

# *Prevalence of Arthritis in Africa: A systematic review*

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## **Supervisor: Prevalence of Arthritis in Africa: A systematic review**

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**Objective:** In this systematic review, we estimate the prevalence of six types of arthritis in Africa; namely rheumatoid arthritis, osteoarthritis, juvenile arthritis, psoriatic arthritis, gout, and ankylosing spondylitis.

**Methods:** We comprehensively searched literature on 31 August 2014 in MEDLINE, EMBASE, Web of Science and the Cochrane Library to identify eligible studies from 1975 up to 31 July 2014. Two review authors independently selected studies, extracted data, and appraised studies. We carried out random effects meta-analysis of prevalence of arthritis and assessed heterogeneity through subgroup analyses. We performed separate analyses for population- and hospital-based studies, as well as rural and urban settings.

**Main Findings:** We included 27 cross-sectional studies (20 population-based and 7 hospital-based) from Africa reporting on the prevalence of arthritis. The majority of the studies were from South Africa (44.4%, 12/27). Rheumatoid arthritis in urban settings ranged from 0.1% in Algeria, 0.6% in the DRC, to a meta-analysis overall prevalence of 2.5% in South Africa, and in rural settings ranged from a meta-analysis overall prevalence of 0.07% in South Africa,

0.3% in Egypt, to 0.4% in Lesotho. Osteoarthritis was the most prevalent form of arthritis and in urban settings it was 55.1% in South Africa and in rural settings, all in South Africa, ranged from 29.5%, 29.7%, up to 82.7% among adults aged over 65 years. Other results include highest prevalence of 33.1% for knee osteoarthritis in rural South Africa, 0.1% for ankylosing spondylitis in rural South Africa, 4.4% for psoriatic arthritis in urban South Africa, 0.7% for gout in urban South Africa, and 0.3% for juvenile idiopathic arthritis in urban Egypt. A third of the included studies had a low risk of bias (33.3%, 9/27), 40.8% (11/27) moderate risk, and 25.9% (7/27) had a high risk of bias.

**Conclusions:** In this systematic review, we have identified the paucity of latest prevalence data on arthritis in Africa. More studies are needed to address the prevalence and the true burden of this disease in Africa.

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