

PD41 Quality Of Diagnostic Test Accuracy Systematic Reviews In Neglected Diseases Registered In PROSPERO: Meta-Epidemiological Review Of Methodological Compliance

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Introduction: Diagnostic test accuracy (DTA) systematic reviews (SR) provide acknowledged challenges for health technology assessment (HTA) due to insufficiency of trials and a paucity of methodological frameworks (compared with interventional SRs). Additionally, research in neglected tropical diseases (NTDs) is scarce. Assessing the methodological compliance of a SR protocol in this context is of utmost importance for developing robust HTA in NTD.

Methods: A search strategy was conducted in PROSPERO in November 2023 to identify protocols of SRs on diagnostic test accuracy using the following terms: “diagnostic accuracy test”, “diagnostic test”, and “diagnostic accuracy”. Deduplication was performed using Excel’s “remove duplicates” functionality. Eligible studies were SRs with predicted meta-analyses on DTA in any NTD (as per the World Health Organization list). *in vitro* studies, those with non-human populations, and methodological studies were ineligible. The variables of interest included registry characteristics (author, year, country), protocol status, and methodological characteristics (pre-defined statistical analyses, sensitivity analyses, and heterogeneity analyses). The results were presented using descriptive statistics and narrative analysis of methodological issues.

Results: From 7,931 registries, 106 protocols were selected that anticipated conducting a meta-analysis of DTA in the context of NTDs. The number of registry entries has grown steadily from one protocol in 2012 to 17 in 2023. Twenty-three NTDs were identified, the three most common being dengue (n=23; 22%), leishmaniasis (n=18; 17%), and syphilis (n=12; 11%). Only 14 protocols were reported as published. Regarding quality of reporting and methods, half (n=54) of the reports explicitly stated a meta-analytical approach in their title. Only 16 mentioned a sensitivity analysis and 32 did not mention an analysis of heterogeneity.

Conclusions: The meager number of protocols reported as published could mean a lack of updates or publications, or both. The absence of essential methodological descriptions in protocol titles and body text is worrisome and may ultimately be reflected in the number of publications. Further analysis should assess the specifics of methodological quality based on well-established methodological frameworks for quality of reporting and methods.

PD42 Should Antibiotics Be Used To Treat Recurrent Otitis Media In Children? Updating A Recommendation

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Introduction: Acute otitis media (AOM) is one of the most common childhood infections. Recurrent AOM (rAOM) is defined as the presence of three or more AOM episodes in a period of six months. We describe the methodology used to update the recommendation of the 2018 Spanish National Antimicrobial Therapeutic Guide on the use of antibiotic treatments for rAOM in children.

Methods: We followed the GRADE-ADOLOPMENT approach to update the recommendation on antibiotic treatment for rAOM. Firstly, the research question was framed in a Population, Intervention, Comparison, and Outcome format. A comprehensive search strategy was developed, the results of which were screened according to the inclusion criteria. The selected studies were reviewed, and the quality of the evidence was assessed. Subsequently, an Evidence to Decision (EtD) framework was created and the new evidence was presented to the Guideline Development Group (GDG), which updated the recommendation on rAOM treatment in children.

Results: Among the 1,934 references identified by the database searches, only one guideline from the National Institute for Health and Care Excellence (NICE91, updated in 2022) met our inclusion criteria. This CPG included five individual studies comparing antibiotic treatments for rAOM. None of the studies demonstrated a significant advantage for any treatment. The overall quality of the evidence for these comparisons was considered low. A GRADE EtD framework was elaborated using the NICE91 recommendations but contextualized to the Spanish National Health System. Based on the evidence, the GDG did not modify the current recommendation provided in 2018.

Conclusions: The overall quality of the available evidence regarding antibiotic use for rAOM in children was considered low. Further research is therefore needed to resolve the controversy and increase confidence in the appropriateness of using antibiotics in the treatment of rAOM, thereby improving the quality of life of children with this condition.