Scoping Review of the Evidence Base for Community-Based Surveillance of Rabies and Other Neglected Zoonoses in Low-and Middle-Income Countries



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Introduction

Neglected zoonotic diseases are a subset of neglected tropical diseases (NTZD) that primarily affect the poor & marginalized populations.

In 2008 a global One Health Concept was formulated to tackle NTZDs like rabies, leishmaniasis, echinoccosis etc.

The Integrated Disease Surveillance and Response (IDSR) guidelines, propose Community Based Surveillance (CBS), a key component of One Health (OH) to enhance early zoonotic disease detection.

CBS is a systematic detection and reporting of events of public health significance for surveillance purposes within a community, by community members.

However, there is a shortfall of sources of data & references supporting implementation of CBS in Low- and Middle-Income Countries (LMICs).

This scoping review aims to map out and explore the range of evidence on implementation of CBS with a OH component for neglected tropical zoonotic diseases in lowand middle-income countries.

Methods

Extensive search of published and grey literature was conducted (Databases: Embase, Medline, CAB abstracts, CINAHL, Web of Science, Scopus, Global index medicus. Grey sources: WHO (IRIS), FAO, CDC, NTLTD, OAlster, ILRI, OATD, OIE).

Inclusion criteria: The review considered CBS studies about Neglected Zoonotic Diseases in LMICs from 1990 to mid 2024.

The study used Joana Briggs Institute guidelines & PRISMA-ScR checklist.

Analysis followed Arksey and O'Malley framework enhanced by Peters et al¹.

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Preliminary Results

The search identified 4172 studies; 20 met inclusion criteria (11 CBS = Africa).

CBS for zoonoses was reported to be more effective in most studies.

Nine CBS studies included rabies.

Sixteen CBS studies involved Human & Animal sectors (OH).

Two CBS studies reported no change in zoonoses case detection rates.

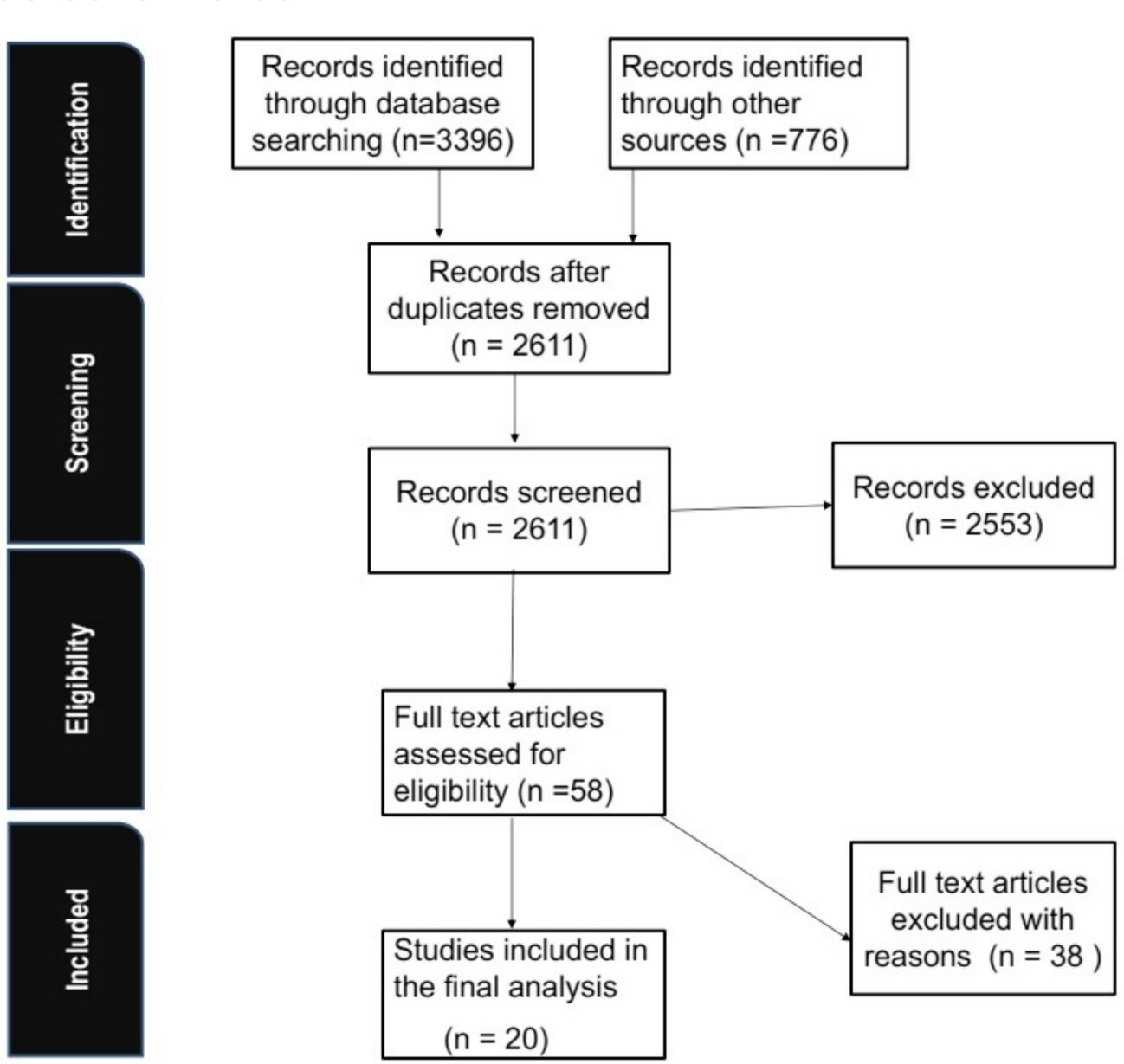


Figure: A flow diagram of CBS for rabies and other zoonoses

Preliminary Conclusions

Environmental health should be another priority sector in CBS implementation.

Insufficient evidence on effectiveness of CBS outside research projects.

Need for research on sustainable control strategies of CBS for NTZDs to the community.

References

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