Review of: "Expanding Participatory Epidemiology to Explore Community Perceptions of Human and Livestock Diseases among Pastoralists in Turkana County, Kenya"

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Potential competing interests: No potential competing interests to declare.

Comments

(1) Objective and purpose

Griffith and co-authors provide an interesting report of their experience in piloting the use of participatory epidemiology (PE) in exploring the understanding of pastoralists of human, livestock and zoonotic diseases in the context of arid and semi-arid land in Kenya.

However, the extent of the pilot is quite limited, consisting of three focus groups across three sites, with a total of 17 participants, only two of whom were women.

There is also some confusion across different statements of purpose with the following statement at the end of the introduction: ‘we piloted a One Health approach to examine human, livestock and zoonotic diseases among Turkana pastoralists’. This statement does not mention the use of PE.

Given the limited extent of engagement of the community members in the study, the results need to be seen as preliminary, more a ‘proof of concept’ than an assessment of the effectiveness of the approach.

(2) Materials and Methods

This section provides a description of the study site and the focus group discussion methodology. But it does not discuss how the usefulness of PE as a method would be assessed, including an assessment of both strengths and weaknesses.

The study involved four focus group discussions (FGD) with one consisting of both men and women, and the remaining two consisting only of men. There does not appear to be any consideration of the impact / role of gender relations in the design, and, for example, whether it would be useful to include a FGD with women only.

The methodology focuses on defining or estimating ‘importance’. While not defining importance enables the participants to determine importance from their own perspective, it is possible, indeed likely, that different participants would have different understandings or views on importance, particularly, for example, differing between men and women. It would be useful in future work to explore how participants understand and decide on the factors that determine importance.

(3) Results

Table 2 provides interesting information on how participants recognize some diseases as ‘the same disease in people and livestock’. However, the concept of a zoonosis is quite complex, and while participants might recognize the disease as ‘the same disease in people and livestock’, this is not the same as recognition as a zoonosis. Thus it is unclear whether the column labelled ‘category’ in Table 2 , is the result of information provided by the participants, or a classification by the authors.

The following section titled ‘Zoonotic diseases and local terminology’ suggests that participants could identify certain diseases as ‘zoonoses’ for example brucellosis. It would be useful to clarify how the identification of a disease as a ‘zoonosis’ was established, and the factors / criteria used to determine that participants had understood a disease as a zoonosis, and / or whether that recognition was consistent or not.

The use of the piling exercise to determine priorities is an interesting example of use of a method that is adapted to the context and enables the reflection of group viewpoints. However, little evidence is provided for the comment that ‘participants exhibited a deep understanding of epidemiology’. Table 3 provides a useful summary of the participants’ understanding of diseases, and their causes, in both animals and humans.

Discussion

The discussion focuses more on an analysis of the findings, in terms of the participants’ understanding of human and livestock diseases and their connections, rather than a critique of the strengths and weaknesses of the methodology. However, as a key question for the research was to determine the appropriateness / effectiveness of PE as a methodology and ‘expanding scope of PE to encompass human diseases’, more consideration could be given in the discussion section to the strengths and weaknesses of the PE methodology. Given that this study is more in the nature of a pilot of the methodology, it suggests that this is a method that shows some promise, but needs further exploration in different contexts, and potentially with different community group membership.

There is also a suggestion of the use of the study approach as a low cost disease surveillance method. However, the discussion does not explore in depth the strengths and weaknesses of the methodology as a surveillance method. This would need further study over an extended time period, to determine the sensitivity and specificity of the methodology to identify changes in the incidence or impact of infections over time.

Overall this study pilots the use of a promising methodology that builds on the concepts of ‘one health’ and community participation. Further studies are needed to explore the potential of this method to move beyond a research context to a surveillance tool.