Peer Review Report

Review Report on The impact of the COVID-19 pandemic on tuberculosis case notification and treatment outcomes in Eswatini

Original Article, Int J Public Health

Reviewer: Marie Bismark Submitted on: 19 Aug 2022 Article DOI: 10.3389/ijph.2022.1605225

EVALUATION

Q1 Please summarize the main findings of the study.

This retrospective cohort study found that, during the COVID-19 pandemic, Eswatini experienced a reduction in TB case notifications and a worsening of TB patient outcomes.

Q 2 Please highlight the limitations and strengths.

The study is one of the first to describe the impact of the pandemic on TB diagnosis, treatment, and outcomes. The study used a large longitudinal dataset which included data from before and during the pandemic. The dataset included information on patient outcomes.

A limitation is that the study design was not able to distinguish between an actual reduction in TB case numbers due to public health restrictions, and a reduction in case finding due to health system limitations.

Q3 Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

I recommend the paper for publication.

The retrospective cohort design is an appropriate method and the statistical measures appear valid and correctly applied (though I am not a statistician). The study design is replicable. The findings have been appropriately interpreted.

The paper is clear and well-written and the findings are important for international TB efforts.

Minor suggestions:

1. In the contribution section, I suggest rewording to "solutions that will be standardised to local resources and needs" rather than "local weaknesses"

2. In the introduction I think it would be worth mentioning the role of healthcare workers who identify cases in the community and how this role was impacted by pandemic-related restrictions. This will then help set the scene for the discussion.

3. Line 35. I think "number of cases" should be "percentage" or "proportion of cases"

4. Line 48. I think the word "also" can be deleted

5. Line 131. You may wish to add an additional introductory sentence along the lines of "There are two possible explanations for the reduced number of case notifications during the pandemic. One possibility is that fewer TB cases were identified due to reduced case finding and community anxiety about seeking healthcare. Alternatively, there may have been an actual reduction in TB infections due to public health restrictions." And then discuss each of these explanations as you have done.

Overall, I think this paper makes an important contribution to the literature.

PLEASE COMMENT		
Q 4	Is the title appropriate, concise, attractive?	
Yes		
Q 5	Are the keywords appropriate?	
Yes		
Q 6	Is the English language of sufficient quality?	
Yes		
Q 7	Is the quality of the figures and tables satisfactory?	
Yes.		
Q 8	Does the reference list cover the relevant literat	ature adequately and in an unbiased manner?)
Yes		
QUALITY ASSESSMENT		
Q 9	Originality	
Q 10	Rigor	
Q 11	Significance to the field	
Q 12	Interest to a general audience	
Q 13	Quality of the writing	
Q 14	Overall scientific quality of the study	
REVISION LEVEL		
Q 15	Please make a recommendation based on your comments:	

Minor revisions.