

KNOWLEDGE, ATTITUDE, AWARENESS OF HIP OSTEOARTHRITIS IN POST TRAUMATIC PATIENTS OF HIP JOINT.

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ABSTRACT

Background: Hip osteoarthritis (OA) is a chronic and often debilitating joint disorder that may arise following a hip injury, commonly referred to as post-traumatic osteoarthritis (PTOA). Despite being a frequent long-term outcome of such injuries, many individuals remain unaware of their susceptibility or the ways to effectively manage the condition.

Objective: This study set out to explore how much post-traumatic hip patients know about hip osteoarthritis, attitude towards condition and awareness about the condition.

Methods: We conducted a cross-sectional study with 78 participants with a history of hip trauma. Using a structured questionnaire, we assessed three main areas: knowledge (basic facts and risk factors), attitude (beliefs about prevention and treatment), and awareness (recognition of symptoms and connection to past injuries).

Results: The findings showed that 63.6% of patients had a reasonable understanding of hip OA, especially in terms of its causes and prevention. About 69.7% displayed a positive attitude, showing they were open to seeking treatment and believed in the importance of early diagnosis. Interestingly, awareness was highest—89.7% acknowledged that their prior injury might have led to the development of hip osteoarthritis. However, many still lacked of knowledge about the disease's progression and long-term impact.

Conclusion: Most patients who've suffered from hip trauma or hip injury are somewhat aware and have a good attitude toward managing hip osteoarthritis, but detailed knowledge is still lacking. Providing better education and guidance at the time of injury and during follow-up care could help these individuals recognize symptoms early, seek appropriate care.

Keywords: Hip Osteoarthritis, Post-Traumatic Osteoarthritis (PTOA), Knowledge, Attitude, and Awareness (KAA), Hip Injury, Patient Education, Degenerative Joint Disease, Early Diagnosis, Rehabilitation, Risk Factors, Musculoskeletal Disorders

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INTRODUCTION

Osteoarthritis was frequently developed in post-traumatic patients due to the increasing incidence of traumatic joint injury. Patients who experience falls and accidents are more likely to develop osteoarthritis in later life. Sedentary lifestyle changes in both younger and older populations are the primary cause of arthritis. One of the most common arthritic conditions and the primary cause of disability in developed nations is osteoarthritis, particularly hip osteoarthritis, which also contributes to a

loss of independence. Osteoarthritis is generally regarded as a multifactorial disease. It involves risk factors such as age, gender, body weight, genetics, and diet, along with other contributors like biomechanical imbalances, joint misalignment, anatomical variations, muscle weakness, and structural defects. This condition impacts over 80% of adults¹. Due to the associated pain and discomfort, elderly individuals with this condition often withdraw from social activities and family events². Patients typically ignore their symptoms in the early stages because they don't know how to manage the

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treatments or about other biomedical options, like physiotherapy. The hip is the lower limb's more stable and weight-bearing joint. This type of synovial joint is ball and socket. The joint is created when the acetabulum and femur head articulate. Hyaline cartilage covers the femur's head. The stability of the hip joint is very high. For example: The strength of the ligament and muscle in the acetabulum. Is a term osteo means bone or arthritis means inflammation to the joint and later in results into swelling, Redness, Tenderness, pain. It has 2 types - primary and secondary: Primary occurs at large or weight bearing joint Secondary -Due to any underlying disease. causes degeneration of joint occurs at any age after adolescence. Pathophysiology – Is a leading cause of degeneration mainly, articular cartilage is affected, In this rise in water content, and loss of proteoglycans in cartilage matrix. Repeated weightbearing may cause fibrillation in the cartilage, Fibrillation in the cartilage, due to the grinding mechanism may abrade it. The subchondral bone becomes shiny and firm. Despite its growing clinical burden, there remains limited awareness among post-traumatic hip patients about the long-term consequences of their injury, and increases risk of OA. Early diagnosis and management of OA are crucial to delay progression, preserve joint function, and improve patient outcomes. However, patients' knowledge about the disease, their attitude toward its prevention and treatment, and their awareness of symptoms and follow-up care significantly influence health-seeking behaviour and adherence to treatment strategies^{3 4 5}. Understanding the levels of knowledge, attitude, and awareness (KAA) among post-traumatic hip patients is necessary for developing targeted educational interventions and improving outcomes. This study seeks to evaluate the knowledge, attitude, and awareness (KAA) of individuals with traumatic hip injuries concerning hip osteoarthritis, identify areas of limited understanding, and examine possible correlations with demographic and clinical characteristics. In the region of Karad, a semi-urban area with a mix of rural and urban populations, road traffic accidents, falls, and occupational injuries contribute significantly to the burden of hip trauma. Despite advances in acute management and surgical intervention, there is often a lack of long-term follow-up care and limited awareness regarding the risk of OA development in these patients. Early detection and lifestyle modifications—such as physiotherapy, weight management, and joint-protective strategies—can delay disease progression and reduce disability. However, these preventive measures largely depend on an individual's knowledge, attitude, and awareness about osteoarthritis.

STATISTICAL ANALYSIS –

Existing literature on PTOA has largely focused on clinical outcomes, with relatively little emphasis on community-based awareness in post-traumatic populations. Understanding this demographic is critical for patient education, rehabilitation programs, and public health strategies tailored to local needs^{6 7 8 9 10}.

METHODS

A cross-sectional study was conducted involving 94 post-traumatic hip joint patients aged between 35 and 65 years. Data collection was carried out through Google Forms distributed via various social media platforms. A self-designed questionnaire was developed to assess the knowledge, attitude, and awareness (KAA) of hip osteoarthritis in these patients. It also contains the participant's name, age, and gender. A random sampling method was employed. The collected data were analysed by a statistician. The forms were shared with patients and their relatives within the specified age range of 35 to 65 years.

INCLUSION CRITERIA

- Age: 35 years to 65 years
- Gender: both male and female
- H/O hip trauma
- Post operative (All Surgeries)

EXCLUSION CRITERIA

- Any arthritic condition (Rheumatoid arthritis etc.)
- Previous history of hip osteoarthritis
- Below 35 years
- Above 65 years

ETHICAL COMMITTEE APPROVAL

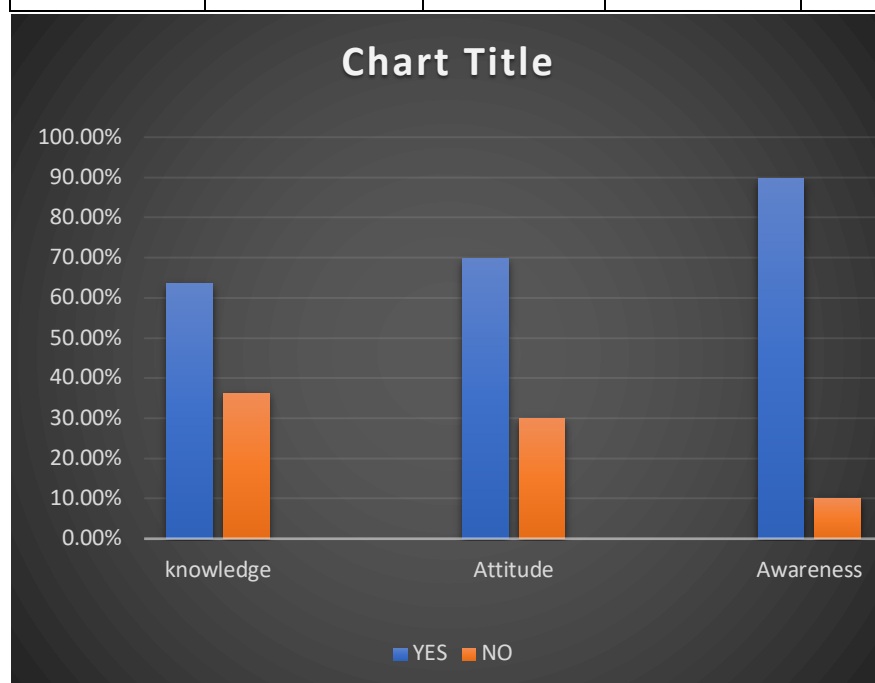
Ethical approval for this study was obtained from the Institutional Ethics Committee of Krishna Vishwa Vidyapeeth (Deemed to be University), Karad. All participants were provided with a comprehensive explanation of the questionnaire and the purpose of the study. Informed consent was obtained from each individual prior to participation. Participation was entirely voluntary, and the confidentiality of all respondents was firmly maintained throughout the study.

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Sr.No.	Question		Number	Percentage
1.	Are you know that hip osteo - arthrits can occur after a hip injury?	YES	50	64.1%
		NO	28	35.8%
2.	Do you have any difficulty with your hip joint?	YES	61	78.2%
		NO	17	21.7%
3.	Do you know that life style changes, such as weight management and exercise, can help in managing hip Osteo arthrits?	YES	48	61.5%
		NO	30	38.4%
4.	Do you know about the risk factor for hip osteoarthritis. (e.g., previous injury, obesity, age)	YES	27	34.6%
		NO	51	65.3%
5.	Do you know that hip osteo arthrits is worsen over a time if untreated?	YES	62	79.4%
		NO	16	20.5%
6.	Do you think that early diagnosis and treatment important for hip osteoarthritis?	YES	75	96.1%
		NO	3	3.8%
7.	Did you believe that surgery is the only solution for hip osteo arthrits?	YES	30	38.4%
		NO	48	61.5%
8.	Would you prefer non-surgical treatments, such as physical therapy and medications, for managing hip osteo arthrits?	YES	58	74.3%
		NO	20	25.6%

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9.	Would you be willing to learn more about hip osteo arthritis and prevention strategies?	YES	68	87.1%
		NO	10	12.8%
10.	Do you think that regular checkups help to prevent hip osteo-arthritits?	YES	72	92.3%
		NO	6	7.6%



RESULT AND INTERPRETATION -knowledge, attitude, and awareness among the 78 post-traumatic hip patients:

- Knowledge:**
 63.6% of responses indicated adequate knowledge about hip osteoarthritis, including its risk factors, progression, and lifestyle modifications. The remaining 36.4% showed a lack of awareness.
- Attitude:**
 About 69.7% of participants showed a positive attitude toward early diagnosis, treatment options, and willingness to seek help out of 100%.

- Awareness:**
 Approximately 89.7% of participants were aware of preventive strategies, non-surgical treatments, and the importance of regular check-up and 10.3% people are unaware about the condition.

These results indicate a moderate level of knowledge and a generally

positive attitude, highlighting the need for enhanced educational and awareness initiatives.

DISCUSSION-

This study aimed to find out how much people who've had hip injuries know about hip osteoarthritis (OA), how they feel about it, and how aware they are about the condition. A total of 78 patients with a history of hip

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trauma took part. Overall, the results showed a fairly good level of knowledge, attitude, and awareness (KAA), but there were still noticeable gaps.

Post-traumatic osteoarthritis (PTOA) is a common and serious consequence of joint injuries, especially in the hip. Over time, the joint undergoes wear and tear due to mechanical stress, leading to pain, reduced mobility, and long-term disability. The good news? If caught early, OA can be managed effectively—sometimes even delayed—through lifestyle changes, regular monitoring, and timely treatment. That's why educating patients after a hip injury is not just helpful; it's essential.

When we looked at the level of knowledge, 63.6% of participants showed a solid understanding of hip OA. They knew that trauma could lead to OA—especially when injuries are left untreated or not followed up properly. However, the remaining 36.4% had little to no awareness of this. This knowledge gap is concerning, as it could delay diagnosis and lead to worsening of this.

In terms of attitude, about 69.7% of patients had a positive mindset. They understood the importance of early detection and were open to non-surgical treatments like physiotherapy and medication. However, a third of respondents still held onto the outdated belief that surgery is the only real solution, this might prevent them from exploring more natural or less aggressive treatment options.

The results around awareness were encouraging: 89.7% of the participant aware about it. They recognized the value of lifestyle changes such as weight control, regular exercise, and follow-up checkups. These individuals knew that maintaining good habits could slow down disease progression. Still, 10.3% lacked this awareness, which is given the impact such knowledge can have on long-term joint health.

One encouraging finding from the study was that almost 74% of participants said they were open to learning more.

CONCLUSION-

This study involved 78 people who had previously experienced hip injuries. It aimed to find out how much they know about hip osteoarthritis (OA), what they think about it, and how aware they are about the condition. The results showed that while 63.6% had a basic understanding of OA, many still didn't know enough about its causes, risk factors, or how it develops over time.

A good sign is that about 69.7% of the people had a positive attitude toward getting treated. They recognized the value of early diagnosis and were open to both surgical and non-surgical options like physiotherapy and medications—showing a positive mindset when it comes to managing the condition.

Awareness was the strongest part, with 89.7% of respondents familiar with preventive measures such as maintaining a healthy weight, staying active, and attending regular medical checkups. However, even here, some gaps were noted—especially in understanding how consistent follow-up care can help slow the disease's progress.

Overall, the findings highlight a clear need for better educational outreach. By improving patient knowledge and understanding, we can encourage earlier interventions and more proactive care—ultimately helping those at risk of hip OA live healthier, more comfortable lives after injury. Public health efforts and targeted awareness campaigns can make a big difference in bridging these gaps and supporting long-term joint health.

REFERENCES

1. Simon Dagenais DC, PhD, Shawn Garbedian MD, Eugene K. Wai MD MSc. *Clin Orthop Relat Res.* 2009.
2. Zijuan Fan¹²⁺, Lei Yan³⁺, Haifeng Liu³⁺, Kenan Fan², Qiang Liu^{4*}, Jiao Jiao Li^{5*}, Bin Wang^{1*}.
3. Iiana N Ackerman, Joanne L Kemp, Kay M Crossley, Adam G Culvenor, Rana S Hinman. *J Orthop Sports Phys Ther.* 2017;47(2).
4. Donald D. Anderson et al. Post-Traumatic Osteoarthritis: Improved Understanding and Opportunities for Early Intervention.
5. Hanan Ali Alqarni et al. Knowledge, Attitude, and Practice regarding Osteoarthritis among Saudi adults in Tabuk.
6. Gossec L, et al. Development of the Hip Osteoarthritis Knowledge Scale (HOAKS). *Arthritis Res Ther.* 2023.
7. Alahmed MS, et al. General Population KAP Studies on OA (Saudi Arabia).
8. Bierma-Zeinstra SM, et al. Post-traumatic arthritis. *J Rheumatol.* 2002.
9. Alahmed MS, et al. Knowledge and awareness regarding osteoarthritis and its risk factors in Hail, Saudi Arabia. *BMC Musculoskelet Disord.* 2023.
10. Alghamdi MK, et al. Public's knowledge of osteoarthritis and its related risk factors in Makkah, Saudi Arabia. *BMC Public Health.* 2023.
11. Bierma-Zeinstra SM, et al. *Post-traumatic arthritis. J Rheumatol.* 2002.