

QUALITY ASSESSMENT OF THE EVIDENCE UNDERPINNING PHARMACIST-LED ANTIMICROBIAL STEWARDSHIPS INTERVENTIONS

AUTHORS

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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 policy-makers in clinical practice and research, but sometimes the evidence about its **quality** is limited.

AIM & OBJECTIVE

The aim of this study is to evaluate the **quality** of the systematic reviews measuring the **impact** of **PHARMACIST - LED** AMS interventions.

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:

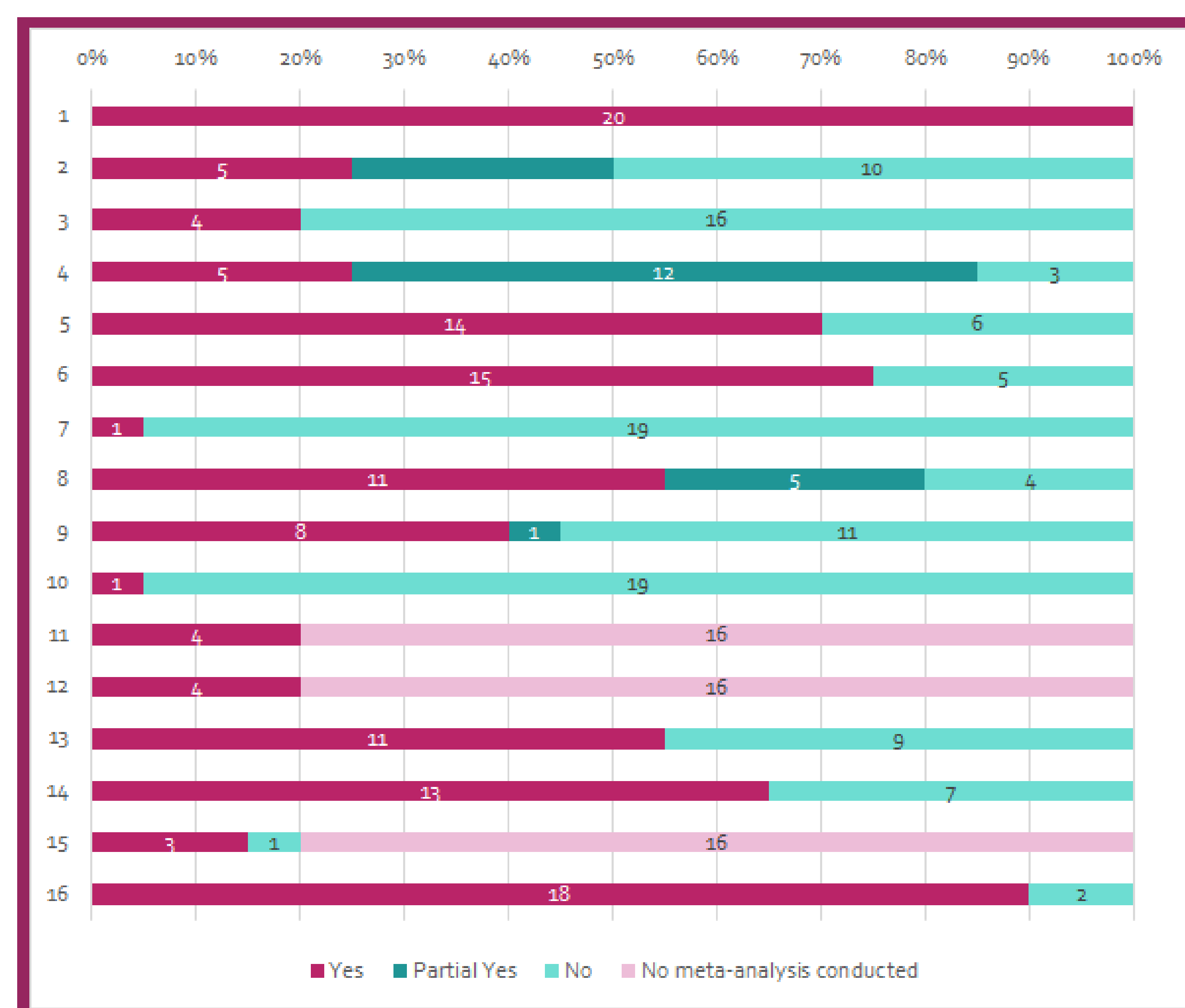
Critically low: 15 reviews (75%)

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



- | | |
|--|---|
| 1) PICO components | 9) Technique for assessing risk of bias |
| 2) Prospective registration | 10) Funding of the included studies |
| 3) Selection of the studies for inclusion | 11) Statistical combination of results (if MA) |
| 4) Literature search strategy | 12) Risk of bias incorporated in meta-analysis |
| 5) Duplicated study selection | 13) Risk of bias incorporated in interpretation |
| 6) Duplicated data extraction | 14) Heterogeneity explanation |
| 7) List of excluded studies and exclusions | 15) Publication bias and impact (if MA) |
| 8) Integrity issue description | 16) Conflict of interest |



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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