

The Determinants of Knee Osteoarthritis Management; A Systematic Review

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Abstract: *Knee osteoarthritis (KOA) is one of the most common musculoskeletal disorders worldwide and represents a major cause of pain, disability, and reduced functional capacity among adults. Effective management of knee osteoarthritis typically involves a combination of therapeutic approaches aimed at reducing symptoms and improving joint function; however, treatment outcomes are often influenced by multiple determinants related to patient behavior, rehabilitation strategies, and healthcare delivery. This systematic review aimed to identify and synthesize the key determinants influencing the management of knee osteoarthritis. The review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines. A comprehensive literature search was performed across four major electronic databases: PubMed, Scopus, Web of Science, and CINAHL, using keywords related to knee osteoarthritis, management strategies, exercise therapy, rehabilitation, treatment adherence, and self-management. A total of 237 records were initially identified, and after screening and eligibility assessment, 20 studies were included in the final synthesis. The findings indicate that exercise-based management and physiotherapy interventions represent fundamental components in improving pain reduction and physical function among individuals with knee osteoarthritis. Psychosocial factors, including motivation, beliefs about treatment effectiveness, and perceived barriers to physical activity, were also identified as important determinants influencing patient engagement in rehabilitation programs. In addition, treatment adherence plays a critical role in determining the effectiveness of management strategies. Emerging evidence also highlights the potential role of digital self-management and telehealth-based interventions in improving patient participation and access to rehabilitation services. Overall, the management of knee osteoarthritis is influenced by multiple interrelated determinants, and integrating these factors into patient-centered management strategies may enhance treatment effectiveness and improve long-term clinical outcomes.*

Keywords: Knee Osteoarthritis; Exercise Therapy; Rehabilitation; Treatment Adherence; Systematic Review.

1. Introduction

Knee osteoarthritis (KOA) is one of the most common chronic musculoskeletal disorders and a leading cause of pain, disability, and reduced functional capacity among adults worldwide. Osteoarthritis is characterized by progressive degeneration of articular cartilage, subchondral bone

remodeling, synovial inflammation, and structural alterations within the joint. These pathological changes ultimately lead to joint stiffness, pain, and impaired mobility, which significantly affect patients' quality of life. Among the various joints affected by osteoarthritis, the knee joint is particularly vulnerable due to its central role in weight-bearing and locomotion. As life expectancy increases and the prevalence of obesity continues to rise globally, the incidence and burden of knee osteoarthritis are expected to increase substantially in the coming decades (Hunter & Bierma-Zeinstra, 2019). Clinically, knee osteoarthritis is associated with persistent joint pain, reduced range of motion, swelling, and functional limitations that interfere with daily activities such as walking, standing, and climbing stairs. These symptoms often lead to decreased physical activity and progressive physical decline, which may further accelerate disease progression. Consequently, knee osteoarthritis represents a significant public health challenge and contributes to considerable healthcare costs, including medical treatment, rehabilitation services, and long-term disability management.

Current management strategies for knee osteoarthritis focus primarily on symptom relief, functional improvement, and slowing disease progression. International clinical guidelines consistently recommend non-pharmacological interventions as the first-line approach in the management of knee osteoarthritis. These interventions commonly include structured exercise programs, weight management, patient education, and physiotherapy aimed at improving joint stability and physical function (Bannuru et al., 2020; Fernandes et al., 2020). Among these strategies, exercise therapy is widely recognized as one of the most effective and accessible treatment modalities for individuals with knee osteoarthritis (Fransen et al., 2021). A variety of exercise modalities have been investigated for their therapeutic benefits in this population. Strengthening exercises, aerobic training, neuromuscular exercise, and individualized rehabilitation programs have demonstrated beneficial effects in reducing pain and improving physical function. Evidence from systematic reviews and meta-analyses indicates that well-structured exercise interventions can significantly enhance muscle strength, joint stability, and mobility in patients with knee osteoarthritis (Guo et al., 2022; Goh et al., 2021). In addition, individualized exercise programs tailored to patient characteristics have been shown to improve both pain outcomes and functional performance (Yaseen et al., 2020). More recent research has also examined optimal exercise modalities and dosage parameters in order to maximize therapeutic benefits and improve long-term disease management (Whitfield & Tomlinson, 2025).

Despite the strong evidence supporting conservative management strategies, treatment outcomes in knee osteoarthritis are often influenced by multiple determinants that affect patient engagement, adherence, and overall effectiveness of interventions. These determinants may include patient-related factors such as motivation, beliefs, and psychosocial characteristics, as well as external factors related to healthcare delivery and treatment accessibility. Psychosocial determinants have been shown to play a significant role in influencing participation in physical activity, weight management behaviors, and adherence to treatment recommendations among individuals with osteoarthritis (van Dongen et al., 2025). In addition, adherence to home-based rehabilitation programs remains a critical challenge, as patients frequently encounter barriers including pain, lack of motivation, limited knowledge, and insufficient professional support (Akgül et al., 2020). Recent developments in digital health technologies and telehealth-based interventions have introduced new opportunities for supporting self-management and improving treatment adherence among patients with knee osteoarthritis. Remote exercise programs and digital self-management platforms have shown promising results in improving patient engagement and clinical outcomes (Bennell et al., 2022; Kiadaliri et al., 2023). Understanding the factors that influence adherence to such interventions is therefore essential for optimizing long-term management strategies and improving patient outcomes. Given the complex and multifactorial nature of knee osteoarthritis management, identifying the determinants that

influence treatment implementation and effectiveness is essential for guiding clinical practice and improving patient outcomes. Therefore, this systematic review aims to identify and synthesize the determinants influencing the management of knee osteoarthritis and to highlight key factors affecting adherence to different management strategies.

2. Methodology

This systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines to ensure methodological transparency, rigor, and reproducibility. The primary aim of this review was to identify, critically evaluate, and synthesize existing empirical evidence regarding the determinants influencing the management of knee osteoarthritis. A comprehensive and systematic literature search was conducted across several major electronic databases, including PubMed, Scopus, Web of Science, and CINAHL. These databases were selected due to their extensive coverage of medical, rehabilitation, and health sciences literature. The search strategy was developed using a combination of relevant keywords and controlled vocabulary terms related to the topic of interest. Key search terms included “knee osteoarthritis,” “management,” “exercise therapy,” “rehabilitation,” “treatment adherence,” “determinants,” “self-management,” and “physical activity.” Boolean operators such as AND and OR were applied to refine the search and increase both sensitivity and specificity of the search results.

The initial search process yielded a total of 237 records identified through two search strings. Specifically, the first search string retrieved 166 articles, while the second search string identified 71 articles. After removing 51 duplicate records, a total of 186 articles remained for further evaluation. These articles underwent a systematic screening process based on their titles and abstracts to determine their relevance to the research objectives. Eligibility criteria were established a priori to ensure systematic and unbiased study selection. Studies were included if they investigated determinants influencing the management of knee osteoarthritis among adult populations. Eligible study designs included systematic reviews, randomized controlled trials, clinical trials, observational studies, and qualitative studies examining management strategies such as exercise therapy, physiotherapy interventions, rehabilitation programs, weight management strategies, digital self-management interventions, and other conservative treatment approaches. Studies were excluded if they focused exclusively on surgical interventions, did not examine determinants related to knee osteoarthritis management, or were not published in English.

During the screening stage, 166 studies were excluded because they did not meet the predefined eligibility criteria or were not directly relevant to the determinants of knee osteoarthritis management. The remaining studies were assessed through full-text evaluation to confirm their eligibility. Following this process, 20 studies met the inclusion criteria and were included in the final qualitative synthesis. The detailed study selection procedure, including identification, screening, eligibility, and inclusion phases, is illustrated in Figure 1 (The Systematic Review Process).

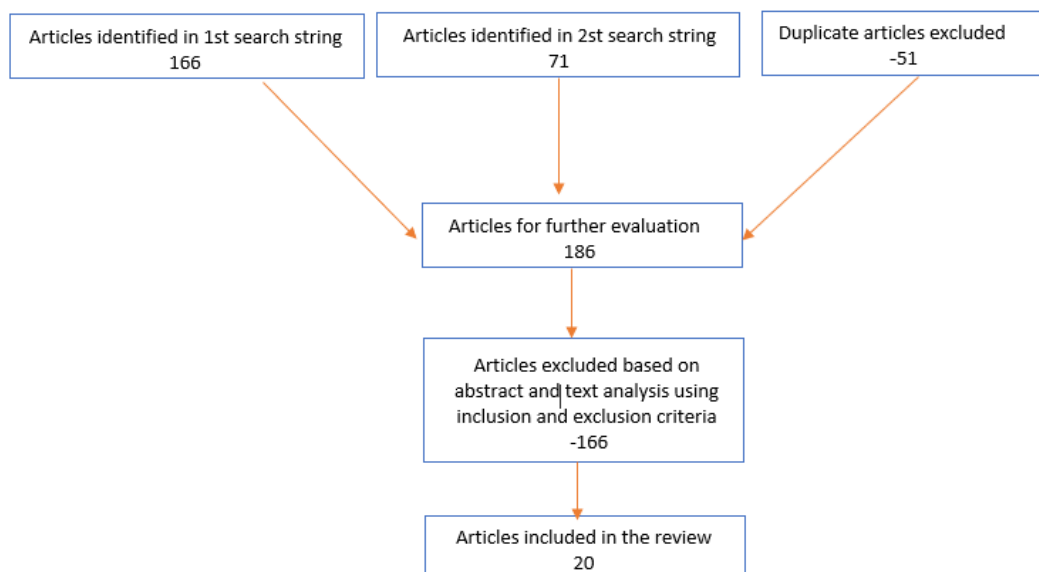


Figure 1: The Systematic Review Process

Data extraction was performed using a standardized data extraction framework to ensure consistency and reliability. Extracted information included author(s), year of publication, study design, study population characteristics, intervention or management strategy investigated, and the determinants influencing knee osteoarthritis management reported in each study. To enhance the analytical rigor of the review, the findings from the included studies were synthesized using a structured narrative synthesis approach. Given the methodological heterogeneity among the included studies in terms of study design, intervention types, and outcome measurements, a quantitative meta-analysis was not considered appropriate. Instead, determinants were systematically categorized into thematic domains, including exercise-based management strategies, rehabilitation interventions, psychosocial determinants, treatment adherence factors, digital self-management approaches, lifestyle-related factors such as physical activity and weight management, and clinical management considerations. This thematic categorization facilitated comparison across studies and enabled the identification of recurring determinants influencing the management of knee osteoarthritis.

3. Results

3.1 Study Characteristics

The literature search identified a range of studies investigating different aspects of knee osteoarthritis management and the factors influencing treatment outcomes. After the screening and eligibility assessment process described in the Methods section, a number of relevant studies were included for qualitative synthesis. These studies represented a variety of research designs, including systematic reviews, randomized controlled trials, observational studies, and qualitative investigations focusing on management strategies for knee osteoarthritis. The selection process of the included studies is illustrated in Figure 1. The included studies examined multiple approaches to the management of knee osteoarthritis, with particular emphasis on non-pharmacological interventions. Exercise therapy

was consistently highlighted as a central component of conservative management strategies. Evidence from systematic reviews and clinical studies demonstrated that structured exercise programs, including strengthening exercises, aerobic training, and neuromuscular exercise, play a significant role in improving pain outcomes and physical function among individuals with knee osteoarthritis (Fransen et al., 2021; Goh et al., 2021). These interventions aim to enhance joint stability, increase muscular support around the knee joint, and improve overall functional mobility.

Several studies also evaluated the effectiveness of individualized exercise interventions and tailored rehabilitation programs. Individualized exercise approaches have been shown to produce meaningful improvements in pain reduction and functional performance in patients with knee osteoarthritis (Yaseen et al., 2020). Similarly, systematic reviews investigating exercise prescription for individuals with knee osteoarthritis emphasized the importance of selecting appropriate exercise modalities and training intensity to optimize clinical outcomes (Guo et al., 2022; Whitfield & Tomlinson, 2025). These findings suggest that treatment strategies should consider patient characteristics, physical capacity, and disease severity when designing rehabilitation programs. In addition to physical interventions, several studies investigated behavioral and psychosocial determinants influencing treatment adherence and engagement in management strategies. Psychosocial factors such as motivation, perceived benefits of exercise, and self-efficacy were found to significantly influence participation in physical activity and weight management programs among individuals with osteoarthritis (van Dongen et al., 2025). Barriers to adherence, including pain during exercise, lack of professional supervision, and limited access to rehabilitation resources, were also identified as important factors affecting the success of home-based exercise programs (Akgül et al., 2020).

Recent research has also explored the role of digital health interventions and telehealth-based programs in supporting the management of knee osteoarthritis. Remote exercise programs and digital self-management interventions have demonstrated promising outcomes in improving patient engagement, facilitating access to rehabilitation programs, and enhancing adherence to treatment recommendations (Bennell et al., 2022; Kiadaliri et al., 2023). These approaches may provide valuable alternatives to traditional in-person rehabilitation, particularly for patients with limited access to healthcare services. Overall, the included studies collectively highlight that the management of knee osteoarthritis is influenced by a combination of clinical, behavioral, and healthcare-related factors. Exercise-based interventions, patient adherence, psychosocial influences, and accessibility of rehabilitation services appear to be among the most frequently reported determinants affecting treatment outcomes. A summary of the key characteristics of the included studies is presented in Table 1.

Table 1: Literature Review Matrix

No	Author(s) and Year	Exercise-based Management	Rehabilitation Interventions	Psychosocial Determinants	Treatment Adherence	Digital Self-Management	Lifestyle Factors	Clinical Management
1	Sánchez et al. (2025)	✓	✓					
2	Guo et al. (2022)	✓	✓					
3	Hunter et al. (2025)		✓	✓	✓			
4	Kiadaliri et al. (2023)			✓	✓	✓		

No	Author(s) and Year	Exercise-based Management	Rehabilitation Interventions	Psychosocial Determinants	Treatment Adherence	Digital Self-Management	Lifestyle Factors	Clinical Management
5	Putra & Anggiat (2023)	✓	✓					
6	van Dongen et al. (2025)	✓		✓	✓		✓	
7	Chapman et al. (2023)		✓					✓
8	Fransen et al. (2021)	✓	✓					
9	Whitfield & Tomlinson (2025)	✓	✓					
10	Thompson et al. (2023)		✓					✓
11	Akgül et al. (2020)	✓	✓	✓	✓			
12	Bannuru et al. (2020)	✓	✓				✓	✓
13	Bennell et al. (2022)	✓	✓	✓	✓	✓	✓	
14	Fernandes et al. (2020)	✓	✓				✓	✓
15	Goh et al. (2021)	✓	✓					
16	Hunter & Bierma-Zeinstra (2019)	✓	✓				✓	✓
17	van Dongen et al. (2025)	✓		✓	✓		✓	
18	Volpi (2022)							✓
19	Whittaker et al. (2022)	✓	✓					✓
20	Yaseen et al. (2020)	✓	✓					

3.2 Determinants of Knee Osteoarthritis Management

The analysis of the included studies revealed that the management of knee osteoarthritis is influenced by multiple interrelated determinants that affect treatment implementation, patient engagement, and overall clinical outcomes. These determinants include exercise-based management strategies, rehabilitation interventions, psychosocial influences, treatment adherence, digital self-management approaches, lifestyle-related factors, and clinical management strategies. A summary of these determinants across the included studies is presented in Table 1. Exercise-based management emerged as one of the most consistently reported determinants influencing knee osteoarthritis outcomes. Several studies highlighted the importance of structured exercise programs in improving pain, mobility, and functional capacity among patients with knee osteoarthritis. Systematic reviews and meta-analyses have demonstrated that strengthening exercises, aerobic training, and individualized exercise programs significantly improve physical function and reduce pain symptoms (Fransen et al., 2021; Guo et al., 2022; Yaseen et al., 2020). Additionally, recent evidence has emphasized the importance of selecting appropriate exercise modalities and dosage to maximize therapeutic outcomes and enhance long-term disease management (Whitfield & Tomlinson, 2025; Sánchez et al., 2025).

Rehabilitation interventions, particularly physiotherapy-based programs, also represent an essential determinant in the management of knee osteoarthritis. Rehabilitation strategies aim to restore joint function, improve muscle strength, and enhance joint stability through targeted therapeutic

interventions. Studies examining physiotherapy and rehabilitation approaches indicate that structured rehabilitation programs can support recovery and improve overall joint performance in patients with knee-related conditions (Putra & Anggiat, 2023; Chapman et al., 2023). Furthermore, emerging treatment approaches such as tissue augmentation and advanced rehabilitation strategies may contribute to improved structural stability and recovery outcomes (Thompson et al., 2023). Psychosocial determinants were also identified as critical factors influencing the success of knee osteoarthritis management. Factors such as motivation, beliefs regarding treatment effectiveness, and perceived barriers to physical activity can significantly affect patient participation in management programs. Evidence suggests that psychosocial factors play an important role in shaping patient behaviors related to physical activity, weight management, and engagement with treatment recommendations (van Dongen et al., 2025). In addition, qualitative research has shown that barriers such as pain, lack of motivation, and insufficient professional guidance may negatively influence adherence to home-based exercise programs (Akgül et al., 2020).

Treatment adherence represents another important determinant affecting the effectiveness of knee osteoarthritis management strategies. Adherence to prescribed rehabilitation programs, supportive devices, and self-management interventions is essential for achieving optimal clinical outcomes. Studies have shown that adherence behaviors are influenced by multiple factors including patient beliefs, perceived benefits, and the availability of professional support (Hunter et al., 2025). Recent research has also highlighted the growing role of digital self-management interventions and telehealth-based programs in supporting the management of knee osteoarthritis. Digital platforms and remote exercise programs have demonstrated promising results in improving patient engagement and treatment adherence (Bennell et al., 2022; Kiadaliri et al., 2023). These interventions may provide accessible alternatives to traditional rehabilitation services and contribute to more effective long-term management of knee osteoarthritis.

4. Discussion

This systematic review aimed to identify and synthesize the determinants influencing the management of knee osteoarthritis based on evidence from the included studies. The findings demonstrate that knee osteoarthritis management is influenced by multiple interacting factors, including exercise-based management strategies, rehabilitation interventions, psychosocial determinants, treatment adherence, digital self-management approaches, lifestyle factors, and clinical management strategies. These determinants collectively influence the effectiveness of treatment approaches and patient outcomes. One of the most consistently identified determinants across the included studies was exercise-based management. Exercise therapy has long been recognized as a cornerstone in the non-surgical management of knee osteoarthritis. Evidence from systematic reviews indicates that structured exercise programs can significantly reduce pain and improve physical function among individuals with knee osteoarthritis (Fransen et al., 2021). Similarly, studies examining specific exercise prescriptions have shown that appropriately designed programs incorporating strengthening and aerobic components can enhance joint stability and mobility (Guo et al., 2022). The effectiveness of individualized exercise interventions has also been highlighted, suggesting that tailoring exercise programs to patient characteristics may improve clinical outcomes and long-term adherence (Yaseen et al., 2020). In addition, recent research has explored optimal exercise modalities and dosage to further enhance the therapeutic benefits of exercise-based interventions in knee osteoarthritis management (Whitfield & Tomlinson, 2025; Sánchez et al., 2025).

Rehabilitation interventions, particularly physiotherapy-based management strategies, were also identified as important determinants affecting knee osteoarthritis outcomes. Rehabilitation programs aim to improve muscle strength, joint stability, and functional performance through targeted therapeutic exercises and structured treatment plans. Physiotherapy-based interventions play an essential role in restoring joint function and supporting long-term disease management. Studies focusing on rehabilitation strategies indicate that structured physiotherapy programs can contribute to improved functional outcomes in patients with knee conditions (Putra & Anggiat, 2023). Furthermore, clinical studies investigating ligamentous injuries and advanced treatment approaches suggest that effective rehabilitation strategies may improve joint stability and facilitate recovery in knee-related disorders (Chapman et al., 2023; Thompson et al., 2023). Another important determinant identified in this review is the role of psychosocial factors in influencing treatment participation and engagement. Psychosocial determinants such as motivation, beliefs about treatment effectiveness, and perceived barriers to exercise have been shown to significantly influence patients' willingness to participate in physical activity and rehabilitation programs. Evidence suggests that psychological and behavioral factors can strongly influence patient engagement in weight management and physical activity interventions among individuals with osteoarthritis (van Dongen et al., 2025). Additionally, qualitative research exploring patient experiences has identified common barriers to adherence, including pain during exercise, lack of professional supervision, and limited understanding of rehabilitation programs (Akgül et al., 2020). Addressing these psychosocial barriers may therefore be essential for improving the effectiveness of knee osteoarthritis management strategies.

Treatment adherence also emerged as a key determinant influencing the success of management interventions. Effective management of knee osteoarthritis requires sustained participation in rehabilitation programs and adherence to prescribed treatment plans. Studies examining adherence behaviors suggest that patient perceptions, treatment expectations, and access to professional support can significantly affect adherence levels (Hunter et al., 2025). Improving patient education and providing continuous support may therefore enhance adherence and contribute to improved treatment outcomes. In recent years, digital health technologies and telehealth-based interventions have gained increasing attention as potential tools for improving self-management and accessibility of rehabilitation services. Digital platforms can facilitate remote monitoring, provide structured exercise guidance, and support patient engagement in management programs. Evidence from randomized trials indicates that telehealth-delivered exercise and weight management programs can produce favorable outcomes in individuals with knee osteoarthritis (Bennell et al., 2022). Additionally, studies examining predictors of adherence to digital self-management interventions highlight the importance of behavioral and motivational factors in determining the effectiveness of such programs (Kiadaliri et al., 2023).

Lifestyle factors such as weight management and physical activity also play an important role in knee osteoarthritis management. Clinical guidelines consistently emphasize the importance of maintaining a healthy body weight and engaging in regular physical activity as part of comprehensive osteoarthritis management strategies (Bannuru et al., 2020; Fernandes et al., 2020). Weight reduction may decrease mechanical stress on the knee joint and contribute to improved mobility and symptom relief. Overall, the findings of this systematic review highlight the multifactorial nature of knee osteoarthritis management. Effective management requires an integrated approach that considers clinical interventions, behavioral determinants, and patient engagement strategies. Understanding these determinants may help healthcare professionals design more effective management programs and improve long-term outcomes for individuals with knee osteoarthritis.

5. Conclusion

This systematic review aimed to identify and synthesize the key determinants influencing the management of knee osteoarthritis based on evidence from the included studies. The findings demonstrate that the management of knee osteoarthritis is multifactorial and influenced by a combination of clinical, behavioral, and lifestyle-related determinants. Among the most consistently reported determinants were exercise-based management strategies and rehabilitation interventions, which play a central role in improving pain, physical function, and joint stability in individuals with knee osteoarthritis. The review also highlights the significant influence of psychosocial factors and treatment adherence on the effectiveness of management strategies. Patients' motivation, beliefs regarding treatment benefits, and perceived barriers to physical activity can strongly affect participation in rehabilitation programs and long-term engagement with management interventions. Addressing these psychosocial determinants is therefore essential to enhance adherence and improve treatment outcomes.

In addition, emerging evidence suggests that digital self-management and telehealth-based interventions may provide valuable support for patients with knee osteoarthritis by improving access to rehabilitation programs and facilitating continuous monitoring and guidance. Lifestyle factors, particularly weight management and regular physical activity, also remain important components of comprehensive knee osteoarthritis management. Overall, effective management of knee osteoarthritis requires an integrated and patient-centered approach that combines evidence-based clinical interventions with strategies aimed at improving patient engagement and adherence. Future research should continue to explore innovative management approaches and identify strategies that can further enhance long-term outcomes for individuals living with knee osteoarthritis.

References

- Ceballos Sánchez, J. L., Álvarez-Barbosa, F., Reguera Rodríguez, M., & Ramos-Munell, J. (2025). Physical exercise to manage pain in patients with knee osteoarthritis: A systematic review. *Archivos de Medicina del Deporte*. (Sánchez et al., 2025)
- Guo, X., Zhao, P., Zhou, X., Wang, J., & Wang, R. (2022). A recommended exercise program appropriate for patients with knee osteoarthritis: A systematic review and meta-analysis. *Frontiers in Physiology*, 13. (Guo et al., 2022)
- Hunter, D. J., Black, A. M., Culos-Reed, S. N., Lun, V. M., & Mohtadi, N. G. (2025). Exploring predictors of brace-wearing adherence in knee injury rehabilitation. *Clinical Journal of Sport Medicine*, 35, 423–430. (Hunter et al., 2025)
- Kiadaliri, A., Dell'Isola, A., Lohmander, L., Hunter, D. J., & Dahlberg, L. (2023). Assessing predictors of adherence to a digital self-management intervention for osteoarthritis. *Journal of Orthopaedic Surgery and Research*, 18. (Kiadaliri et al., 2023)
- Putra, S. J., & Anggiat, L. (2023). Physiotherapy management on sprain medial collateral ligament in sports injury: A literature study. *Physical Therapy Journal of Indonesia*. (Putra & Anggiat, 2023)
- van Dongen, B., Ronteltap, A., Cijis, B., Kloek, C. J. J., Bolman, C., & Crutzen, R. (2025). Psychosocial factors associated with physical activity and weight management in osteoarthritis: A systematic review. *BMC Rheumatology*, 9. (van Dongen et al., 2025)
- Chapman, G. L., Vij, N., LaPrade, R., & Amin, N. H. (2023). Medial-sided ligamentous injuries of the athlete's knee: Evaluation and management. *Cureus*, 15. (Chapman et al., 2023)

- Fransen, M., McConnell, S., Harmer, A., Van der Esch, M., Simic, M., & Bennell, K. (2021). Exercise for osteoarthritis of the knee. *Cochrane Database of Systematic Reviews*.
- Whitfield, M., & Tomlinson, O. W. (2025). Optimal exercise modalities and doses for therapeutic management of knee osteoarthritis. *Frontiers in Aging*. (Whitfield & Tomlinson, 2025)
- Thompson, A. A., Bolia, I. K., Fathi, A., Dobitsch, A., Cruz, C. R., Grewal, R. S., ... Hatch, G. F. (2023). Tissue augmentation techniques in the management of ligamentous knee injuries. *Orthopedic Research and Reviews*, 15, 215–223. (Thompson et al., 2023)
- Akgül, H., Aydin, N. S., Sari, Z., Birtane, M., & Tonga, E. (2020). Qualitative study exploring the barriers and facilitators to home-based exercise programs adherence with knee osteoarthritis. *Annals of the Rheumatic Diseases*, 79, 1268–1269. (Akgül et al., 2020)
- Bannuru, R. R., Osani, M. C., Vaysbrot, E. E., Arden, N., Bennell, K., Bierma-Zeinstra, S., ... McAlindon, T. E. (2020). OARSI guidelines for non-surgical management of knee osteoarthritis. *Osteoarthritis and Cartilage*, 28(11), 1578-1589.
- Bennell, K. L., Lawford, B. J., Keating, C., Brown, C., Kasza, J., Mackenzie, D., ... & Hinman, R. S. (2022). Comparing video-based, telehealth-delivered exercise and weight loss programs with online education on outcomes of knee osteoarthritis: a randomized trial. *Annals of internal medicine*, 175(2), 198-209.
- Fernandes, L., Hagen, K. B., Bijlsma, J. W., Andreassen, O., Christensen, P., Conaghan, P. G., ... Kjekens, I. (2020). EULAR recommendations for the non-pharmacological management of hip and knee osteoarthritis. *Annals of the Rheumatic Diseases*.
- Goh, S. L., Persson, M. S., Stocks, J., Hou, Y., Welton, N. J., Lin, J., ... Zhang, W. (2021). Relative efficacy of different exercise types for knee osteoarthritis. *Sports Medicine*, 51, 1343-1362.
- Hunter, D. J., & Bierma-Zeinstra, S. Osteoarthritis Lancet, 393 (10182)(2019). [View PDF](#) [View article](#) [View in Scopus](#), 1745-1759.
- van Dongen, B., Ronteltap, A., Cijis, B., Kloek, C. J. J., Bolman, C., & Crutzen, R. (2025). Psychosocial factors associated with physical activity, weight management, and sleep in adults with hip and knee osteoarthritis: A systematic review. *BMC Rheumatology*, 9. (van Dongen et al., 2025)
- Volpi, N. (2022). Symptomatic slow-acting drugs (SYSADOAs)/disease modifying anti-osteoarthrosis drugs (DMOADs) in the treatment of osteoarthrosis: what is the opinion of the different rheumatology/osteoarthritis societies in 2021?. *Medical Research Archives*, 10(1).
- Whittaker, J. L., Truong, L., Losciale, J., Silvester-Lee, T., Miciak, M., Pajkic, A., ... Roos, E. (2022). Efficacy of the SOAR knee health program: Protocol for a randomized trial. *BMC Musculoskeletal Disorders*, 23. (Whittaker et al., 2022)
- Yaseen, K., Kundakci, B., Goh, S. L., Doherty, M., Zhang, W., Abhishek, A., & Hall, M. (2020). Individualised exercise intervention for hip and knee osteoarthritis: A systematic review and meta-analysis of randomized controlled trials. *Annals of the Rheumatic Diseases*. (Yaseen et al., 2020)