joint pain. 20% of them are adequate level of knowledge regarding exercise on joint pain .64% of them were having moderate and 16% were having inadequate level of knowledge. The booklets were distributed among people to improve their knowledge. There by they can improve themselves from illness and improve their health status.

5. Acknowledgements

I am grateful to all the participants who participated enthusiastically in my study and is 100 clients attending at Shri Mahant Indiresh Hospital Dehradun" for their cooperation. We would like to acknowledge the Shri Guru Ram Rai University Patel Nagar, Dehradun, Uttarakhand to conduct this research.

6. References

i Havelin, J. and King, T. (2018) 'Mechanisms underlying bone and joint pain', *Current Osteoporosis Reports*, 16(6), pp. 763–771. doi:10.1007/s11914-018-0493-1.
ii professional, C.C. medical (no date) *What is joint pain? Cleveland Clinic*. Available at: https://my.clevelandclinic.org/health/symptoms/17752-joint-pain (Accessed: 15 April 2024).
iii William C. Shiel Jr., M. (2022) *Joint pain (hand, knee) causes, symptoms, medications & relief*, *eMedicineHealth*. Available at: https://www.emedicinehealth.com/joint_pain/article_em.htm (Accessed: 15 April 2024).
iv Organization (2023) *Types of exercises for strong joints*, *AIA*. Available at: https://www.aia.com/en/health-wellness/healthy-living/healthy-body/Types-of-exercises-for-joints (Accessed: 15 April 2024).
v. Exercising for joint pain (no date) *Tips for Exercising With Joint Pain | Houston Methodist*. Available at: https://www.houstonmethodist.org/blog/articles/2023/jun/tips-for-exercising-with-joint-pain/ (Accessed: 15 April 2024).