

# PATIENT'S PERCEPTION OF HIP AND KNEE OSTEOARTHRITIS IN A HOSPITAL IN JAMBI CITY

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## ABSTRACT

Osteoarthritis (OA) is a degenerative joint disease, primarily affecting the elderly, and is classified into primary OA (with no specific cause) and secondary OA (caused by other diseases or conditions). Although it cannot be cured, appropriate management can control the symptoms and prevent disease progression. This study aims to assess the perception and knowledge of hip and knee OA patients in Jambi City using the Osteoarthritis Knowledge Scale (OAKS) instrument. Data were obtained from 87 patients at Kambang General Hospital: 54 filled out the Knee OAKS and 33 for Hip OAKS. The results showed that patients' understanding of general knowledge about OA was high (84%), but knowledge related to prevention was significantly lower (44%). Knowledge regarding treatment and symptom management was moderate (68.2%), and understanding of healthy lifestyle behaviors was 53%. These findings indicate a significant gap in patient knowledge, particularly regarding preventive measures and lifestyle modifications. Therefore, targeted educational interventions are crucial to improve patient understanding, enhance self-management, and ultimately achieve better clinical outcomes in managing OA.

**Keywords:** Osteoarthritis, Patient Knowledge, OAKS, Health Education, Perception

## ABSTRAK

*Osteoarthritis (OA) adalah penyakit sendi degeneratif yang terutama menyerang lansia, dan diklasifikasikan menjadi OA primer (tanpa penyebab spesifik) dan OA sekunder (disebabkan oleh penyakit atau kondisi lain). Meskipun tidak dapat disembuhkan, manajemen yang tepat dapat mengontrol gejala dan mencegah perkembangan penyakit. Penelitian ini bertujuan untuk menilai persepsi dan pengetahuan pasien OA panggul dan lutut di Kota Jambi menggunakan instrumen Osteoarthritis Knowledge Scale (OAKS). Data diperoleh dari 87 pasien di RSUD Kambang: 54 pasien mengisi Knee OAKS dan 33 pasien mengisi Hip OAKS. Hasil penelitian menunjukkan bahwa pemahaman pasien mengenai pengetahuan umum tentang OA tergolong tinggi (84%), namun pengetahuan terkait pencegahan secara signifikan lebih rendah (44%). Pengetahuan mengenai pengobatan dan manajemen gejala berada pada tingkat sedang (68,2%), dan pemahaman tentang perilaku gaya hidup sehat sebesar 53%. Temuan ini mengindikasikan adanya kesenjangan pengetahuan yang signifikan pada pasien, terutama terkait langkah-langkah pencegahan dan modifikasi gaya hidup. Oleh karena itu, intervensi edukatif yang terarah sangat penting untuk meningkatkan pemahaman pasien, mendorong manajemen mandiri, dan pada akhirnya mencapai luaran klinis yang lebih baik dalam penanganan OA.*

**Kata kunci:** Osteoarthritis, Pengetahuan Pasien, OAKS, Edukasi Kesehatan, Persepsi

## INTRODUCTION

Osteoarthritis (OA) represents a major global health challenge, recognized as the leading cause of disability among older adults worldwide.<sup>1</sup> It is the most common form of arthritis, with its prevalence rapidly increasing due to global trends of population aging and rising obesity rates.<sup>2</sup> The Global Burden of Disease Study 2019 estimated that over 500 million people live with OA, a figure that has risen substantially over the past three decades.<sup>3</sup> In Indonesia, the 2018 Basic Health Research (RISKESDAS) report highlighted that joint diseases affect 7.3% of the population, with OA being the predominant diagnosis, underscoring its significant national burden.<sup>4</sup>

Historically viewed as a simple "wear and tear" disease of the articular cartilage, the understanding of OA pathophysiology has evolved significantly. It is now considered a complex disease of the entire joint organ, involving the subchondral bone, synovium, ligaments, and periarticular muscles.<sup>5</sup> Chronic, low-grade inflammation and metabolic dysregulation are now recognized as key drivers of its progression, linking OA to systemic conditions like obesity and metabolic syndrome.<sup>6,7</sup> This modern understanding highlights that OA is not merely a consequence of mechanical loading, but a result of a complex interplay between mechanical, biological, and inflammatory factors.<sup>8-11</sup>

The impact of OA extends far beyond the joint itself, imposing a substantial burden on individuals and healthcare systems. Chronic pain, the hallmark symptom of OA, leads to functional limitations, reduced mobility, and a significant decline in quality of life.<sup>12,13,14</sup> This often results in disability, loss of independence, and an increased risk of comorbidities such as cardiovascular disease and depression.<sup>15</sup> From a socioeconomic perspective, the costs associated with OA are staggering, encompassing direct medical



expenses for consultations, imaging, medications, and joint replacement surgeries, as well as indirect costs from lost productivity and informal care.<sup>16</sup>

In response to this burden, clinical management guidelines from organizations like the European Alliance of Associations for Rheumatology (EULAR) and the National Institute for Health and Care Excellence (NICE) universally recommend patient-centered care with non-pharmacological strategies as the core foundation.<sup>17,18</sup> These core strategies include patient education, structured exercise programs, and weight management. The goal is to empower patients to actively participate in their own care through effective self-management.<sup>19,20</sup> Evidence strongly suggests that patients who are well-informed and engaged in self-management behaviors experience better pain control, improved function, and higher quality of life.<sup>21</sup>

However, the successful implementation of self-management hinges on a patient's health literacy—their ability to obtain, process, and understand basic health information to make appropriate health decisions.<sup>22,23</sup> A significant gap often exists between the information provided by clinicians and the patient's ability to comprehend and apply it. This disparity can lead to poor adherence to treatment plans, misconceptions about the disease, and underutilization of effective non-pharmacological strategies.<sup>24</sup> This phenomenon is observed across various healthcare settings, including in Jambi City, where despite good access to medical facilities, patient knowledge about OA and its management remains varied.

To bridge this knowledge gap, it is first necessary to accurately assess its magnitude and specific domains of deficiency. The Hip and Knee Osteoarthritis Knowledge Scale (OAKS) is a validated instrument designed for this purpose, allowing for a standardized measurement of patient understanding across key areas of OA management.<sup>25-27</sup> Therefore, this study aims to utilize the OAKS instrument to assess the level and specific domains of knowledge among patients with hip and knee osteoarthritis in Jambi City, to identify educational needs and inform the development of targeted patient support programs.

## METHODS

This cross-sectional study was conducted at Kambang General Hospital, Jambi City, from June to October 2024. The study population consisted of patients newly diagnosed with hip or knee OA by an orthopedic specialist. Sampling was performed using a consecutive sampling method until 87 eligible respondents were recruited.

Data were collected using the Indonesian-adapted version of the Hip and Knee Osteoarthritis Knowledge Scale (OAKS) questionnaire. The OAKS instrument consists of 11 statements covering four domains of knowledge: (1) general knowledge about OA, (2) prevention, (3) care and symptom management, and (4) healthy lifestyle.<sup>10</sup> The questionnaire was administered by research assistants to ensure patients understood each item. The diagnosis of OA in each patient was confirmed through physical examination and radiological imaging (pelvic and/or knee X-rays) as necessary.

The collected data were analyzed descriptively to present the frequency and percentage of patient knowledge levels for each domain. A "good understanding" category was defined for patients with a total score exceeding 40 out of a maximum of 55, following the instrument's scoring guidelines.<sup>10</sup>

## RESULTS AND DISCUSSION

Of the 87 participating patients, 54 (62.1%) completed the questionnaire for knee OA (Knee OAKS), and 33 (37.9%) for hip OA (Hip OAKS). The analysis of patient knowledge levels, categorized by domain, revealed significant disparities as summarized in Table 1.

**Table 1.** Patient Knowledge Levels by Domain

Knowledge Domain	Percentage of Patients with Good Understanding (%)
General Knowledge about OA	84.0%
Care and Symptom Management	68.2%
Healthy Lifestyle Behaviours	53.0%
Prevention of Onset/Worsening	44.0%

The findings highlight a critical disconnect between patients' general awareness of their diagnosis and their practical understanding of how to manage and prevent the progression of the disease. The high score in General Knowledge (84%) suggests that clinicians are effectively communicating the diagnosis itself. Patients know they have osteoarthritis. However, this awareness does not translate into actionable knowledge.

The alarmingly low score in Prevention (44%) is the most significant finding of this study. This indicates a major gap in patient education regarding their active role in managing the condition. OA management is heavily reliant on modifying risk factors, such as weight control and appropriate physical activity, which are key to slowing joint damage.<sup>7,12,13</sup> This lack of knowledge can lead to a sense of helplessness and passive reliance on pharmacological treatments, which only manage symptoms without addressing the underlying progression. This finding aligns with studies by Carmona-Terés et al., who found that while patients were aware of their diagnosis, many felt disempowered and lacked understanding of concrete steps they could take.<sup>11</sup>



The moderate score in Care and Symptom Management (68.2%) suggests that patients have a basic understanding of treatment options, likely focused on medications prescribed to them. However, this moderate score may hide deficiencies in knowledge about non-pharmacological strategies, such as the importance of specific muscle-strengthening exercises versus general activity, the benefits of physical therapy, and joint protection techniques. Over-reliance on analgesics without incorporating these crucial strategies is a well-documented issue in OA care.<sup>9</sup>

Similarly, the low score in Healthy Lifestyle Behaviours (53%) reinforces the gap identified in the prevention domain. Patients may not fully grasp the direct impact of diet, weight management, and specific exercises on their joint health. Vague advice to "lose weight" or "be more active" is often insufficient. Effective patient education requires specific, actionable guidance tailored to their capabilities and lifestyle.<sup>14</sup> Without this, patients are unlikely to adopt and maintain the necessary behavioral changes.

Based on these findings, the research team designed an interactive health talk session for patients and their families. The educational content was specifically targeted at the lowest-scoring domains: prevention, self-management, and lifestyle modification. Such educational interventions, particularly when they are targeted and continuous, have been shown to improve adherence and clinical outcomes in other studies on OA patients.<sup>14</sup> This study demonstrates that a validated instrument like OAKS is not only useful for research but can serve as a practical needs-assessment tool to guide clinical education efforts.

This study has several limitations. Firstly, the cross-sectional design does not allow for observing changes in knowledge over time. Secondly, the study was conducted in a single hospital in Jambi City, so the results may not be generalizable to a wider population. Lastly, there is a possibility of response bias from respondents due to social desirability.

## CONCLUSION

The knowledge of osteoarthritis patients in Jambi City is uneven. While general awareness of the disease is high, there is a significant knowledge deficit regarding prevention and lifestyle modification. This gap has the potential to hinder effective disease management and accelerate OA progression. Therefore, structured and continuous educational efforts are necessary to empower patients, increase their involvement in their own care, and ultimately improve their quality of life.

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