

Appendix A: Interview Guide

1. Background and Expertise

- Could you briefly describe your role and professional background?
- What regions or conflict-affected settings have you worked in regarding mortality estimation or humanitarian response?
- How long have you been engaged in this work?

2. Perceived Importance and Complexity of Mortality Estimation

- In your view, how important is mortality estimation in conflict settings? Why?
- What makes mortality estimation particularly complex or challenging in the contexts where you've worked?

3. Barriers to Mortality Estimation

- What are the most significant barriers you've encountered when estimating mortality in conflict settings?
 - Political (e.g., censorship, data manipulation)
 - Logistical (e.g., infrastructure destruction, displacement)
 - Social/cultural (e.g., mistrust, burial practices)
- Can you share an example of when these challenges directly impacted mortality estimation?
- How do these barriers vary across different types of conflict (e.g., protracted vs. acute onset)?

4. Enablers and Facilitating Conditions

- What systems or practices have you seen that *enable* effective mortality estimation?
- Can you share a context where mortality data collection was particularly successful? What factors contributed?

5. Methodological Approaches

- Which methods have you used or encountered in your work (e.g., key informant reporting, small-area estimation, satellite imagery, social media)?
- In your experience, how do you determine which method to use in a particular context?
- Have you seen these methods used in combination? What did that process look like?

6. Ethical and Political Considerations

- What ethical concerns arise from some methods?
- How do you manage data privacy and the potential misuse of sensitive information?

7. Any other recommendations?

Appendix B: COREQ (Consolidated Criteria for Reporting Qualitative Research) Checklist

Domain	Item	Description of how addressed in this study
Domain 1: Research team and reflexivity	1. Interviewer/facilitator	Interviews were conducted by two researchers (T.R. and R.A.), both with training in qualitative methods and public health.
	2. Credentials	T.R.: MPH, R.A.: MD/MPH.
	3. Occupation	Both were postgraduate researchers in public health.
	4. Gender	One male, one female.
	5. Experience and training	Both had prior experience conducting qualitative research in humanitarian contexts.
	6. Relationship established	No prior relationship with participants before study commencement.
	7. Participant knowledge of interviewer	Participants were informed of the researchers' institutional affiliations and study aims.
	8. Interviewer characteristics	Researchers were neutral facilitators with no operational role in participants' organisations.
Domain 2: Study design	9. Methodological orientation	Thematic analysis following Braun & Clarke's six-phase framework.
	10. Sampling	Snowball sampling beginning with a curated list of humanitarian and public health professionals.
	11. Method of approach	Participants were contacted via email invitation.
	12. Sample size	Twelve interviews were conducted until thematic saturation was reached.
	13. Non-participation	None

	14. Setting of data collection	All interviews were conducted remotely via Zoom.
	15. Presence of non-participants	No non-participants were present during interviews.
	16. Description of sample	Participants were experts in public health, epidemiology, biostatistics, and humanitarian health responses with conflict-affected experience (see Table 1).
Domain 3: Data collection	17. Interview guide	A semi-structured interview guide was used (Appendix A).
	18. Repeat interviews	No repeat interviews were conducted.
	19. Audio/visual recording	All interviews were audio-recorded with consent.
	20. Field notes	Brief notes were taken during and after interviews.
	21. Duration	Interviews lasted approximately 45–60 minutes.
	22. Data saturation	Recruitment ceased once thematic saturation was reached (after twelve interviews).
	23. Transcripts returned	NA
Domain 4: Analysis and findings	24. Number of data coders	Two coders (T.R. and R.A.).
	25. Coding tree	Codes were inductively generated, refined through team discussion, and grouped into higher-order categories.
	26. Derivation of themes	Themes were derived inductively.
	27. Software	Analysis was conducted manually using Excel.
	28. Participant checking	All participants would like to get access to the manuscript once published.
	29. Quotations presented	Participant quotations are included throughout the Results to illustrate themes.
	30. Data and findings consistent	Findings are consistent with the data, supported by quotations and triangulation.
	31. Clarity of major themes	Major themes clearly reported (enablers/barriers; methods).
	32. Clarity of minor themes	Divergences and contextual nuances reported in Results and Discussion.