Reviewer’s report

Title: Supporting the use of research evidence in decision-making in crisis zones in low- and middle-income countries: A critical interpretive synthesis

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Reviewer: Mit Philips

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The research question concerns strategies to facilitate/stimulate the use of existing evidence and points to barriers to using this available evidence. Much of the article deals with tools to access the evidence info, but not on the quality of this evidence (as indicated) - and more importantly, it does not look into other push & pull factors outside available evidence.

The political agenda’s set by donors and United Nations are arguably more influential and are not based on evidence but rather political framing. Recent examples are the integrated approach framework (UN and others), donor policies concerning fragile & conflict affected states (or similar terms), the health securitisation agenda etc. Arguably these have much more influence on the orientation and choices taken in crisis situations. I would argue these are not necessarily evidence based but serve broader development and political agenda’s and are therefore one of the important factors NOT to use available evidence.

Interventions during crisis are to a large extent determined by the funding available and thus the preferences of donors.

Not only implementers but also researchers adopt the policy language and sometimes get specific funding to rather support instead of critically look at these policies.

It would therefor have been useful to at least mention this strong force in the policy arena and examine its effect on using or not available evidence during crisis.

The other issue is there is no specific definition provided for 'crisis' in the selection of articles and evidence. Furthermore the use of the wide term 'crisis' complicates drawing conclusions for the entire group. Natural disasters are not epidemic outbreaks, nor conflict. Each of them has very specific restrictions, eg the use of government health systems during a conflict in which the government is party to has important implications eg South Sudan or Yemen. Even during outbreaks this becomes an issues, such as in North Kivu, DRC.
There is a methodological problem in the review in the grouping/compiling of crisis in any Low & middle income country. Not only is it recognised now that country's GDP-classification is unhelpful to base decisions on in determining health needs assessments and interventions, using averages based on experiences/evidence from such a wide range of countries makes it difficult to draw conclusions from. If there is one guiding principle recognised in crisis interventions, it's that context matters enormously and interventions need to be adapted to the specific contexts.

In the article there is an important source of information left out beyond the ones mentioned, namely standards and guidelines based on evidence and past experience, from specific agencies (WHO, UNICEF, OXFAM, MSF) and/or agency groups (eg refugee health manual). The closest mentioned to this are the 'professional opinion' and 'experts' but this seems only to speak about individuals present or involved in the crisis itself.

It's strange to see that under political systems there is mainly reference to national government level tasks. International politics play a major role - beyond the international humanitarian aid which is included.

The definition of health system on page 10 under line 201 seems to refer mainly to implementing capacity and moreover seems in contradiction of the frequently used terminology of 'fragile states', which indicate government unable or unwilling to provide basic social services to their population.

A similar remark can be made on the use of 'humanitarian aid system', focusing on delivery of services. It would have been useful to mention at least some of the principles of humanitarian aid that guide interventions in crisis situation -focusing on people and the most vulnerable first and foremost and operating with impartiality, independence, neutrality etc.

Another point is the fact that often in crisis decisions need to be made while dealing with a high degree of uncertainty. This implies dealing with unknowns and also regular/fast revision of decisions during crisis as additional/different information appears. This is also left out of the article.

In the selection of articles 1 in 4 is discarded, which seem high.
Most articles that speak about 'success' deal with information sharing (such as Haiti example on page 13) but do not indicate any evidence of improved outputs of the emergency response by the use of this information.

A selection bias is worth mentioning that research in highly insecure contexts is less available, as often researchers face difficulties to access these places, and therefore 'acute crisis' situations are likely to be less represented.

A further complication is that the search and therefore most articles reviewed date from before April 2017, i.e. before the Istanbul summit on Humanitarian Aid that declared an intention towards new ways of working. This makes the review probably less relevant as it illustrates exactly the first point mentioned ie that evidence is not the basis guiding interventions in crisis situations, but rather political agendas.

The 2 strategies that are put forward ie stakeholder dialogues and evidence briefs, would merit further discussion, especially in terms of how to protect independence and objectivity of these processes.

There is no mention of 'vested interest' from the health system and other actors in the grouped stakeholder discussion, with a reluctance to change that might affect these vested interests and/or push certain political agenda's.

For the evidence briefs - and especially making them rapidly available - these might be certainly useful, but their usefulness will critically depend on who is translating this research into context-specific recommendations. It's not entirely clear to me if the authors suggest that this 'translation' should be done rather by academics than by the professional experts mentioned above?

Future research might include some classification of the available evidence in terms of strength, usefulness and applicability, as this will determine critically its use.

Another methodology could be to interview people on the wider process and their experience during a recent crisis they lived through and check if they felt there was willingness to use evidence (compared to other guidance/influence), evidence on what issues would have been useful, what sources of info they used, how did they apply it/or not and why (not).
Taking into account the above, the proposed framework seems at the same time too narrow (not including international political agenda's) and too general (too wide range of types of crisis with little specific context factors).

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