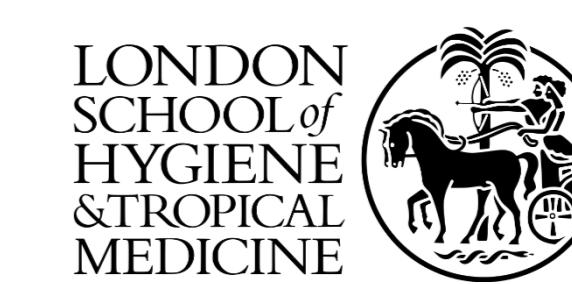




# A Systematic Review of Vaccination Guidance for Humanitarian Responses

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## BACKGROUND AND AIM

- In 2020, 23 million children did not receive routine immunisation services, with up to 17 million of these children not receiving a single dose of a vaccine.
- Guidance documents can assist actors in responding to routine vaccination needs in crisis-affected settings using a standardised or evidence-based approach.
- Availability of guidance, coherence among multiple guidance sources, contextual relevance of guidance, and credibility are identified as important considerations for guidance uptake among those responding to crisis-affected settings

**Aim:** To map the normative landscape of vaccination guidance for humanitarian crisis response across 18 vaccine preventable diseases

## METHODS

### SEARCH STRATEGY:

- An **anonymous survey** seeking vaccination guidance was disseminated on LinkedIn, Twitter, and mailing lists between 15 July and 12 August 2022
- A **manual search of grey literature** published on 76 agency websites was conducted
- Searches were performed on **Google and Bing search engines** in English and French
- A search strategy for **peer-reviewed publications** was performed on Embase and Global Health
- Reference lists of documents that met inclusion criteria** and the reference list of Aboubaker et al. were screened

### INCLUSION CRITERIA OF DOCUMENTS

- Published between 1 January 2000 and 16 August 2022
- Contains **vaccination guidance for humanitarian contexts**
- Guidance focused on cholera, diphtheria, hepatitis A, hepatitis B, haemophilus influenzae type b, human papilloma virus (HPV), measles, meningococcal, mumps, pertussis, polio, pneumococcal, rotavirus, rubella, tetanus, tuberculosis, varicella, or yellow fever
- English or French

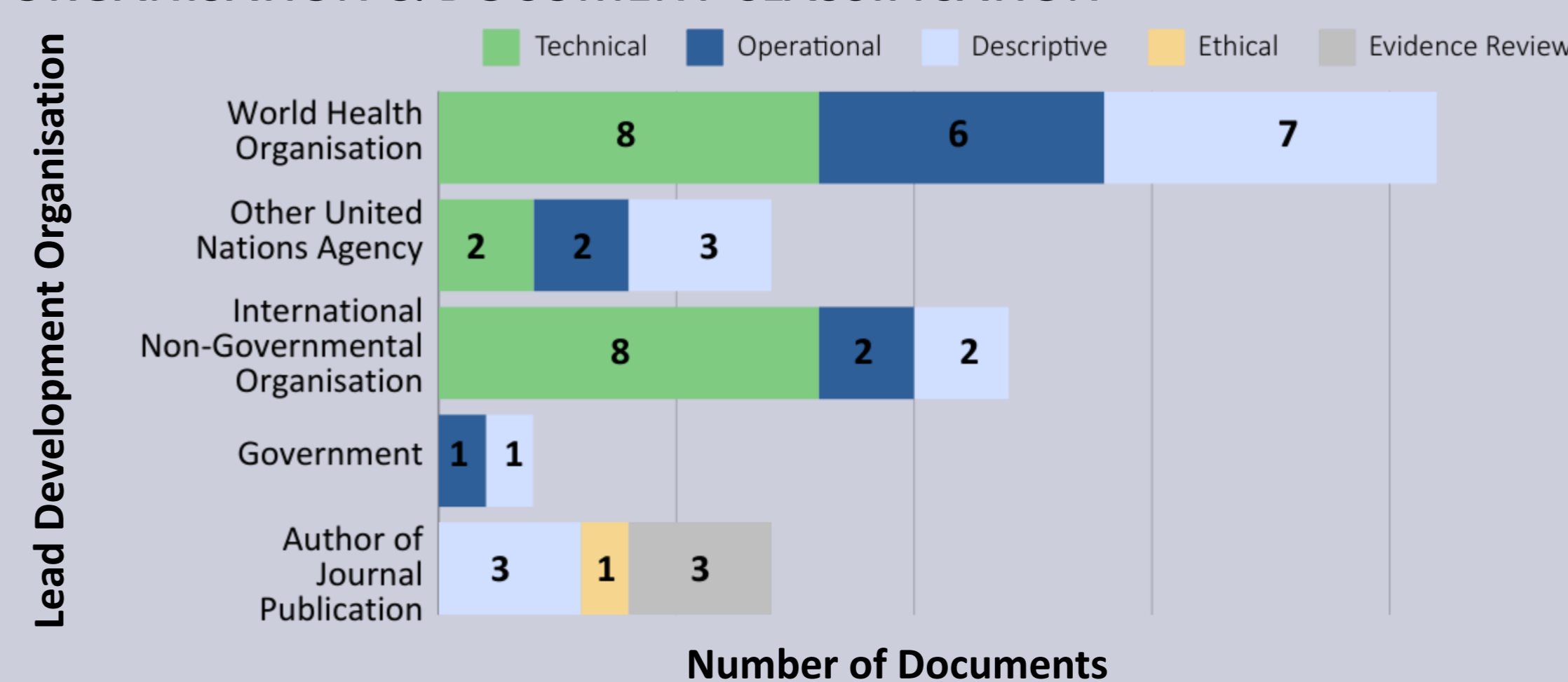
### CRITICAL APPRAISAL TOOLS

- Appraisal of Guidelines for Research and Evaluation II (AGREE II)
- Scale for the Quality Assessment of Narrative Review Articles (SANRA)

## RESULTS

- 48 documents were identified for inclusion including 7 peer reviewed articles and 41 grey literature documents.

### LEAD DEVELOPMENT ORGANISATION & DOCUMENT CLASSIFICATION



- TARGET POPULATION:** Nearly all guidance documents (n = 46, 96%) reported vaccination guidance for “children”, followed by adolescents (n = 18, 38%), and newborns (n = 2, 4%).

- TARGET USERS:** The majority (n = 40, 83%) of documents targeted immunization programme planners, managers, and policy makers. A few documents (n = 3, 6%) targeted advocacy groups and (4%, n = 2) health communication teams.

- ZERO DOSE:** The concept of zero-dose was identified in 22% (n = 11) of the documents, with the majority (n = 10) being published in 2020, 2021, and 2022.

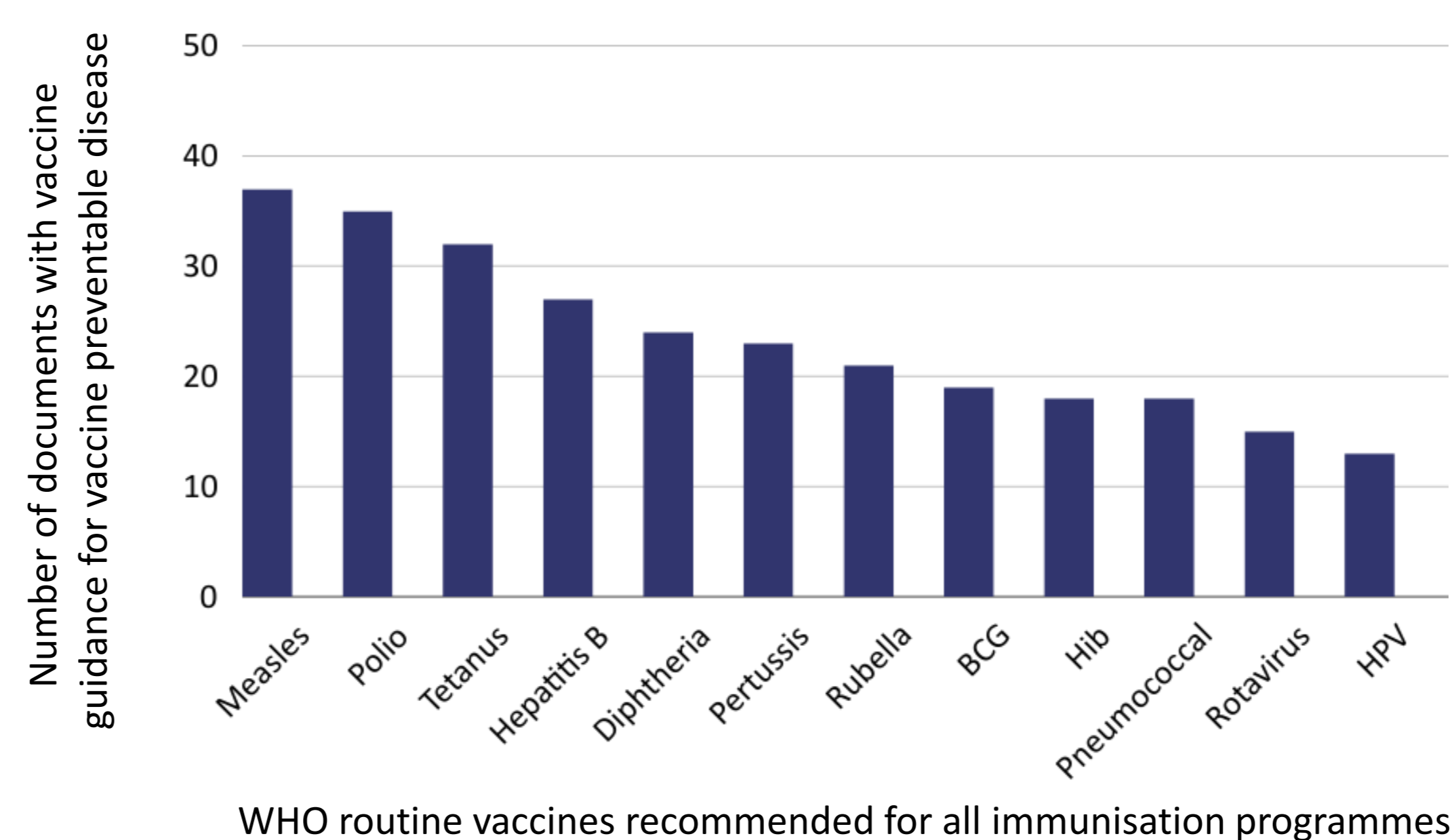
- VACCINE PREVENTABLE DISEASES :** Vaccination guidance for targeting measles (n=37, 77%), polio (n=35, 73%), and tetanus (n=32, 67%) was most prevalent (**Figure 1**). Fewer documents contained guidance for HPV (n=13, 27%) and WHO non-universally recommended vaccines (**Figure 2**) notably hepatitis A (n=11, 23%) and rubella (n=10, 21%).

- VACCINE DELIVERY RECOMMENDATIONS:** Mass vaccination was the primary modality for vaccination delivery (n = 11, 23%), followed by strengthening of routine vaccination services (n = 6, 13%). Only two documents (4%) included guidance for both.

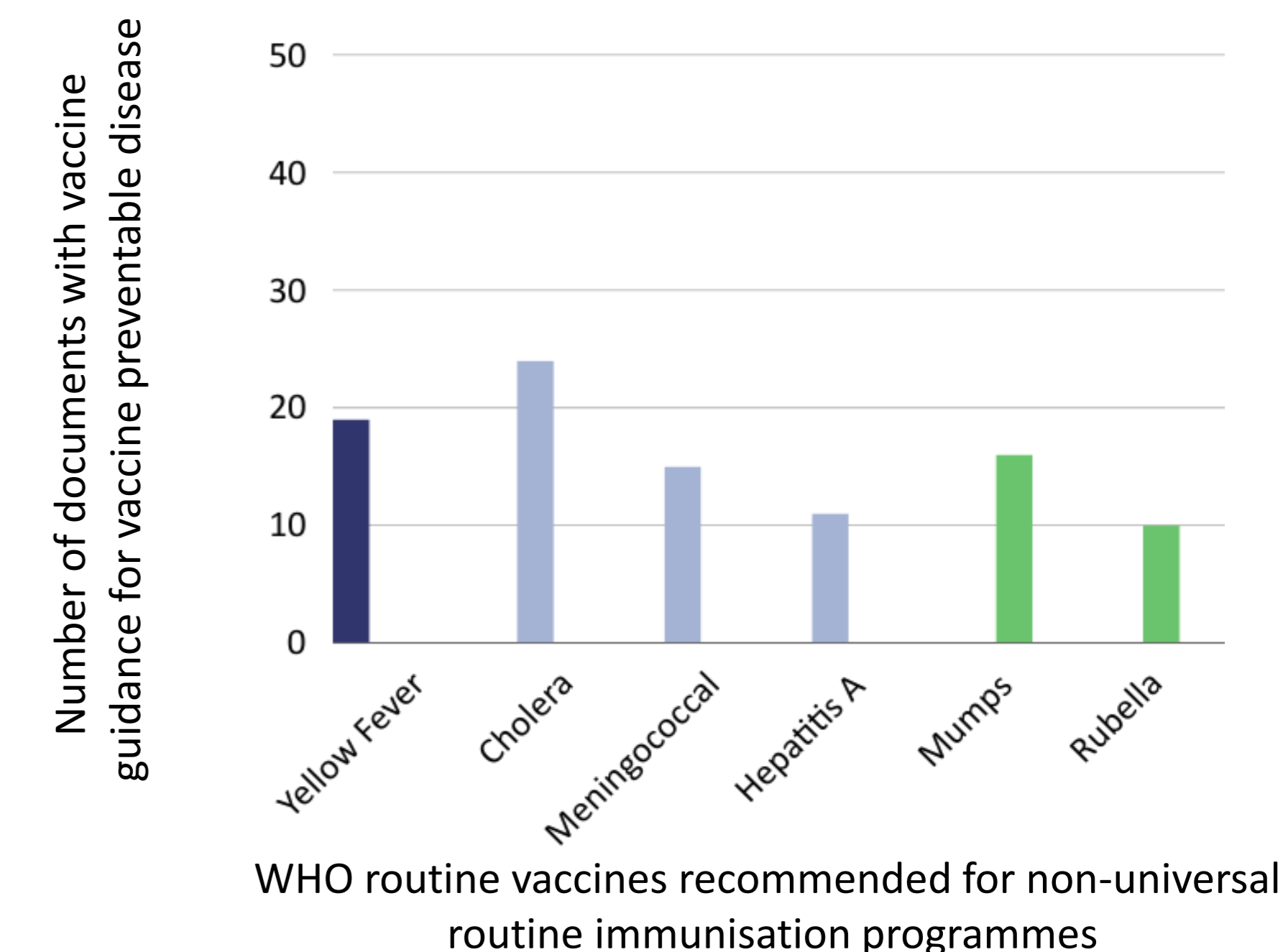
### CRITICAL APPRAISAL

- AGREE II (n=45):** The category of “the views and preferences of the target population have been sought” scored poorly (3.2/7) on the disaggregated 7-point Likert-Scale.
- SANRA (n=3):** The items of ‘Statement of Concrete Aims or Formulation of Questions’ (67%) and ‘Scientific Reasoning’ (67%) scored lower.

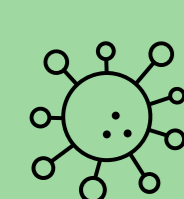
**Figure 1.** Number of documents with vaccine guidance for vaccine preventable disease mapped to corresponding WHO routine vaccines recommended for all immunisation programmes.



**Figure 2.** Percentage of other vaccines assessed in the review mapped according to WHO non-universal routine vaccine programme recommendations.



## DISCUSSION



### VACCINE PREVENTABLE DISEASES

- Measles, polio, and tetanus were the most frequently identified VPDs. Polio and measles are prioritised for mass immunization and require high coverage to achieve herd immunity.
- Lack of guidance for HPV vaccination in crisis settings may influence how crisis responders prioritise and view the importance of providing this vaccine to crisis-affected populations.



### VACCINE DELIVERY MODALITIES

- Few guidance documents presented both types (mass and routine) vaccination campaigns. Hybrid delivery modalities including leveraging other operational delivery platforms such as schools or resource distribution points should be considered.



### ETHICAL GUIDANCE

- Critical appraisal revealed limited input from affected populations during document creation. Affected populations can help navigate ethical challenges, support community acceptance of vaccines, as well as enable co-development of context-specific recommendations to support informed consent and should be included in guideline development.



### HEALTH COMMUNICATION

- Health communication teams were not commonly identified as target users. Inclusion of health communication teams as target users and recommendations to support health communication is necessary to address potential vaccine misconceptions and support vaccine uptake in crises settings.



## ETHICS STATEMENT

The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee) of the London School of Hygiene and Tropical Medicine (protocol code 27026, 13 May 2022)

