Quality assessment of the evidence underpinning pharmacist-led antimicrobial stewardships interventions

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Background
Pharmacist-led antimicrobial stewardships (AMS) interventions are proposed as key strategies to optimise antibiotic use and reduce adverse events, including the selection of antimicrobial resistance.

Systematic reviews are at the highest level of the evidence validity hierarchy and provide insight and support policymakers in clinical practice and research, but sometimes the evidence about its quality is limited.

Methods & Material
Umbrella review of the systematic reviews on AMS conducted following the PRISMA-P guideline.

Protocol registration (Prospero CRD42022333928)

Double independent search by two authors in PubMed, Scopus, Cochrane Library and Google Scholar without language or time restrictions until June 2022.

Included: pharmacist-led AMS interventions.

Quality assessment by two authors independently using a modified AMSTAR-2 tool.

Results
1004 citations -> 20 reviews eligible for inclusion: 648 studies.

Quality Grades:
- Critically Low: 15 reviews (75%)
- Low: 4 reviews (20%)
- High: 1 review (5%)

Most loss-making domains:
- Provide a list of excluded studies
- Measurement of risk of bias
- Explicitly state that review methods were pre-established.

Keywords
- ANTImicrobial STEWARDSHIP
- PROGRAMS
- QUALITY
- ANTImicrobial PHARMACIST

Conclusion
The overall quality of the systematic reviews measuring the impact of PHARMACIST-LED AMS interventions is low. There is a need for high-level literature covering the participation and implication of pharmacists in AMS.

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