Terms of Reference for
Systematic Review on Gender Disparities in Missed and Zero Dose Polio Vaccination Among Children Under Five in Pakistan, Afghanistan, Nigeria, and Sudan

1. Background

The Global Polio Eradication Initiative (GPEI) is approaching the eradication of poliovirus in most regions of the world. However, Pakistan and Afghanistan remain endemic for Wild Poliovirus Type 1 (WPV1). An analysis of POLIS dashboard data for 629 children who tested positive for WPV1 between 2015 and 2024 shows a consistently lower proportion of girls (39%) compared with boys (61%), except in 2018. Nigeria and Sudan continue to report outbreaks of vaccine derived poliovirus due to low routine immunization coverage and a high concentration of missed and zero-dose children. Similarly, an analysis of 3,670 children who tested positive for circulating Vaccine Derived Poliovirus Type 2 (cVDPV2) during the same period indicates a 10% higher proportion of boys in all years except 2016 and 2017. These patterns, observed across Pakistan, Afghanistan, and Nigeria, indicate statistically significant gender disparities that warrant further examination. Understanding the underlying reasons for these differences is essential to strengthening operational strategies. For example, if boys in certain settings are less likely to receive polio vaccines, targeted communication materials may be required to reassure communities that vaccination is safe and essential for boys.

2. Objectives

Assess the impact of gender norms on polio vaccination missed or zero dose children under five in Pakistan, Afghanistan, Nigeria, and Sudan and quantify and compare the prevalence of polio vaccination missed and zero-dose girls and boys.

3. Scope of Work / Tasks

The consultant is expected to perform the following tasks indicated with an estimated timelines and provide weekly progress updates via power point presentations through virtual meetings and narrative monthly progress reports to share the competition of the milestones as stipulated in the Terms of Reference and finalised protocol.

#	Tasks	Timelines
T1	Finalize the existing draft systematic review protocol in line with international standards and register it on PROSPERO.	Weeks 1-2
	Conduct a comprehensive literature review across peer reviewed databases and mutually agreed grey literature sources. This includes:	
T2	Screening titles and abstracts based on eligibility criteria;	Weeks 3-4
T3	Reviewing full text articles and grey literature and shortlisting eligible studies;	Weeks 5-7
T4	Extracting data from included studies, dashboards, and reports;	Week 8
T5	Assessing study quality and risk of bias;	Week 9
T6	Organizing extracted data into thematic sub-categories;	Week 10
T7	Conducting bias assessments using established tools;	Week 11
T8	Minimizing meta biases through crosschecking (e.g., CASP, R, GRADE);	Week 12
T9	Assessing publication bias using funnel plots and the Egger test;	Week 13
T10	Reviewing grey literature to mitigate non-publication bias;	Week 14
T11	Applying the GRADE framework to assess evidence quality;	Week 15
T12	Contacting study authors to clarify missing or unclear data.	Week 16
T13	Develop the first draft of the systematic review for peer review.	Week 17
T14	Circulate the draft for feedback.	Week 19

T15	Revise the draft systematic review document to address feedback and strengthen the analysis.	Weeks 22-23
T16	Prepare a power point presentation on key findings of systematic review	Week 24

4. Deliverables

#	Deliverable	Timelines
D1	Finalized systematic review protocol and evidence of PROSPERO registration.	Month 1
D2	List of shortlisted articles including PRISMA flow diagram, screening logs, and data extraction sheets.	Month 2-3
D3	Quality appraisal outputs and bias assessment documentation, including GRADE profiles, funnel plots, and author correspondence log.	Month 4
D4	First draft of the systematic review.	Month 5
D5	Final draft of the systematic review	Month 5-6
D6	Presentation on the key findings of systematic review for global advisory bodies	Month 6

5. Timeline / Workplan

The assignment will be completed within six months as per contract dates.

6. Qualifications, Skills, and Experience The consultant must possess the following:

Qualification	Advanced university degree in public health, epidemiology, or a related field such as Gender Studies or Anthropology etc.
Skills	Demonstrated expertise in conducting systematic reviews, including familiarity with PRISMA standards, PROSPERO registration, study selection, data extraction, and synthesis. Technical proficiency in bias and evidence equality assessment tools (e.g., CASP, GRADE and R) and appraisal of grey literature. Competence in quantitative and qualitative analysis, including subgroup analyses, bias analysis, funnel plots, and narrative synthesis. Excellent writing skills. Application of Gender Lens on quantitative and qualitative polio missed and zero-dose children's data.
Experience	Minimum five years of Experience in: o Conducting systematic review including developing systematic review protocols and evidence summaries. o Application of a gender lens to polio programme data. o Analysis of grey literature sources. o Runing of technical software for raw data analysis o Working with polio or routine immunisation programme

7. Technical Supervision / Reporting Lines

The consultant will report to a Gender Specialist and relevant research colleagues within the Polio Department at WHO Headquarters.

8. Location

The assignment will be conducted remotely. No travel is expected.

9. Remuneration and Budget

The consultant will be remunerated at a maximum monthly rate according to the level of experience and expertise and WHO's rules. The additional expenses such as PROSPERO fee or any other foreseeable expenses would be included in the remuneration.

10. Software and Access to Peer Reviewed Journals

The consultant is expected to use free available software. WHO would not be able to provide any subscription fee for any software purchase or access to peer reviewed journals.

11. Standards, Compliance, and Reference Frameworks

The consultant must ensure compliance with WHO ethical standards, requirements for peer reviewed publication, and PROSPERO registration standards.

12. Governance / Stakeholder Engagement

The assignment may include virtual consultations with country level GPEI partners and presentations to global advisory bodies such as the Strategy Committee and Technical Advisory Groups.

13. Confidentiality and Data Protection

All data and materials will remain confidential and will be the intellectual property of WHO.

14. Application Process

Interested candidates should submit their WHO personal history form (PHF) by email to aguete@who.int by close of business on 16 February 2026. The PHF is available through WHO recruitment website (https://careers.who.int/careersection/ex/jobsearch.ftl). Only those candidates considered for the position will be contacted