Economic Burden of Rheumatoid Arthritis in Low- and Middle-Income Countries: Systematic Review

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Introduction

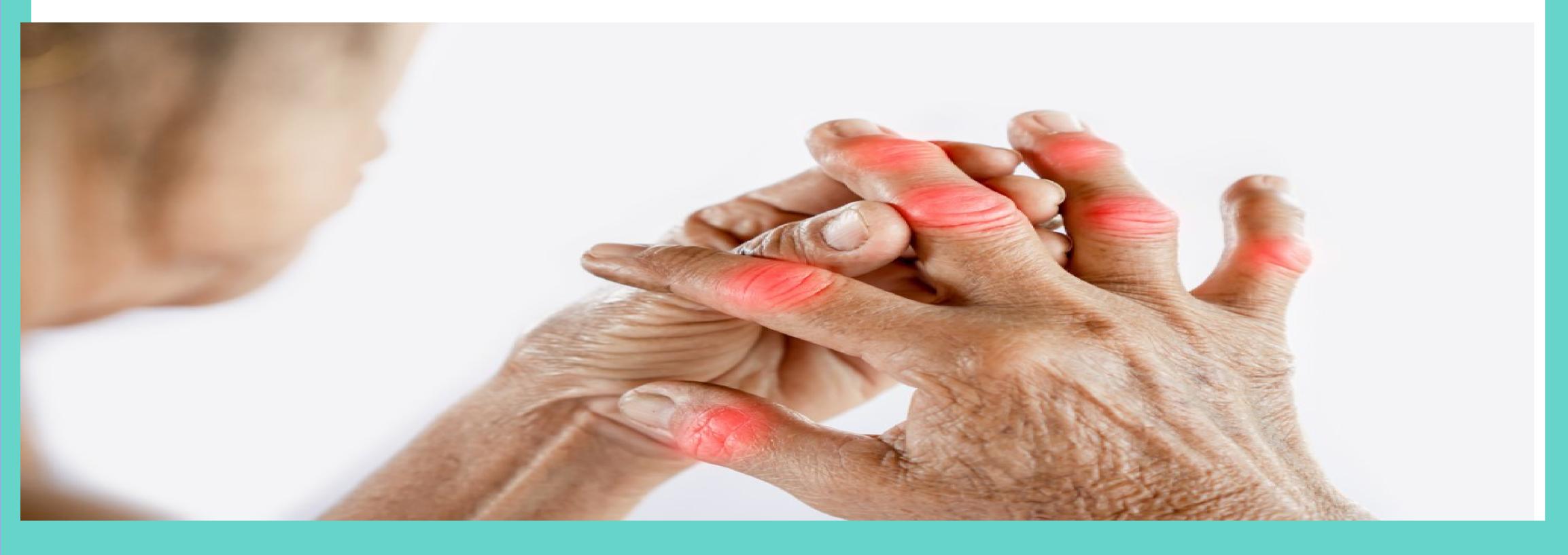
- Rheumatoid arthritis (RA) is a chronic autoimmune disease characterised by persistent inflammation primarily affecting the joints but also impacting multiple extra-articular organs such as the heart, kidneys, lungs, digestive system, and nervous system
- RA leads to debilitating symptoms, including pain, stiffness, fatigue, and reduced mobility, ultimately causing long-term disability and reduced quality of life
- Given the expanding burden of RA in low- and middle-income countries (LMICs), it is crucial to understand the economic impact of the disease in these regions

Purpose

•.The aim of this systematic review was to synthesise the economic impact of RA on households, health systems, and society in LMICs

Methods

- Electronic databases such as PubMed, Web of Science, and CINAHL were searched using keywords related to RA and cost of illness
- Eligible studies were required to report RA-related costs, conducted in LMICs, and published in English
- Quality appraisal of the included studies was carried out using the Newcastle-Ottawa Scale (NOS)
 for cohort studies. A narrative synthesis of findings was performed



Results

- A total of 5,134 studies were initially identified for screening.
- After removing 1,028 duplicates, 50 studies were selected for full-text review, and 15 met the eligibility criteria and were therefore included in the review
- These studies, published between 2007 and 2024, originated from countries including Turkey (n=3), China (n=2), Thailand, Hungary, Mexico, Colombia, Morocco, Pakistan, India, Romania, Brazil, and Argentina
- Nine studies adopted a societal perspective, while six used a healthcare perspective.
- The total sample size was 218,575 participants, with individual study sizes ranged from 62 to 209,292
- Average annual direct costs per patient ranged from US\$523 to US\$2837.9, and indirect costs ranged from US\$81.8 to US\$2463.4

Conclusion

- In LMICs, the economic burden of RA is high due to limited healthcare resources, with patients facing unaffordable costs for treatment and medications
- Improving treatment access and optimising healthcare resources can reduce both direct and indirect costs, enhancing health outcomes of individuals with RA and promoting economic stability

References

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