

# Policy and Institutional Support for Arthritis Training: Strengthening Healthcare Systems in West Africa to Address Arthritis

Nambi Namusisi H.

School of Natural and Applied Sciences Kampala International University Uganda

## ABSTRACT

Arthritis, including osteoarthritis (OA) and rheumatoid arthritis (RA), is a leading cause of disability worldwide, with a growing prevalence in West Africa. Despite the rising burden of musculoskeletal disorders, the region faces significant challenges in arthritis care, including a shortage of trained healthcare professionals, limited access to diagnostic tools, and inadequate healthcare infrastructure. This review examines the policy landscape and institutional support for arthritis training in West Africa, emphasizing the need for improved healthcare worker education, specialized training, and continuous professional development. It explores the barriers to effective arthritis management, including financial constraints, limited continuing medical education (CME) programs, and the lack of standardized national guidelines. Additionally, the review highlights innovative approaches such as interdisciplinary training, public-private partnerships, and international collaborations to enhance arthritis care. Policy recommendations include integrating musculoskeletal health into national health strategies, expanding CME opportunities, and increasing investment in healthcare infrastructure. Strengthening arthritis training can improve early diagnosis, treatment, and patient outcomes, ultimately reducing the disease burden and enhancing public health across West Africa.

**Keywords:** Arthritis, osteoarthritis, rheumatoid arthritis, healthcare worker training.

## INTRODUCTION

Arthritis, a term encompassing a range of conditions affecting the joints, is one of the most prevalent and debilitating chronic diseases worldwide. It is particularly recognized for causing long-term pain, stiffness, swelling, and reduced mobility [1]. Among the most common types of arthritis are osteoarthritis (OA) and rheumatoid arthritis (RA), both of which have significant impacts on the quality of life of those affected [2]. OA is a degenerative joint disease primarily associated with aging and wear and tear, while RA is an autoimmune disorder that causes inflammation in the joints, leading to progressive damage. Together, these conditions represent a leading cause of chronic disability globally, particularly in aging populations [3].

Arthritis affects millions of people worldwide, with both OA and RA contributing significantly to disability and loss of functional independence. While the prevalence of arthritis is high across the globe, the situation in West Africa is particularly concerning [4]. A combination of genetic, environmental, and lifestyle factors contributes to the high burden of musculoskeletal disorders in the region. However, despite the evident need for proper arthritis care, West Africa faces substantial challenges in effectively diagnosing and managing these conditions [5].

One of the key issues in arthritis care in West Africa is the limited access to specialized care. Many countries in the region suffer from a shortage of trained healthcare professionals who are skilled in diagnosing and treating musculoskeletal diseases [6]. This lack of expertise has led to significant delays in diagnosis and, consequently, mismanagement of arthritis. In many instances, individuals living with arthritis are not diagnosed until the disease has progressed to advanced stages, making treatment less effective and outcomes poorer. Furthermore, the region faces a shortage of rheumatologists and orthopedic specialists, and general practitioners (GPs) often lack the necessary knowledge to adequately diagnose and manage arthritis. This shortage is compounded by the fact that healthcare facilities, especially in rural and remote areas, are poorly equipped with the diagnostic tools and treatment options necessary for effective arthritis care [7].

Another significant barrier to improving arthritis care in West Africa is the lack of continuous training and professional development for healthcare workers. While there are efforts to address the training of healthcare professionals in other areas, musculoskeletal disorders are often overlooked in medical education [8]. The result is that many healthcare workers, especially GPs and nurses, are ill-equipped to recognize the early signs of arthritis, diagnose it correctly, and provide appropriate management or referral to specialists when necessary [9].

Given the pressing need for improvement in arthritis care, one critical area of focus is the strengthening of healthcare worker training. Healthcare workers, from general practitioners to specialists, must be better trained to understand arthritis, diagnose it at its early stages, and provide timely interventions that can help reduce the burden of this chronic disease [10]. Enhancing the knowledge, skills, and capabilities of healthcare workers in managing arthritis could lead to earlier diagnoses, better disease management, and ultimately improved patient outcomes in West Africa.

The prevalence of arthritis, particularly OA and RA, is high in West Africa, yet the region struggles with a lack of sufficient healthcare professionals trained to diagnose and manage these conditions. The shortage of skilled healthcare workers and the limited availability of specialized care contribute to late diagnoses, inappropriate management, and poor health outcomes for arthritis patients [11]. In many cases, patients are not referred to specialists promptly, and their conditions worsen without adequate treatment. Additionally, healthcare workers, particularly GPs, may not have sufficient training to recognize the early signs of arthritis or to prescribe appropriate interventions. This lack of training can result in unnecessary suffering and disability for arthritis patients.

The inadequate knowledge and skills of healthcare workers in managing arthritis in West Africa present a significant challenge to the region's healthcare system. Strengthening healthcare worker training is an urgent need, but the specific factors contributing to the insufficient training of healthcare workers in arthritis management have not been fully explored [12]. Therefore, understanding the gaps in training, resources, and healthcare delivery is crucial for developing targeted interventions to improve arthritis care in the region. This study aims to assess the knowledge and skills of healthcare workers in West Africa regarding arthritis, specifically osteoarthritis and rheumatoid arthritis. It identifies gaps in training and resources that hinder effective arthritis diagnosis and management in West African healthcare settings. The study evaluates the impact of insufficient training on the quality of care and patient outcomes for individuals living with arthritis in West Africa. Strategies for improving healthcare worker training in diagnosing and managing arthritis, including collaborations with international organizations and region-specific training programs, are explored. The study's significance lies in providing a comprehensive understanding of the current state of arthritis care in West Africa, identifying gaps in training, and contributing to the development of region-specific training programs. Improving healthcare worker training could lead to better patient outcomes, reducing the burden of arthritis-related disability and improving public health. The findings could also inform policy and advocacy efforts to strengthen healthcare systems in West Africa, advocating for more resources and collaboration with international bodies.

### **Current State of Arthritis Care in West Africa**

Arthritis is a growing health concern in West Africa, with systemic challenges preventing effective diagnosis, treatment, and management. These include inadequate healthcare infrastructure, a shortage of trained healthcare professionals, limited access to modern diagnostic tools, underdiagnosis and misdiagnosis, and low public awareness [13]. The prevalence of arthritis is expected to rise due to demographic and lifestyle changes, including aging populations, urbanization, and obesity. Medication availability is limited, and rehabilitation and physiotherapy services are often unavailable or inaccessible. Surgical interventions, such as joint replacements, are costly and not widely available. Addressing these gaps in arthritis care is crucial to improve the quality of life for patients and reduce the burden of untreated or improperly managed arthritis. The rising prevalence of arthritis in West Africa necessitates targeted efforts to address gaps in arthritis care [14]. These include improved training for healthcare workers, strengthening healthcare infrastructure, raising public awareness, prioritizing arthritis care in health agendas, ensuring access to affordable medications, and integrating traditional and modern medicine. These measures can improve early diagnosis, treatment, and overall quality of life for affected populations, despite the challenges posed by inadequate infrastructure and limited resources.

### **Policy Landscape and Institutional Support for Arthritis Care**

The policy landscape for arthritis care in West Africa is underdeveloped, with musculoskeletal disorders often overlooked in national health agendas. This lack of focus, absence of standardized arthritis management protocols, and challenges in integrating arthritis care into primary healthcare contribute to inadequate care [15]. Limited Continuing Medical Education (CME) programs and inadequate training in primary healthcare settings further exacerbate the issue. To address these gaps, policymakers should advocate for the inclusion of arthritis care in national health strategies, integrate musculoskeletal diseases into public health programs, and prioritize arthritis in national health budgets. Institutional support for arthritis training is also needed. The policy landscape and institutional support for arthritis care in West Africa are insufficient to meet the growing demand for effective management. To address this, there is a pressing need for national health policies that prioritize arthritis, the

integration of arthritis-related training into medical curricula, and the establishment of specialized programs and CME opportunities for healthcare professionals [16]. International collaborations and partnerships with high-income countries can also strengthen the institutional support for arthritis care, ensuring that West Africa's healthcare workers are equipped to manage this increasingly prevalent condition and improve the quality of life for affected individuals.

### **Training Healthcare Workers: Approaches and Challenges**

The training of healthcare workers is crucial for improving arthritis care in West Africa, where musculoskeletal disorders are under-recognized and under-treated. Early integration of arthritis education into medical school curricula is essential for building a solid foundation of knowledge about musculoskeletal diseases [17]. Barriers to integration include crowded programs, lack of qualified faculty, and resource constraints. To improve, West African medical schools could collaborate with international institutions, develop curricula tailored to the region, and offer supplementary learning resources. Continuing medical education (CME) is essential for healthcare professionals to stay updated on the latest advancements in arthritis care. Hybrid models combining online and face-to-face learning are feasible for cost-effective learning. Collaborations with international organizations can fund and organize CME programs for West African healthcare workers. Specialized training for healthcare professionals is crucial for advanced care. However, accessing specialized training is limited due to high costs and international travel [18]. Opportunities for specialized training include fellowships, short-term courses, and international collaboration. Building a workforce of specialists and establishing specialized centers of excellence can help. Interdisciplinary training programs enable collaboration across disciplines, improving the quality of care and outcomes for arthritis patients.

### **Addressing the Challenges of Training Implementation**

The effective implementation of arthritis training for healthcare workers in West Africa faces significant challenges due to financial constraints, cultural and socioeconomic factors, and inadequate healthcare infrastructure [19]. Financial constraints include limited budget allocation for healthcare training, high costs of specialized training, and lack of financial incentives. Solutions include government and donor funding, public-private partnerships, and online and low-cost training. Infrastructure limitations include inadequate hospitals, specialized clinics, and diagnostic tools in rural areas. Solutions include mobile training units, improved infrastructure investment, and the use of diagnostic tools and equipment. By addressing these challenges, a well-equipped healthcare workforce can be developed to diagnose and manage arthritis effectively. The implementation of arthritis training for healthcare workers in West Africa faces challenges such as lack of awareness, cultural beliefs, and economic barriers [20]. To overcome these, strategies include community awareness campaigns, integrating traditional and modern care, investing in public health initiatives, and providing cultural sensitivity training for healthcare workers. By securing funding, improving healthcare infrastructure, leveraging mobile and online learning, and integrating cultural awareness into training programs, healthcare organizations can build a well-trained workforce capable of providing high-quality arthritis care and improving patient outcomes. This will ultimately lead to better health outcomes for patients across the region.

### **Policy Recommendations for Strengthening Arthritis Training**

The strengthening of arthritis training in West Africa requires a comprehensive set of policy recommendations. These recommendations aim to address gaps in arthritis care training and equip healthcare workers with the knowledge and skills required to diagnose and manage musculoskeletal disorders effectively [21]. National guidelines should be developed and implemented, focusing on clinical aspects, referral protocols, comprehensive care, and workforce training. Collaboration with international organizations, such as the World Health Organization and the International League of Associations for Rheumatology, can provide technical assistance, funding, capacity building, and research and data. Medical and nursing curricula should incorporate comprehensive musculoskeletal health education, including undergraduate education, interdisciplinary approaches, and continuous education. Local training materials should be culturally sensitive, practical, accessible, and interactive, ensuring that healthcare workers are better equipped to apply their learning in real-world clinical settings. This multi-pronged approach can enhance the capacity of West African healthcare systems to address the growing burden of arthritis, leading to better health outcomes and reduced healthcare costs [22].

## **CONCLUSION**

Addressing arthritis care in West Africa requires a multifaceted approach that strengthens policy frameworks, institutional support, and healthcare workforce training. The high burden of arthritis, particularly osteoarthritis and rheumatoid arthritis, is worsened by a shortage of trained healthcare professionals, inadequate access to specialized care, and limited public awareness. These challenges lead to delayed diagnoses, poor disease management, and worsened health outcomes for affected individuals. To bridge these gaps, national health policies must prioritize arthritis care by integrating musculoskeletal disorders into public health strategies and ensuring sustainable funding for training programs. Expanding arthritis-related education within medical and nursing curricula, increasing access to continuing medical education (CME), and fostering international collaborations are essential steps toward

building a competent healthcare workforce. Moreover, leveraging innovative training approaches such as hybrid learning models and interdisciplinary programs can enhance knowledge dissemination and practical skills development. By implementing targeted policy reforms and investing in healthcare worker training, West African nations can improve early diagnosis, optimize treatment, and enhance the overall quality of life for individuals living with arthritis. Strengthening healthcare systems through a coordinated effort among governments, healthcare institutions, and international partners will be crucial in reducing the burden of arthritis and ensuring equitable access to effective musculoskeletal care across the region.

## REFERENCES

1. Senthelal, S., Li, J., Ardeshirzadeh, S., Thomas, M.A.: Arthritis. Presented at the June 20 (2023)
2. Mohammed, A., Alshamarri, T., Adeyeye, T., Lazariu, V., McNutt, L.-A., Carpenter, D.O.: A comparison of risk factors for osteo- and rheumatoid arthritis using NHANES data. *Prev Med Rep.* 20, 101242 (2020). <https://doi.org/10.1016/j.pmedr.2020.101242>
3. Di Nicola, V.: Degenerative osteoarthritis a reversible chronic disease. *Regen Ther.* 15, 149–160 (2020). <https://doi.org/10.1016/j.reth.2020.07.007>
4. Leifer, V.P., Katz, J.N., Losina, E.: The burden of OA-health services and economics. *Osteoarthritis and Cartilage.* 30, 10–16 (2022). <https://doi.org/10.1016/j.joca.2021.05.007>
5. Orji O U, Alum E U, Ibiam U A, Ugwuja E I, Aja P M, Igwenyi I O, Offor C E, Ezeani N. N, Ugwu O P C, Alope C, Egwu C O (2022). Antioxidant effect of *Buchholziacoriacea* ethanol leafextract and fractions on Freund's adjuvant-induced arthritis in albino rats: a comparative study. 59, (1), 31–45.
6. Owoyemi, T., Alonge, I., Adetunji, O., Ogbu, E., Ogunbanjo, A., White, S., Adebajo, A., Mallen, C., Babatunde, O.O., Dziedzic, K.: Everyday living with osteoarthritis in the global South: A qualitative focus group inquiry in Nigeria. *Osteoarthr Cartil Open.* 7, 100555 (2024). <https://doi.org/10.1016/j.ocarto.2024.100555>
7. Azevedo, M.J.: The State of Health System(s) in Africa: Challenges and Opportunities. *Historical Perspectives on the State of Health and Health Systems in Africa, Volume II.* 1–73 (2017). [https://doi.org/10.1007/978-3-319-32564-4\\_1](https://doi.org/10.1007/978-3-319-32564-4_1)
8. Alope, C., Ibiam, U. A., Obasi, N. A., Orji, O. U., Ezeani, N. N., Aja, P. M., et al. Effect of ethanol and aqueous extracts of seed pod of *Copaifera salikounda* (Heckel) on complete Freund's adjuvant-induced rheumatoid arthritis in rats. *J Food Biochem.* 2019 Jul;43(7):e12912. doi: 10.1111/jfbc.12912. Epub 2019 May 23. PMID: 31353723.
9. Miteva, D., Bakopoulou, K., Padjen, I., El Kaouri, I., Tomov, L., Vasilev, G.V., Shumnalieva, R., Velikova, T.: Integrating Primary Care and Specialized Therapies in Rheumatoid Arthritis: Optimizing Recognition, Management, and Referral Practices. *Rheumato.* 5, 3 (2025). <https://doi.org/10.3390/rheumato5010003>
10. Htay, M., Whitehead, D.: The effectiveness of the role of advanced nurse practitioners compared to physician-led or usual care: A systematic review. *International Journal of Nursing Studies Advances.* 3, 100034 (2021). <https://doi.org/10.1016/j.ijnsa.2021.100034>
11. Inchingolo, F., Inchingolo, A.M., Fatone, M.C., Avantario, P., Del Vecchio, G., Pezzolla, C., Mancini, A., Galante, F., Palermo, A., Inchingolo, A.D., Dipalma, G.: Management of Rheumatoid Arthritis in Primary Care: A Scoping Review. *International Journal of Environmental Research and Public Health.* 21, 662 (2024). <https://doi.org/10.3390/ijerph21060662>
12. Ugwuja, E. I., Alum, E. U., Ibiam, U. A., Aja, P. M., Igwenyi, I. O., et al. Antioxidant Effect of *Buchholziacoriacea* Ethanol Leaf Extract and Fractions on Freund's Adjuvant-induced Arthritis in Albino Rats: A Comparative Study. *Slovenian Veterinary Research.* 2022; 59 (1): 31–45. doi: 10.26873/svr-1150-2022.
13. Kolou, M.: Challenges of Rheumatoid Arthritis Management in Sub-Saharan Africa in the 21st Century. *Open Journal of Rheumatology and Autoimmune Diseases.* 13, 17 (2023). <https://doi.org/10.4236/ojra.2023.131003>
14. Cubberley, C., Maharaj, A.: Global RA treatment recommendations: An update from the various international societies. *Best Practice & Research Clinical Rheumatology.* 39, 102019 (2025). <https://doi.org/10.1016/j.berh.2024.102019>
15. Mody, G.M.: Rheumatology in Africa—challenges and opportunities. *Arthritis Research & Therapy.* 19, 49 (2017). <https://doi.org/10.1186/s13075-017-1259-3>
16. Alum, E. U. and Ugwu, O. P. C. Nutritional Strategies for Rheumatoid Arthritis: Exploring Pathways to Better Management. *INOSR Scientific Research.* 2023; 10(1):18–26. <https://doi.org/10.59298/INOSRSR/2023/3.2.47322>
17. Kibone, W., Nansubuga, A.L., Okot, J., Buule, R., Bongomin, F., Kaddumukasa, M.: Rheumatology Training for Undergraduate Medical Students in Uganda: A Need Assessment Survey. *J Med Educ Curric Dev.* 11, 23821205231222989 (2024). <https://doi.org/10.1177/23821205231222989>

18. Ibiam, U. A., Alum, E. U., Ugwu, O. P. C. A Comprehensive Review of Treatment Approaches and Perspectives for Management of Rheumatoid Arthritis. *INOSR Scientific Research*. 2023; 10(1):12-17. <https://doi.org/10.59298/INOSRSR/2023/2.2.13322>
19. Santosa, A., Li, J.W., Tan, T.C.: Digital Health for Equitable Rheumatic Care: Integrating Real-World Experiences to Guide Policy Pathways. *Healthcare*. 13, 438 (2025). <https://doi.org/10.3390/healthcare13040438>
20. Uthman, I., Almoallim, H., Buckley, C.D., Masri, B., Dahou-Makhloufi, C., El Dershaby, Y., Sunna, N., Raza, K., Kumar, K., Abu-Saad Huijer, H., Tashkandi, N., Louw, I., Adelowo, O.: Nurse-led care for the management of rheumatoid arthritis: a review of the global literature and proposed strategies for implementation in Africa and the Middle East. *Rheumatol Int*. 41, 529–542 (2021). <https://doi.org/10.1007/s00296-020-04682-6>
21. Armin R, Fisher S I (2018). *Lupus Erythematosus Cell.Arthritis & Rheumatology*, 70, (7), 1101. DOI 10.1002/art.40489
22. Sultan, M.A., Miller, E., Tikkanen, R.S., Singh, S., Kullu, A., Cometto, G., Fitzpatrick, S., Ajuebor, O., Gillon, N., Edward, A., Moleman, Y.P., Pandya, S., Park, I., Shen, J.Y., Yu, Y., Perry, H., Scott, K., Closser, S.: Competency-based education and training for Community Health Workers: a scoping review. *BMC Health Services Research*. 25, 263 (2025). <https://doi.org/10.1186/s12913-025-12217-7>

**CITE AS: Nambi Namusisi H. (2025). Policy and Institutional Support for Arthritis Training: Strengthening Healthcare Systems in West Africa to Address Arthritis. *INOSR Experimental Sciences* 15(3):100-104. <https://doi.org/10.59298/INOSRES/2025/153100104>**