

Rifampicin chemoprophylaxis to prevent leprosy: a systematic review of quantitative and qualitative evidence

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Track

2. Síntese de evidências

Keywords

Rifampicin, Chemoprophylaxis, Leprosy Background: Individuals in contact with patients who have leprosy have an increased risk of disease exposure, which reinforces the need for chemoprophylactic measures, such as the use of rifampicin. Objective: To synthesize the best available evidence regarding the effectiveness of rifampicin chemoprophylaxis for contacts of patients with leprosy, and the best available evidence about the experience and acceptability of rifampicin chemoprophylaxis as reported by contacts, family members, and health professionals with experience in the treatment of leprosy or Hansen's disease. Method: systematic review of qualitative and qualitative evidence following the Joanna Briggs Institute guidelines. Individuals in contact with leprosy patients were included. The quantitative component considered as intervention rifampicin at any dose, frequency and mode of administration and rifampicin combination regimens. The qualitative component considered as phenomena of interest the experience and acceptability of rifampicin chemoprophylaxis. The quantitative component considered experimental and observational studies whereas the qualitative component considered studies that focused on qualitative data, including but not limited to designs such as phenomenology, grounded theory, ethnography, and action-research. The quantitative component considered studies that reported on outcomes such as the development of clinical leprosy in contacts of patients who have leprosy, incidence rates, adverse effects, and safety/harmful effects of the intervention. A three-step strategy for published and unpublished literature was used. The search for published studies included: PubMed, Cumulative Index to Nursing and Allied Health Literature, Cochrane Library, Scopus, Web of Science, National Institute for Health and Clinical Excellence, Latin American and Caribbean Health Sciences Literature; and Google Scholar and EVIPnet for unpublished studies. Studies published from the time of the respective database inception to January 2016 in English, Spanish, Portuguese, Japanese and Chinese were considered. Two reviewers independently assessed the studies for methodological quality using standardized critical appraisal instruments. Standardized data extraction tools developed by the Joanna Briggs Institute were used to extract quantitative and qualitative data from papers included in the review. Due to clinical and methodological heterogeneity in the interventions of the included studies, no statistical meta-analysis was possible. Quantitative and qualitative research findings are presented in narrative form. Results: Following critical appraisal, eight studies were included in this review, seven quantitative and one qualitative. The reduction in incidence of leprosy, using one dose of rifampicin in the first two years, was 56.5% while in the follow up period of 1-4 years the reduction was 34.9%. The combination of rifampicin and the Bacillus Calmette-Guérin vaccine showed a protective effect against the disease of 80%. The only controlled clinical trial using two doses of rifampicin did not indicate effectiveness of the intervention. The qualitative findings showed social acceptability of rifampicin. Conclusions: Chemoprophylaxis with one dose of rifampicin was found to be effective in preventing leprosy in contacts of leprosy patients. Also, there is indication that this strategy is socially accepted.

Keywords: Acceptability, Chemoprophylaxis, Effectiveness, Leprosy, Rifampicin