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Prevalence of rapidly growing mycobacteria (RGM) in Iran: Systematic review and meta-analysis

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ABSTRACT

Background: The infections due to rapidly growing mycobacteria (RGM) are becoming an important health problem in many countries in the world. Globally, an increase in RGM infections is being reported from several regions worldwide. However, there is limited information about the prevalence of these kinds of organisms in Iran.

Methods: The relevant data of the prevalence of RGM were retrieved by searching several databases, such as PubMed, Web of Science, Cochrane Library, Embase, Scopus, Iranmedex, and Scientific Information Database. Meta-analysis was performed by Comprehensive Meta-Analysis (V2.0, Biostat) software.

Results: The meta-analyses showed that the *Mycobacterium fortuitum* (22.7% [95% CI 16.1–30.9]), *Mycobacterium abscessus* (14.0% [95% CI 6.4–27.8]) and *Mycobacterium chelonae* (7.6% [95% CI 2.8–18.8]) were the most prevalent RGM among the conducted studies in Iran.

Conclusions: The relatively high prevalence of RGM underlines the need for greater enforcement of infection control strategies. Establishment of appropriate diagnostic criteria and management guidelines for diseases caused by RGM and expanding the number and quality of regional reference laboratories may facilitate more accurate action for prevention and control of this kind of bacteria.

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