Author’s response to reviews

Title: Explaining patient delay in healthcare seeking and loss to diagnostic follow-up among patients with presumptive tuberculosis in Tanzania: A mixed-methods study

Authors:
Grace Mhalu (gmhalu@ihi.or.tz)
Mitchell G Weiss (mitchell-g.weiss@unibas.ch)
Jerry Hella (jhella@ihi.or.tz)
Francis Mhimbira (fmhimbira@ihi.or.tz)
Enos Mahongo (mahongoe@yahoo.com)
Christian Schindler (christian.schindler@swisstph.ch)
Klaus Reither (klaus.reither@swisstph.ch)
Lukas Fenner (lukas.fenner@ispm.unibe.ch)
Elisabeth Zemp (elisabeth.zemp@swisstph.ch)
Sonja Merten (sonja.merten@swisstph.ch)

Version: 1 Date: 16 Feb 2019

Author’s response to reviews:

RESPONSES TO THE EDITOR AND REVIEWERS

Re: BHSR-D-18-01505 “Explaining patient delay in healthcare seeking and loss to diagnostic follow-up among patients with presumptive tuberculosis in Tanzania”

Please note that in the manuscript changes are highlighted in yellow.

Reviewer #1

Comment 1: The article concerns explaining patient delay in healthcare seeking and loss to diagnostic follow-up among patients with presumptive tuberculosis in Tanzania. It reports findings of an important study aimed at exploring factors associated with patient delay and loss to diagnostic follow-up in the intervention study (TB-PHARM). The article is well written and
highlights important findings that are critical to address in TB control programmes and also adds to the body of scientific knowledge. I do not have any other specific comments.

Authors’ response: Thank you.

Reviewer #2

This study is an output from a larger trial done among TB suspects recruited from pharmacies. This study stands out among the other literature in this field of research being a mixed-methods design, and using prominence score get the information about patient-reported causes of symptoms and healthcare behavior. The writing and article structure and statistical analyses and presentation are very lucid and comprehensible.

Authors’ response: Thank you. The responses to the specific questions are provided below.

Comment 1: Title may indicate mixed methods design

Authors’ response: We revised the title to indicate a mixed-methods study

“Explaining patient delay in healthcare seeking and loss to diagnostic follow-up among patients with presumptive tuberculosis in Tanzania: A mixed-methods study” (p. 1 line 3-5).

Comment 2: Abstract and main paper lines (58-59 and 301-302) "Among the 50 (36.8%) non-LDFU, 26 (52.0%) had also delayed seeking care ". Let both numerators and denominator be given with % to clear how many out of how many so on.

Authors’ response: We re-wrote the paragraph of the abstract and of the result section for more clarity on the numerators and denominators.

“Among 136 interviewed patients, 86 (63.2%) were LDFU from pharmacies and TB clinic while 50 (36.8%) were non-LDFU. Out of 136 patients 88 (64.7%) delayed seeking care, of whom 59 (67%) were females. Among the 86 (63.2%) patients in LDFU group, 62 (72.1%) delayed seeking care, while among the 50 (36.8%) non-LDFU, 26 (52.0%) had also delayed” (p. 3 line 57-61).

“The study population includes 136 presumptive and confirmed TB patients of which 86 (63.2%) were LDFU from pharmacies and TB clinic and 50 (36.8%) were non-LDFU (confirmed or negative TB patients)” (p. 14 line 303-305).
Comment 3: Line 239 -258, All this information on variables operationalization may be written under variables itself

Authors’ response: We added a sub-heading to indicate analysis of PC (perceived causes) and HS (health seeking) variables. We also added a sub-heading to indicate analysis of delay and LDFU.

“Analysis of PC (perceived causes) and HS (health seeking) variables” (p. 11 line 246).

“Analysis of factors associated with delay and LDFU” (p. 12 line 269).

Comment 4: Add another limitation that all factors that could lead to patient delay or LDFU may be other factors not assessed in this study. Add a note on wider 95% CIs for some odds ratios.

Authors’ response: We added another limitation on small sample size and wider confidence intervals as well as other factors not assessed in this study.

“Due to the small sample, our analyses have provided few statistically significant results and our confidence intervals were wide for some odds ratios” (p.25, line 568-569).

“Finally, we cannot exclude that there may be further factors that could lead to patient delay or LDFU which were not assessed in this study” (p.25 line 577-578).

Comment 5 Authors may add the univariate results from appendix into the tables 4 and 5, usually univariate and multivariate are reported together to compare how the factors associated with outcome changed when multivariate was done.

Response: We included the univariate results into the main document.

“Table 4. Univariate analysis of factors associated with patient delay for presumptive and TB patients” (p.40 line 894-896).

“Table 6. Univariate analysis of factors associated with LDFU for presumptive and TB patients” (p.42 line 906-908).
Comment 6: Authors back up their numerical results with support from a qualitative component. Methods do not adequately explain how the data was collected for their results, though I read a section on analyses.

Authors’ response: Thank you. We used a mixed-methods approach in a semi-structured explanatory model interview catalogue (EMIC) according to Weiss et al Transcult Psychiatry 1997 and Weiss et al Anthropol Med. 2001. The method combines both quantitative and qualitative questions during data collection. Datasets generated from EMIC interviews include quantitative variables and qualitative prose which are cross-referenced during data analysis. Open questions were asked and subsequently, the narrative elaboration that was included as a qualitative component. We have explained in details of the instrument and this approach in the methods section of the manuscript.

“In a mixed-methods approach, we used a semi-structured explanatory model interview based on the framework of the explanatory model interview catalogue (EMIC) for cultural epidemiology to study patients’ illness explanatory models [22,23]. The interview and coding categories were adopted from an earlier EMIC interview developed and used in a WHO/TDR-supported multi-country study of gender and tuberculosis in India, Bangladesh, Malawi and Colombia [24)” (p.9 line 181-186).

“Open questions were asked first, and responses were coded according to coding options. Coding distinguished categories reported in spontaneous responses to open questions from categories reported only in response to probed categories, which had not been mentioned spontaneously. Narrative elaboration was included as a qualitative component of the data set” (p.9 line 188-193).

Comment 7: If they want to acknowledge this study as mixed methods study they should have separate sub heads under methods and results sections.

Authors’ response: According to Weiss et al Transcult Psychiatry 1997 and Weiss et al Taiwan J Psychiatry. 2017), the EMIC framework combines both the quantitative and qualitative prose in each section which are cross-referenced for analysis to clarify key features and answer important questions about illness experiences and practical implications. One among components of the EMIC interview is the opportunity for integrated and interactive analysis of the quantitative relationships among the explanatory model variables and qualitative textual data. We can therefore not separate the quantitative and qualitative sections in the methods and result section. We have explained the integrated approach to acquisition and analysis of quantitative and qualitative data in the mixed-methods design characteristic of cultural epidemiological studies. We have added a sentence to the overview of methods to explain that point and the rationale for integration with reference to methodological sources on which the study is based:
“We employed an integrated approach to a mixed-methods study design, which is a characteristic feature of cultural epidemiological studies that integrate acquisition and analysis of quantitative and qualitative data [19–21]” (p.7-8 line 155-158).