PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	A survey of TB knowledge among medical students in Southwest China: Is the information reaching the target?
AUTHORS	Li, Ying; Zhao, Ying; Ehiri, John; Li, Daikun; Luo, Xinglun

VERSION 1 - REVIEW

REVIEWER	Theolis Barbosa Research Technologist in Public Health Centro de Pesquisas Goncalo Moniz Fundacao Oswaldo Cruz - Brazil The reviewer declares to be co-author of reference 28.
REVIEW RETURNED	22-Jul-2013

THE STUDY	1. This manuscript should be submitted to English language review by a native speaker or a manuscript editing service. 2. Please clarify which models were used to provide the multiple logistic regression analyses results shown, the method that was used for their selection, and how interaction was accounted for in the models chosen. 3. The text of the results section repeats excessively the information that is explicit in the tables and figures. 4. On page 9, lines 41-47 the authors state that "[…]we calculated the percentage of people who provided correct responses to questions about the 5 core knowledge of TB, 6 symptoms of TB, 2 ways of transmitting TB, 4 items of the free TB treatment policy in China, and 5 contents of DOTS". In Table 2, "Knowledge about TB symptoms, transmission and treatment among undergraduates in medical university in Southwest China" it is possible to recognize the frequencies of correct answers to 6 variables assessed to provide information regarding the knowledge about TB symptoms, but 3 variables were listed for the assessment of TB transmission in Table 2, and a third category "Knowledge on TB treatment" is assessed based on 5 variables which cover 1) whether or not TB is curable; 2) TB treatment policy in China and 3) assessment of familiarity with DOTS strategy. Please adjust the text to clarify which outcomes were assessed and which variables were assessed for each outcome. 5. Please clarify what the authors mean by "known of transmission" on Table 2.
RESULTS & CONCLUSIONS	1. In Table 2, it is not possible to understand what the asterisk refers to. 2. On page 10, line 44 the authors state that "Third-year students had better knowledge of TB symptoms ($p \leq 0.05$)". Please provide the percentages of overall knowledge of TB symptoms per number of study years.

	3. On page 11, lines 34-39 the authors state that “Overall, third-year students had better knowledge of TB treatment except for knowledge on TB control facilities”. However, on Table 2 the percentage of students that had knowledge of the TB free [treatment] policy was highest for 1st year students (39.5, compared to 31.1 and 31.9 for 2nd and 3rd year students respectively). 4. On figure 5, the graph displays eight bars corresponding to categories of information sources used to gain knowledge of TB, but the legend identifies only six categories. In this figure, which category(ies) correspond to the education strategies used within the government school TB health education program? 5. Reference 28 did not evaluate medical students’ knowledge of TB transmission. It evaluated knowledge of biosafety norms regarding work in health care settings where TB patients are assisted. The students had good knowledge of biosafety norms, yet they did not comply with them, engaging in risky behavior as pointed by the authors. 6. Sentence on page 14, lines 36-42 is incomplete (“Evidence shows that this has contributed to marked improvement in TB knowledge among students throughout the.”)
REPORTING & ETHICS	No checklist was provided

REVIEWER	Eleny Guimaraães Teixeira Gama Filho University- Brazil There are no competing interests.
REVIEW RETURNED	22-Jul-2013

THE STUDY	This is a relevant issue, mainly considering the China incidence of TB. Nerevtheless, there are many questions as some I describe below: This is a relevant issue, mainly considering the China incidence of TB. Nevertheless, there are many questions describe below: 1) In "METHODS" it must be necessary a clear term definition for all used criteria as pre-clinical and clinical medicine, "major", TB knowledge, as well for many others. 2) Details about logistic regression used to conclude the associated factors in the univariate analyses 3) In "RESULTS" there are inconsistency about the number of firts, second and third years of medical training as compared with the Table 1
REPORTING & ETHICS	Wich ethical commitee aproved this study (name, date and number)

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

1. This manuscript should be submitted to English language review by a native speaker or a manuscript editing service.
---Many thanks. The manuscript has been thoroughly reviewed for grammar and presentation by an academic, native English speaker.
2. Please clarify which models were used to provide the multiple logistic regression analyses results shown, the method that was used for their selection, and how interaction was accounted for in the models chosen.
---A binary logistic regression model which included variables with statistical significance identified by

the χ2 test, were used to examine factors associated with core knowledge of TB among the respondents (see page 10).
3. The text of the results section repeats excessively the information that is explicit in the tables and figures.
---This section of the manuscript has been reviewed in the light of this comment and revised to eliminate repetition in the text, of information contained in the tables..

4. On page 9, lines 41-47 the authors state that "[…]we calculated the percentage of people who provided correct responses to questions about the 5 core knowledge of TB, 6 symptoms of TB, 2 ways of transmitting TB, 4 items of the free TB treatment policy in China, and 5 contents of DOTS". In Table 2, "Knowledge about TB symptoms, transmission and treatment among undergraduates in medical university in Southwest China" it is possible to reorganize the frequencies of correct answers to 6 variables assessed to provide information regarding the knowledge about TB symptoms. , but 3 variables were listed for the assessment of TB transmission in Table 2, and a third category "Knowledge on TB treatment" is assessed based on 5 variables which cover 1) whether or not TB is curable; 2) TB treatment policy in China and 3) assessment of familiarity with DOTS strategy. Please adjust the text to clarify which outcomes were assessed and which variables were assessed for each outcome.
---We appreciate the reviewer for this observation. We have clarified this statement in our revised manuscript as follows: "we calculated the percentage of people who provided correct responses to questions about the 6 symptoms of TB, 3 means of TB transmission, 5 items related to TB treatment,5 core knowledge of TB"(page 9).

5. Please clarify what the authors mean by "known of transmission" on Table 2.
--- We want to express the meaning that students had knowledge : TB is one infectious disease. The wordings for information on Table 2 have been completely revised for clarity in the revised version.

1. In Table 2, it is not possible to understand what the asterisk refers to.
---This has been modified for clarity. We now have two distinct symbols, Asterisk refers to statistically significant results ($p<0.05$) , and the other one (□) at the end of title of this table refers to χ2 chi-square tests comparing results between males and females, different years in medical school, and different degree majors.

2. On page 10, line 44 the authors state that "Third-year students had better knowledge of TB symptoms ($p\leq0.05$)". Please provide the percentages of overall knowledge of TB symptoms per number of study years.
---Many thanks for your good suggestion. We have provided number and percentages in the text as you suggested (see pages10).

3. On page 11, lines 34-39 the authors state that "Overall, third-year students had better knowledge of TB treatment except for knowledge on TB control facilities". However, on Table 2, the percentage of students that had knowledge of the TB free [treatment] policy was highest for 1st year students (39.5, compared to 31.1 and 31.9 for 2nd and 3rd year students respectively).
---We thank the reviewer for this important observation. This has been corrected in the manuscript (see page 11).

4. On figure 5, the graph displays eight bars corresponding to categories of information sources used to gain knowledge of TB, but the legend identifies only six categories. In this figure, which category(ies) correspond to the education strategies used within the government school TB health education program?
---Again, we thank the reviewer for this important observation. We have modified the figure which should have 8 categories. The government's school TB health education program typically involve the

use of public media (newspapers and billboards), lecture or debate. However, the students did not report lecture or debate.

5. Reference 28 did not evaluate medical students' knowledge of TB transmission. It evaluated knowledge of biosafety norms regarding work in health care settings where TB patients are assisted. The students had good knowledge of biosafety norms, yet they did not comply with them, engaging in risky behavior as pointed by the authors.

---We thank the reviewer for this valuable observation. Accordingly, we have modified our reference to this citation as follows: "One study in Brazil found that although medical students had had good knowledge of biosafety norms, they engaged in risky behaviors in health care settings where TB patients were assisted"(see page13).

6. Sentence on page 14, lines 36-42 is incomplete ("Evidence shows that this has contributed to marked improvement in TB knowledge among students throughout the.")

---We appreciate the reviewer for this observation. We completed this sentence in the revised manuscript as follows: "Evidence shows that this has contributed to marked improvement in TB knowledge among students throughout the country." (see page14).

Reviewer 2

Reviewer: There are no competing interests.
Eleny Guimaraães Teixeira
Gama Filho University- Brazil

This is a relevant issue, mainly considering the China incidence of TB.
Nevertheless, there are many questions describe below:

1) In "METHODS" it must be necessary a clear term definition for all used criteria as pre-clinical and clinical medicine, "major", TB knowledge, as well for many others.
---We thank the reviewer for this observation. We have added definitions of criteria used in the manuscript, including pre-clinical students, degree major, and TB knowledge (see page 9).

2) Details about logistic regression used to conclude the associated factors in the univariate analyses
---As noted in our response to reviewer # 1, A binary logistic regression model which included variables with statistical significance identified by the $\chi 2$ test, were used to examine factors associated with core knowledge of TB among the respondents.In addition, chi-square statistics ($\chi 2$) were used as univariate analyses to select the potential factors associated with core knowledge of TB among the respondents. Variables with statistical significance identified by the $\chi 2$ test were included in a binary logistic regression model. (see page 9-10).

3) In "RESULTS" there are inconsistencies about the number of first, second and third years of medical training as compared with the Table 1
---We thank the reviewer for this observation. We have corrected these errors in the revised manuscript (see page 10).

4) Which ethical committee approved this study (name, date and number).

---Approval for the study was obtained from the Institutional Review Boards of the College of Preventive Medicine, Third Military Medical University, Chongqing, China (October, 20, 2011) and the School of Nursing, Chengdu University of Traditional Chinese Medicine, Chengdu, Sichuan Province,

China (28 April, 2012). This information has been included in the methods section of the manuscript (see page8- 9).

VERSION 2 – REVIEW

REVIEWER	Theolis Costa Barbosa Bessa Research Technologist in Public Health Fundacao Oswaldo Cruz, Bahia, Brazil
REVIEW RETURNED	11-Aug-2013

GENERAL COMMENTS	1. On page 6, line 54: please clarify the statement “In 1998, WHO released a document in 1997 following a workshop on Tuberculosis Control and Medical Schools held in Rome, Italy (…)”. 2. On page 10, line 44: please clarify the statement “As for overall knowledge of TB symptoms, 10.8% (119) male and female3.4% (13) year had knowledge of all of these classic symptoms(p≤0.05), 13.6% (84), 4.3 % (17), 6.6% (31) students of third-year, second year and first-year had knowledge of all of these classic symptoms (p≤0.05).”

VERSION 2 – AUTHOR RESPONSE

1. On page 6, line 54: please clarify the statement “In 1998, WHO released a document in 1997 following a workshop on Tuberculosis Control and Medical Schools held in Rome, Italy (…)”.
---Thanks for your observation of this error. We clarified this sentence in our revised manuscript as follows: “In 1997, WHO released a document following a workshop on Tuberculosis Control and Medical Schools held in Rome, Italy, which stressed the importance of graduating medical students with proper knowledge and skills related to effective TB control.”

2. On page 10, line 44: please clarify the statement “As for overall knowledge of TB symptoms, 10.8% (119) male and female3.4% (13) year had knowledge of all of these classic symptoms(p≤0.05), 13.6% (84), 4.3 % (17), 6.6% (31) students of third-year, second year and first-year had knowledge of all of these classic symptoms (p≤0.05).”
---Thanks for your observation of this error again. We clarified this sentence in our revised manuscript as follows: “As for overall knowledge of TB symptoms, 10.8% (n=119) of males and 3.4% (n=13) of female 3.4% (13) year had knowledge of all of these classic symptoms of TB (p≤0.05),). Slightly more than thirteen per cent (; 13.6%; n= (84) of students in the third year of medical school, , 4.3 % (17), 6.6% (31) students of third-year, 4.3 % (n=17) of those in the second year, , second year and 6.6% (n=31) of first-year students had knowledge of all of these classic symptoms (p≤0.05).