



PATIENTS' KNOWLEDGE ABOUT OSTEOARTHRITIS KNEE AND THEIR PERCEPTION ABOUT PHYSIOTHERAPY MANAGEMENT FOR OSTEOARTHRITIS KNEE PAIN – A QUALITATIVE PILOT STUDY

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ABSTRACT **Background:** Osteoarthritis is a common, debilitating chronic joint disease and is a leading cause of pain worldwide. There is very little literature on patients' knowledge of osteoarthritis knee and their Perception of physiotherapy management for osteoarthritis knee pain. So, the study aims to know about the patients' Perceptions of physiotherapy treatment in Osteoarthritis knee pain and their knowledge about osteoarthritis knee. **Materials And Method:** 7 individuals above 55 years were interviewed using a self-administered, semi-structured questionnaire. The participants were recruited from a tertiary care hospital in Ahmednagar. The data was analysed using thematic analysis. **Result:** The thematic approach was used according to the approach of Morse et al. Codes: 1) knowledge 2) treatment option 3) avoidance of surgery 4) physiotherapy management. From which four key themes emerged **Conclusion:** Most of the patients lack knowledge of osteoarthritis, but some patients described osteoarthritis as "wear and tear of joints," "rubbing of bones on one another," or "knee pain,".

KEYWORDS : Osteoarthritis, Patient perceptions, Physiotherapy Management.

INTRODUCTION

Osteoarthritis (OA) is a common and often debilitating chronic joint disease and is one of the leading causes of pain and disability worldwide⁽¹⁾. The prevalence of OA is expected to increase gradually with the aging population and increasing prevalence of obesity. Symptoms can become increasingly debilitating over time and can contribute to feelings of dependence, loss of quality of life, and loss of autonomy in older people. Knee OA is a chronic joint disease characterized by significant heterogeneity in aetiology, onset, course, and treatment response among patients⁽²⁾.

Knee OA is a significant cause of joint pain and problems in daily functioning. These patients' knee pain and physical functioning have been predicted to deteriorate based on their knee characteristics, clinical factors, and psychosocial factors. Obesity is the primary risk factor for knee OA⁽³⁾. Knee pain is a common problem affecting 25% of people in middle and old age⁽⁴⁾.

Although OA is a widespread illness, its diagnosis may be difficult. Diagnostic criteria were developed for OA of the knee⁽⁶⁾. The primary goal of the diagnostic criteria is to differentiate OA from other arthritis, such as rheumatoid arthritis and ankylosing spondylitis⁽⁶⁾. The American College of Rheumatology classification criteria for OA of the knee were used widely⁽⁶⁾.

OA recommends non-pharmacological first-line management, which should include weight loss, physical activity, Self-management of pain, and education⁽⁵⁾. Based on personal living experiences with the disease, the interactions with health professionals, and the treatments received, the informants have identified various knowledge about OA⁽⁵⁾.

This study is important to know about the patient's knowledge about the osteoarthritis knee. It will also help to know about the patient's perception about the physiotherapy treatment in Osteoarthritis knee pain.

Procedure:

Ethical committee approval was obtained, and participants were recruited from a pool of patients who received physiotherapy for osteoarthritis knee pain. They were selected using a purposive sampling technique from OPD and IPD patients of tertiary care hospitals. The nature of the study was explained to the patients. Patient consent was taken. 7 Participants were recruited from a tertiary care hospital in Ahmednagar. Interviews were taken using a self-administered questionnaire. The researcher recorded and transcribed all interviews continuously so that the data analysis occurred when data collection was happening. All the interviews conducted were face-to-face interviews. Interview was conducted individually in a quiet room. This allowed data collection to continue until the saturation point occurred. These interviews were semi-structured, a

research question that uses open-ended questions.

DATA ANALYSIS

An inductive thematic approach was used. To minimize over-representation, two researchers conducted the data analysis simultaneously. Following Morse et al.'s approach to inductive thematic analysis which had four steps: (1) read and reread interview transcripts; (2) step back and reflect on interviews as a whole; (3) identify ideas of similar nature; (4) group ideas into themes. First, the student researcher transcribed the data, and then another researcher with expertise in qualitative methodologies individually read each transcript. Next, they reread and inductively coded each transcript to identify topics and initial patterns of emerging ideas. They then compared codes and grouped similar topics/ ideas into categories before organizing them into broader themes and subthemes. The senior researcher read all transcripts before the discussion to ensure data credibility and confirmability. Analysis was performed using standard word processing software.

RESULT

Seven participants were selected for the interview. Out of which (3) were women and (4) were male. The participants were between age group of 55 to 90 years. All the participants were screened according to the ACR criteria for diagnosis osteoarthritis knee. One session of interview was conducted after 2 to 3 sessions of physiotherapy treatment. The data was then transcribed using thematic approach of morse et al. The codes arise were

- Codes: 1) knowledge
- 2) Treatment options
- 3) Avoiding surgery
- 4) physiotherapy management
- 5) consequences of OA

◦ THEMES:

1) Lack of knowledge about osteoarthritis

This is aroused as, in the interviews, we discovered that most patients lacked knowledge about osteoarthritis knee conditions. They knew about it only when the doctor explained it. For some, it was only the "wear and tear" of the joints or "pain in the joint."

"A 60-year-old male said that osteoarthritis for him is a knee pain."

"A 67-year-old female said that is not known osteoarthritis before coming to the doctor."

2) Impact on daily leaving activities

It was found that there was a significant impact of osteoarthritis knee on the daily function of patients.

"A 60-year-old male said that he has reduced his daily activities like

morning walk due to pain."

3) Lack of knowledge about various treatment options

Lack of knowledge was the most common problem found in all the participants. The Interviewer found out that patients didn't know about physiotherapy as a treatment option.

"A 67-year-old female said that she had no idea about physiotherapy management until the doctor suggested her."

"A 58-year-old male said that the treatment he knew for his knee pain was only medication can cure the pain."

4) Perception of physiotherapy management

Participants felt that physiotherapy had helped them a lot in reducing the pain and in improving their quality of life. Some felt that physiotherapy had relieved their symptoms, but it was not long-lasting.

"A 60-year-old male said physiotherapy management has helped him reduce pain while walking in the morning."

"A 67-year-old female said that there was a reduction in pain after taking physiotherapy, but she felt it was not long-lasting."

DISCUSSION

The qualitative study explores the experiences of people who have received physiotherapy care for knee OA⁽¹⁾. Interestingly, participants tended to have an OA diagnosis already made before their physiotherapy consultation. They also believed they already had adequate knowledge and understanding about knee OA. This was despite participants' different perceptions about knee OA describing it as 'wear and tear,' 'bone on bone,' 'degenerative,' and 'cartilage wear' and their belief that surgery is inevitable⁽¹⁾. This study confirms that knee OA patients are often cautious of physical activity due to fear of accelerating joint degradation. They expressed fear about surgical and pharmacological treatments. They suggested that professionals should focus on the needs of the patients, on alleviating pain, and on delaying the progression of the disease⁽⁴⁾. Most of the patients in your study lacked knowledge about osteoarthritis until the doctor explained their condition. The consequences of knee osteoarthritis were least known to the patients. The contributing factors that patients discussed about osteoarthritis were mainly regarding their occupation. As this study is in a rural area, the main contributing factor was farming occupation, as it involves activities that put pressure on the knee joint. Due to the culture in rural India, most of the activities involve "cross-leg sitting," "squatting," "walking for a longer distance," and "standing for a longer duration." Participants felt that most of these activities also directly impacted their knee condition. Most of the patients said that the only management strategy they knew was taking medications. Also, they said that medications were giving only temporary relief, and there were lots of side effects on their body due to the regular medications. Physiotherapy was known to them only when the doctor suggested them for physiotherapy. Patients also said there was a significant impact on their daily living, like morning walks and household chores. Most of the participants felt that exercise and improved quality of life should help them avoid surgery as they have a fear of undergoing surgery and are worried about the consequences of surgery in their future lives. The participants who were taking regular physiotherapy had seen improvement in their condition and also stated that they faced less difficulty performing their daily activities. This study confirms that knee OA patients are often cautious of physical activity due to fear of accelerating joint degradation. Also, the physiotherapist was aware of explaining the condition to the patient and the importance of exercises.

Similar study was conducted by Pek Ling Teo et al in year 2020 on Patient experiences with physiotherapy for knee osteoarthritis in Australia—a qualitative study which states that Patients' experiences with receiving physiotherapy care for their knee OA were partly aligned with the standard, particularly regarding comprehensive assessment, self-management, and exercise⁽¹⁾.

CONCLUSION

- Most of the patients lack knowledge of osteoarthritis. Still, some patients described osteoarthritis as "wear and tear of joints," "rubbing of bones on one another," or "knee pain," leading to difficulty in cross-leg sitting and doing activities of daily living.
- Patients also mentioned they had little knowledge about

physiotherapy as a treatment option for their knee pain until their orthopedic surgeon suggested physiotherapy

- Patients also mentioned that their pain has effectively reduced during daily activities and morning walks after the physiotherapy sessions.

Annexure I

Theme 1: Understanding of knee osteoarthritis

Name

Age

Gender

Occupation

Past medical history

- 1) What does osteoarthritis mean to you?
- 2) What all do you know about the consequences of knee osteoarthritis?
- 3) Since how many years have you suffering from knee osteoarthritis?
- 4) Since how many days are you coming for physiotherapy sessions?
- 5) Describe about the various contributing factors that will lead to knee osteoarthritis.
- 6) Do you know about the symptoms of knee osteoarthritis? Describe them?
- 7) Describe about the various strategies that can help you in management osteoarthritis knee pain?

Theme 2: Perception about the physiotherapy management in osteoarthritis knee pain

- 8) Have you taken physiotherapy management earlier?
- 9) Did you find physiotherapy helpful in reducing your knee pain?
- 10) Did physiotherapy management help in improving our quality of life?
- 11) Did you feel that physiotherapy management will help in avoiding surgery?
- 12) Did physiotherapist tell you about the importance of exercise in knee osteoarthritis?
- 13) How confident was your physiotherapist in managing knee osteoarthritis?

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