

The Immunization Agenda 2030 strategy to reach zero-dose children in low- and middle-income countries: a living scoping review

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Outline

- 01** Introduction and objective
- 02** Methods
- 03** Findings
- 04** Limitations
- 05** Implications



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Introduction

- The Immunization Agenda 2030 (IA2030) aims to halve the number of zero-dose (ZD) children by 2030.
- We found no existing comprehensive synthesis of the empirical evidence.

Objective

To map and synthesise what is known from the scientific literature on ZD children in LMICs since the launch of IA2030

To be repeated on an annual or biannual basis until 2030





Photo credit: WHO

Methods

07

Search strategies and selection criteria

- P** **Population:** children < 5 years of age
- C** **Context:** low- and middle-income countries (LMICs) as per the World Bank
- C** **Concept:** zero-dose (ZD) children
-  **Scope:** 1 Jan 2020 – 11 Jan 2024
-  **Language restrictions:** none

 **Databases:** MEDLINE (Ovid), CINAHL Complete (EBSCOhost), EBM Reviews (Ovid), EMBASE (Ovid), LILACS, and Google Scholar.

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Inclusion:

- primary research studies and reviews (published and pre-prints)



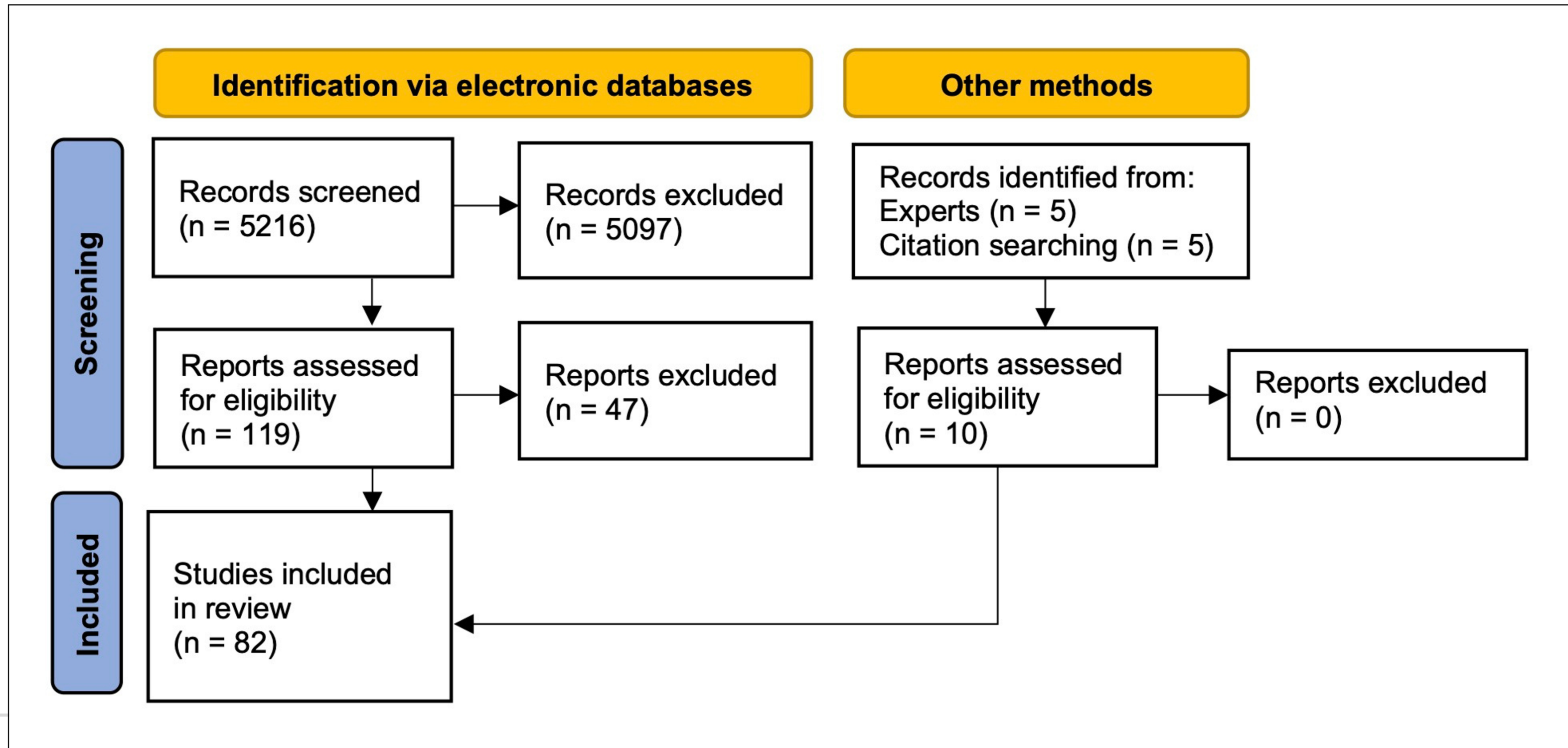
Exclusion:

- grey literature and conference abstracts
- studies containing only qualitative information



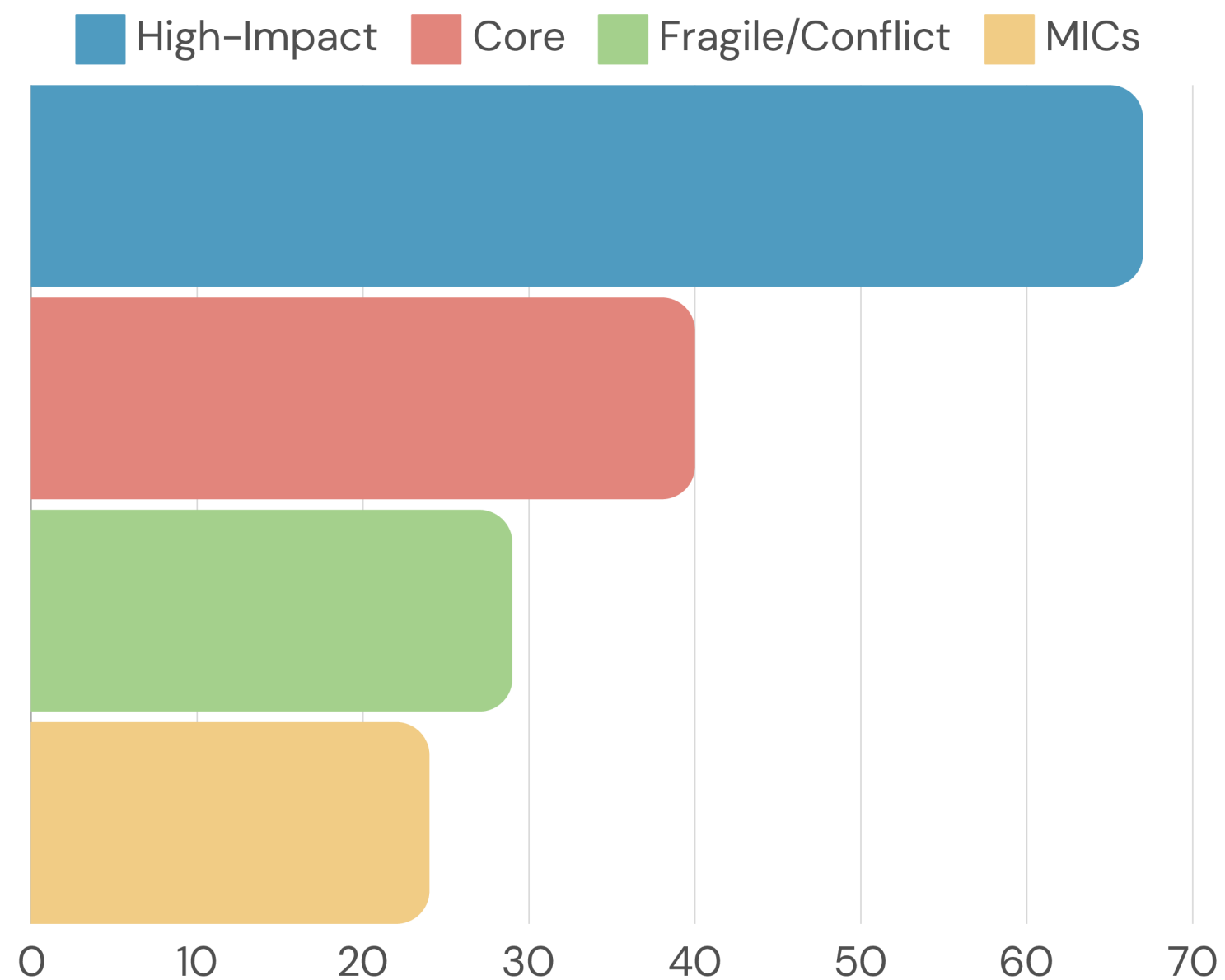
Databases: MEDLINE (Ovid), CINAHL Complete (EBSCOhost), EBM Reviews (Ovid), EMBASE (Ovid), LILACS, and Google Scholar.

Selection of sources of evidence

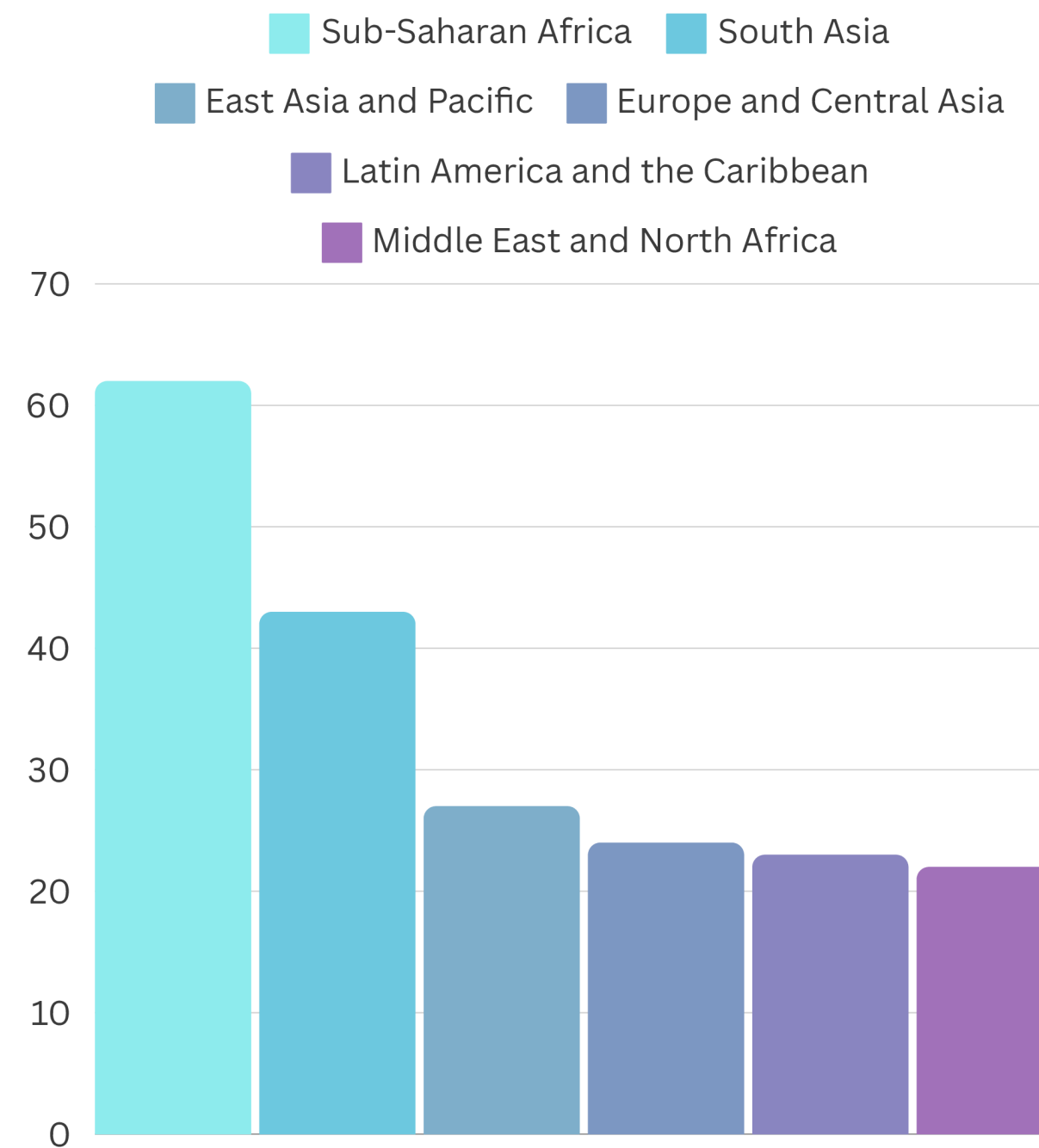


Findings – geographical coverage

Gavi segments



World Bank Regions



Note: articles may cover more than one segment.

Findings – thematic coverage

Of the 82 studies included in the review...

73

provided evidence on prevalence and distribution in defined contexts.

57

provided evidence on barriers and forms of disadvantage faced by ZD children, their households and their communities.

0

provided evidence on interventions that focused specifically on the delivery of routine immunisation to ZD children.

Note: Articles may cover more than one theme.

Findings – thematic coverage

Of the 82 studies included in the review...

41 studies noted subnational variations in ZD prevalence.

73

provided evidence on prevalence and distribution in defined contexts.

57

provided evidence on barriers and forms of disadvantage faced by ZD children, their households and their communities.

0

provided evidence on interventions that focused specifically on the delivery of routine immunisation to ZD children.

Note: Articles may cover more than one theme.

Findings – factors that impede vaccine delivery to ZD children

Of the 24 articles that discussed barriers to vaccination services...



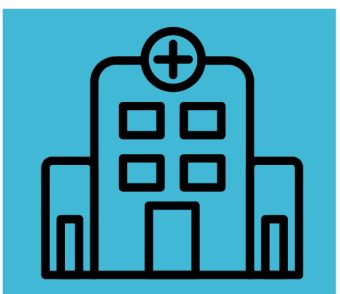
Intent to vaccinate (n=20)

Such as: myths, rumours and fears surrounding vaccines, and lack of faith in immunisation, and restricted decision-making power for women and other primary caregivers.



Community access (n= 10)

Such as: long distance to health facilities, or insecurity to access facilities; costs associated with vaccination services; vaccine service times not suitable to caregivers' schedules.



Facility readiness (n=3)

Such as: absenteeism or unavailability of EPI staff; inadequate incentives for vaccinators and community workers; inadequate incentives to conduct outreach sessions.

Findings – deprivations faced by ZD children, households, & communities

Of the 44 articles that discussed deprivations...

Access to immunisation services

n = 11

Such as: low coverage of maternal tetanus toxoid vaccination; lack of co-delivery of other vaccines/completing full immunisation; missed opportunities for vaccination.

Access to other health services

n = 23

Such as: low coverage of antenatal and postnatal care, skilled birth attendance, family planning; lack of care-seeking for childhood illnesses; low coverage; lack of insecticide-treated nets.

Access to other non-health services

n = 7

Such as: lack of health insurance; lack of access to a bank account.

Deficits in indicators of development

n = 41

Such as: low socioeconomic status; poor maternal education/literacy; low maternal empowerment; malnutrition; lack of improved WASH; poor learning attainment in preadolescence.

Notes: 1) Articles may cover more than one category; 2) Framework inspired by Hogan & Gupta (2023).

Three key findings

The current scientific literature on ZD children...

01

... most commonly reported barriers to vaccination delivery for ZD children related to the *intent to vaccinate*, followed by *community access*.

02

...underscores that ZD children, households and communities face multiple deprivations, with the risk varying across contexts.

03

...does not include evidence on interventions specifically focused on delivering routine immunisation to ZD children.

Limitations



- 1 Independent double data extraction only possible for 42% of the articles, to obtain preliminary findings for April 2024.
- 2 Exclusion of studies containing only qualitative information.
- 3 Exclusion of grey literature to focus on scientific literature.
- 4 No critical appraisal of the articles (optional for scoping reviews).



Photo credit: Gavi

Implications

Key orientation # 1

Partner with communities to understand and address the **root causes** and **contributing factors** that shape low uptake of vaccine and other essential services.



Photo credit: Gavi

Implications

Key orientation # 2

For ZD children and missed communities facing substantial adversity, **design strategies that recognise and can transform multiple deprivations.** Use carefully selected, feasible, and integrated services, tailored to context-specific needs.

Implications

Key orientation # 3

Generate evidence on interventions that deliver **routine immunisation** to ZD children and missed communities, including their outcomes, cost-effectiveness, and impact.



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Full list of references available upon request.