Author's response to reviews

Title: On the frontline of primary health care: The profile of community health workers in rural Quechua communities in Peru

Authors:

Angela Brown (abrownliv@aol.com)
Rosa Malca (huaya@terra.com.pe)
Adriana Zumaran (adriana_zumaran@yahoo.es)
J. Jaime Miranda (jaime.miranda@lshtm.ac.uk)
Health Unlimited's Quechua Community Health Project writing group (huaya@terra.com.pe)

Version: 3 Date: 23 March 2006

Author's response to reviews: see over
Dear Editor,

We are very grateful for the reviewer’s comments provided to our paper. We attached a revised version of the paper. In this letter, we will clarify and respond to the comments and questions raised by the two reviewers.

We would like to apologise in advance for the delay in answering to the reviewers’ comments. This delay was due to the fact that the paper was being circulated among native English speakers to double check and improve the quality of the English presented in the paper.

Also, we would like to inform that we have made a minor change through the paper, replacing the noun “community health agents” by “community health workers.”

With kind regards,

Dr J. Jaime Miranda
On behalf of the authors
Reviewer 1: Dr Victor Zamora

General

1. The way the results are presented must be improved. For example: “three groups of community health agents were studied” describe its commonalities and the main differences.

   We have reorganised the results section and now includes subheadings for each set of information: qualitative and quantitative. The reader will have the opportunity to understand commonalities and differences between community health workers, based on the information provided in the results sections.

2. Although the author recognizes that the literature related to community health workers is abundant I think he has improve the selection of his bibliographic references and make them more relevant to the particular issue of this article.

   We have added a few references, including more relevant ones that are directly related to community health workers in Peru (see references 3 and 14). However, our choice is somewhat limited, since the literature on community health agents in Peru is very poor and the subject of our paper has not been properly addressed in Peru nor internationally.

   A quick search on pubmed using (“Peru”[MeSH] AND “Rural Health Services”[MeSH]) yields only 4 results, none of them being directly relevant to the present paper.

   We have stated these difficulties in the first paragraph of the paper which reads: “Despite the abundance of research and published scientific literature… the literature on community health workers in Peru is limited [3].”

   We have also added a few references related to the systematic reviews carried out on the impact of traditional birth attendant’s training on health outcomes. This appears in the following sentence, also in the paper’s background section: “Of all community health workers, the impact of traditional birth attendants’ training is the only one that has been studied and addressed in a systematic way [10-12].”

Major Compulsory Revisions

3. Results, par. 3. there must be a mistake with the figures used for the literacy rate among community health promoters. If this is not the case the sentence “a low educational level among the 3 groups of community health agents was observed” would not be correct. I think the whole paragraph should be revised.

   Low educational level included from illiterate to incomplete high school education. We have revised the whole paragraph, being more specific:

   “In general, a low educational level –ranging from illiterates to incomplete high school education- among the 3 groups of community health workers was observed. 75% of traditional healers were illiterate and the remaining 25% had incomplete primary school education. Amongst traditional birth attendants, more than 90% fell in the illiterate and incomplete primary school education categories. In the case of health promoters, 1% were illiterate, 48% had incomplete primary school education and only 8% of these agents had completed high school.”

4. I would suggest including a paragraph describing the profile of the female community health agents.

   We did a sub-analysis of female community health workers and, despite the fact that they were minority in all three groups of community health workers, we did not find any pattern of difference. We, therefore, have not included this information.
Minor Essential Revisions: None

Discretionary Revisions (which the author can choose to ignore)

5. Regarding the methodology the author must give more information about the project he used as his source of information.

   In the Methods section, under the heading “The community health project” we state the nature and strategy of the project, as well as specific links and references about the project that will guide the reader if more information is required.

6. It would be important to include some information about the levels of poverty among this communities.

   Under the heading “Setting” in the methods section we have added the following paragraph with a specific reference: “54.8% of Peruvian population are poor, and 24.4% of Peru’s population live on extreme poverty. Ayacucho, the project’s intervention area, has been classified as a department with generalised poverty, due to 72.5% poverty rate. 45.4% of Ayacucho population live under extreme poverty conditions [16].”

7. Quality of written English: Needs some language corrections before being published

   We have revised in depth this issue.
**Reviewer 2: Dr Ximena Salazar**

**Major Compulsory Revisions.**

1. **Is the question posed by the authors new and well defined?** The purpose of this article is to describe the profile of community health agents. Although the issue has not been studied in Peru, international literature on the topic is abundant. The question posed did not go into great detail.

The reviewer clearly notes that the topic of the present paper has not been studied in Peru. Additionally, at least in the biomedical literature, the topic of the profile of community health workers has not been well studied.

We have chosen a few international references to guide the argument and ideas presented in the background section of our paper. While Reviewer 1 asks for more context-specific references, and reviewer 2 requires more international references, we shall agree that a balance is ideal. We have re-phrased and added new references to paragraph 2 of the Background section, hoping to achieve a balance on the type of references required.

2. **Are the methods appropriate and well described, and are sufficient details provided to replicate the work?** Research methods are not appropriately described particularly those related to the development of community agents.

The aim of this study was “to describe the profile of community health workers in rural Quechua communities from Ayacucho, Peru.” We clearly stated in the first sentence of the Methods section that this was a descriptive study. More than an analytical piece, we consider this paper as exploratory, an initial paper that could highlight potential future research questions. Maybe this misinterpretation creates the majority of Dr Salazar’s comments on the piece.

The project did not elect nor selected community health agents to train. These positions, as described on the paper, were mainly decided by the community—in the case of health promoters—or by personal choice—in the case of traditional birth attendants and traditional healers. The materials specific to activities to work with each of these agents have been presented in the project’s reports, and briefly described elsewhere (references listed at the end of this letter). These references have now been added to the paper to further guide the reader towards this related material.

The authors need to provide more information about the methods they applied in their research, both quantitative and qualitative. For instance, there is no information about the variables they regarded, why and how the sample was established among the 40 rural communities? How the data analysis was conducted?

The variables gathered for this paper were quite straightforward—age, sex, education level, years in the role, main activities carried out—, hence we decided not to present them in a specific manner in the present report.

We have made small changes to the Subject section of the paper providing more information about participants. Sample size calculation was not needed because we reached the total of community health workers (see Subjects in Methods section) and we were not looking for a particular difference in an specific variable between them. Again this is an exploratory descriptive study.

In relation to data analysis, we have added the following sentence in the “Data” subheading of the Methods section: “Data was entered and analysed in Excel, and descriptive statistics were obtained for this report.”
Although the use of quantitative and qualitative data is significant the article does not reflect this mixed methodology. Methodological details are not sufficiently described in order to replicate the work. The methodology section is more dedicated to describe the intervention project conducted by the authors.

We agree that replicability is an important factor for every study, and due to the limited literature in this subject, other studies are needed. However, detailed methodological information are necessary when more advanced epidemiological surveys and analysis are carried-out. Since this paper presents a first initial exploratory analysis, not hypothesis-driven, not statistically-result driven, we do think there is enough information to generate further research questions at the social, epidemiological and health policy levels.

The following are a few examples of further research questions that can arise from this paper:

i) Sociology: Gender determinants in uptaking community health roles; Socioeconomic determinants in maintaining a community health role; What is the impact of education achievement of community health worker’s performace and morale?

ii) Epidemiology: Do community health workers have an impact on referral systems for acute/chronic conditions? Do community health workers have an impact in morbidity/mortality?

iii) Health policy: Does community health workers performance provide an indicator for health system assessment or health services performance assessments in rural settings? Does community health workers contribute to a better health-care workforce in isolated areas?

Being this the first paper of its own in this context, we think it is premature to ask for more complex research analysis with such limited data.

3. Are the data sound and well controlled? Since there is not an adequate description of research methods we can not answer this question.

Data are not controlled because this was not subjected to more complex statistical analysis. We do think, however, that the data is sound. Also, despite being simple data, we would contend that this data has a strong messages in its present format.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Unfortunately the scarce data provided does not allow us to respond this question.

We hope we have resolved the queries raised by the reviewer so she can address this question in the appropriate context of the paper.

5. Are the discussion and conclusions well balanced and adequately supported by the data? In general, the discussion provides information on topics such as: gender, age patterns, level of education, the abandon of the program, the requirements to become a community health agent and work experience of actual agents. However, this information is not sufficient to provide a profile of community health agents. In addition we are also informed that there are 3 different types of health promoters: "curanderos", "parteros", and community promoters of health. Differences among these 3 groups are not clarified, neither their implications to future interventions.

We have reorganised the results section and now includes subheadings for each set of information: qualitative and quantitative. The reader will have the opportunity to understand commonalities and differences between community health workers, based on the information provided in the results sections.

The implications for future interventions is presented in the Discussion section of the paper.
Finally, although the gender component has been well discussed it is absent in the final results. The article is more descriptive than analytical.

Indeed, the article is a descriptive one and never claimed to be an in-depth analytical statistical piece. We would agree that when a subject has not been described before, more than an analytical piece you need a good description of the context. This article intends to provide so, maintaining room for future research questions—and interventions—from different health-related fields.

6. Do the title and abstract accurately convey has been found? The article does not provide a profile of community health agents: it provides some characteristics that differentiate three types of community health agents.

We used the word profile as synonym of characteristics/outline. We apologise if this wording created bigger expectations about the paper. We did check with the Oxford dictionary that profile was appropriate in this case, since this means: “1. an outline of something, especially a face, as seen from one side. 2 a short descriptive article about someone.”

7. Is the writing acceptable? The writing is acceptable.

Additional attention has been given to this area and the paper has gained from reviews and comments from native English speaker academics.

References
3. Miranda JJ. Culturally appropriate birth services within health facilities. *J Epidemiol Community Health* 2002;56(3):161a-
4. Miranda JJ, Nuñez H, Alca A. Traditional healers, still part of the community health systems in the Andes. *J Epidemiol Community Health* 2002;56(10):733-.