Author's response to reviews

Title: Evaluating the effectiveness of a training program to build teachers' capacity to identify and appropriately refer middle and high school students with mental health problems in Brazil

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Version: 2  
Date: 24 October 2013

Author's response to reviews: see over
Author's covering letter for initial submission

Title: Evaluating the effectiveness of a training program to build teachers' capacity to identify and appropriately refer middle and high school students with mental health problems in Brazil

Authors:

Version: 1 Date: 22 October 2013

Comments: see over
DATE: October, 16th, 2013

To the Editors of BMC Public Health

Dear Editors,

Thank you for the opportunity of submitting a new manuscript to BMC Public Health (entitled “Evaluating the effectiveness of a training program to build teachers’ capacity to identify and appropriately refer middle and high school students with mental health problems in Brazil: an exploratory study”). An earlier version of this manuscript (MS: 1933261787860048) was previously submitted and revised by two reviewers.

We are grateful to the reviewers for the important comments and suggestions that have allowed us to improve the manuscript. This covering letter explains the revisions made, as requested by Dr. Larry Wissow and Dr. Dixon Chibanda.

Title page, Abstract, Competing Interest, Authors Contribution, Acknowledgments and References were included in the main manuscript file. Reference number 12 is not “in press” anymore since it was recently published (2013), therefore, it was updated in the new manuscript file.

Copies of all questionnaires used in the study were translated into English and provided as additional files, except the Youth Self-Report (YSR) due to copyright conditions (unauthorized reproduction of forms is forbidden by law). YSR forms can be ordered directly from the author’s online store (www.aseba.org). Also, a sample of the YSR form is available on the website.

We are sending the following electronic files:

- MAIN MANUSCRIPT FILE
- Three separate files for questionnaires
- Five separate files for tables

Please find below comments and suggestions from the two reviewers followed by the authors’ answers (answers in italic).

Thank you for your consideration of our paper.

Sincerely yours,

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REVIEWER'S REPORT 1

**Title:** Evaluating the effectiveness of a training program to build teachers' capacity of identifying and appropriately referring middle and high school students with mental health problems in Brazil: an exploratory study

**Version:** 2  **Date:** 17 February 2013

**Reviewer:** Larry Wissow

**Reviewer's report:**

This study addresses an important topic – schools play a major role in children’s emotional and social development, and it is very important for teachers to be able to identify youth with possible mental health issues and do what they can to help them get care (and avoid punitive responses, too). The paper does a nice job of orienting the reader to the Brazilian educational system, which helps with understanding. There are a few issues that perhaps could strengthen the paper if they were addressed:

**Here are some revisions that I think are "major":**

1. It is not clear how the six vignettes were developed. They vary in the extent to which they describe symptoms occurring at home of which the teacher would not be aware, and they vary in indication that the teacher has talked to a parent about problems at home. This raises two kinds of ambiguity. First, is this a test of teachers’ general knowledge of mental health problems, in which case the home-based symptoms are appropriate, or is it a test of what they recognize in school, in which case the home-based symptoms might be things of which they are unaware. Second, does one assume in Brazilian schools that parents and teachers communicate about these sorts of things?

   The six vignettes were developed by a scientific committee including psychiatrists and psychologists that prioritized behaviors present in the school environment that could be identified by teachers. The authors intended to not only test teachers’ general knowledge of mental health problems but also test their ability to recognize any deviant behaviors at school. However, the authors recognize that they may have created conditions for ambiguity. Therefore, they recognize the need to improve and standardize the vignettes for the next pilot study, including more details of behaviors noticeable in the school environment. In Brazil, as in other countries, parents and teachers commonly do not communicate about these sorts of things.

2. It is also not clear how these vignettes were linked to identification of actual students who had similar symptoms. It is noted that parents and students gave informed consent, but we are not told how the investigators got from teacher responses to vignettes to actual names to contacting identified students and controls.

   This was an exploratory, descriptive survey that included two investigations. The vignettes were not linked to the identification of actual students since the two investigations were independent, although a source of complementary information about teachers’ knowledge before training. The vignettes were part of the first investigation, being presented to participants before and after the training.
In the case-control study, teachers were required (before training) to make a list with the names of their actual students who in their opinion were in need of a mental health evaluation due to problematic behavior in the classroom. Students included in these lists were considered cases. The control group included students from the same grade, gender, and age randomly selected from the remaining group of students out of teachers’ lists.

This more detailed information was added to the new manuscript.

3. There may be a potential ethical issue, too, depending on what students were told in the consent process. The fact that they were tested in a group could be seen as a breach of confidentiality.

All students from fifth grade to the last year of high school were told that they would be randomly selected to complete a questionnaire about adolescent mental health, and that after their consent and their parent’s consent this questionnaire would be applied in groups. Students selected to participate in the study were divided in mixed groups (cases and controls) and taken to specific school rooms where they were asked to complete the questionnaire (self-report). Participants did not know that the study was classifying them in cases and controls, and also, they were not aware that teachers were making lists for identifying cases.

This more detailed information was added to the new manuscript.

Here some I think are "minor" but essential:

1. The authors might comment on why they did not include anxiety or post-traumatic symptoms among the vignettes since at least in other parts of the world these would be among the more common conditions encountered.

We completely agree with the reviewer that anxiety should have been included in the vignettes, since any anxiety disorder is one of the most frequent groups of child/adolescent disorders in the Brazilian general population (5.2%) [25]. The lack of a vignette describing an adolescent with anxiety has now been included in the section “limitations of the study”.

As additional information, the current study was part of a broader project with specific interest in high risk for psychosis, manic episodes and comorbid depression. Since we could not eliminate vignettes on high risk for psychosis and mania (less frequent in the general population), we were cautious about increasing the total number of vignettes by adding vignettes on different types of anxiety disorders.

Also, according to the same prevalence study, PTSD is rare (0.1%) in Brazilian children/adolescents.

We added a reference for this prevalence study:

2. Despite a relatively basic approach to assessing the impact of the training (pre-post tests using the exact same measure) it seems striking that there was not universal improvement on the post-test (Table 5). Of missed items on the first test, only about 60% were correct on the second. Thus there is some concern that the training was not as effective as it might have seemed.
We completely agree that the non-universal improvement on the post-test is a sign of the need to improve the intervention. We also think that what we learned in this pilot study will help us improve the strategy applied, in order to test it again in a second pilot study. These considerations were included in the manuscript conclusion regarding the partial effectiveness of the study and the need to take into account the issues raised by teachers in their qualitative evaluation of the training when developing an improved model to be tested in a second pilot study.

Discretionary: The paper might have more impact if it focused on the case-control portion of the study (if it can be explained clearly and seems ethically sound after explanation). It might then suggest the kinds of the training that would be most useful. The idea youth with predominantly internalizing symptoms are hard to identify is not new but very important to point out in a setting where there is to be a new focus on detection and referral.

**Level of interest:** An article whose findings are important to those with closely related research interests

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

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
No competing interests

**REVIEWER'S REPORT 2**

**Title:** Evaluating the effectiveness of a training program to build teachers' capacity of identifying and appropriately referring middle and high school students with mental health problems in Brazil: an exploratory study

**Version:** 2  **Date:** 10 May 2013

**Reviewer:** Dixon Chibanda

**Reviewer's report:**

**Major Compulsory Revisions**

Although this is an important area particularly in LMIC it seems the authors' attempt to address broad mental health problems as a general subject is rather ambitious. While the use of teachers is a noble idea in view of the huge treatment gap for mental, neurological & substance use disorders the assumption that teachers can screen for a wide range of conditions is erroneous. May be more helpful to focus on or two priority conditions such as depression and/or ADHD. They should clearly define what "mental health problems" means. They should be consistent in the use of terms e.g. "psychopathological conditions" is used interchangeably with "mental health problems". The term "common mental disorders" may be more appropriate.
The authors would like to clarify that the study did not expect teachers to screen for a wide range of conditions. As now clarified in the manuscript, teachers were not required to identify specific psychopathological conditions but only the need for mental health evaluation due to the possible presence of any mental health problems. In addition, we have made corrections in the abstract and text, using new terms such as “some mental health problems”, “deviant behavior”, and “possible mental health problems”.

This study is about evaluating the effectiveness of a training program to build teachers' capacity... the training program should be defined more so that others wanting to use it can do so, or they should reference the detailed training manual used.

We added the following information in the section for teacher training strategy description: “The material used in the training is available in Portuguese at the Federal University of São Paulo upon request to the corresponding author of this manuscript”

The authors used the Brazilian version of the YSR screening tool. They should provide the sensitivity, specificity...of this tool. A gold standard should be included as way of validating the teachers ability to accurately screen.

We added the following information in the section “Instruments and procedures – 2. Case-control study description”: “Preliminary validity data regarding the YSR showed its discriminative capacity of distinguishing between youth referred to mental health services and youth from the general population in Brazil” [13].

We also added the respective reference for this statement:

Minor essential revisions

They should either use british or american english not both. There grammatical errors that need to be corrected.

The manuscript was revised and corrected by an English native speaking professional reviewer.

What are the inclusion criteria for both teachers and students?

The inclusion criteria for teachers were clarified in the section “Teacher and student samples – 1. Teachers’ training”. This section now includes the phrase: “Taking into account the Brazilian educational system of school grades and the requirement of compulsory attendance to collective pedagogical work meetings for teachers having a work load above 12 classes per week, the study inclusion criteria for teachers included teaching in middle school (fifth-to-eighth grades) and/or in at least one of the three high school grades, and compulsory attendance at collective pedagogical work meetings”.

The inclusion criteria for students were clarified in the section “Teacher and student samples – 2. Case-control study”., This section now includes the phrase: “The inclusion criteria for students to enter the case-control study included being aged between 11 and 17 years, and being enrolled in a grade between fifth grade and the last year of high school”.
Table 1 should be stratified by gender.

*Table 1 was modified, and now, it is stratified by gender.*

**Level of interest:** An article of limited interest

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**
No competing interests.