Peer Review Report

Review Report on Knowledge of Medical Education on Maternal and Child Primary-care among Physicians: A cross-sectional study Running head: Knowledge of medical education on maternal & child care

Original Article, Int J Public Health

Reviewer: TEGBAR SENDEKIE Submitted on: 24 Mar 2024

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EVALUATION

Q 1 Please summarize the main findings of the study.

The study assessed pre-training knowledge of primary physicians working in commune health stations in three mountainous regions of north Vietnam and found substantial gaps in maternal and child healthcare knowledge. The knowledge gap was more pronounced in child than pregnancy healthcare. Male, older and more experienced physicians had lower knowledge score.

Q 2 Please highlight the limitations and strengths.

The study revealed practice relevant knowledge gaps in MCH among physicians in rural and remote regions. However, the validity and reliability of the findings may be suspect. Firstly, it is not clear if and how the questionnaire was validated. I question the clarity of the questions and instructions. Who and how were the questions prepared? From the supplementary table, at least in two instances (dehydration management, and child illness danger signs), multiple answers were possible. However, in the methods section, the authors stated that there was only one single best answer. I also did not see explanations about the validity and reliability of the questionnaire including reliability coefficients. The fact that study participants were required to complete the 40+ questions in 15 minutes might have also put unnecessary pressure and affected their performance.

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.

The authors studied an important topic- continuing medical education- for primary care physicians in rural and remote locations. However, the report is about needs for continuing education, instead of a continuing education intervention.

Major comments: I have a couple of major comments. Firstly, the manuscript would be stronger and of greater interest to the scientific community if the authors reported on effectiveness of the CME interventions. Have the authors conducted post-training assessment? If yes, they should report change in knowledge by comparing post and pre-test performance. If not, they should explain why they did not. Effectiveness of CME has a greater programmatic and research importance than report of pre-intervention knowledge level. Secondly, why did the authors focus on MCH while the pre-course assessment covered medical emergencies and non-communicable diseases as well?

I have summarized section by section comments below.

Title: Suggest revising the title to reflect the objective and content of the manuscript. The title does not go with the content of the manuscript. The manuscript describes pre-training knowledge of primary care physicians and as such describes CME needs instead of CME.

Abstract: It is balanced and well-written.

Introduction: Well-written including the background, rationale and objective.

Methods: It is not clear if and how the questionnaire was validated. I have doubts about the clarity of the questions and instructions. I would like to see the full original questionnaire. For example, from the supplementary table, at least in two instances (dehydration management, and child illness danger signs), multiple answers were possible. However, in the methods section, the authors stated that there was only one single best answer. The authors should provide evidence of validity and reliability. I did not see explanations about the validity and reliability of the questionnaire including reliability coefficients. The fact that study participants were required to complete the 40+ questions in 15 minutes might have also put unnecessary pressure and affected their performance. Furthermore, it is not clear if the authors asked about prior training. Knowing whether and when participants received training would help inform the need and type of CME interventions. Another question, was the CME a knowledge only intervention or had a clinical practice component? If it had a clinical practice component, I wonder if the authors assessed clinical skills as well. If not, it should be acknowledged as a limitation. There was no commentary about sample size or how the study participants were selected from the population of primary care physicians in the three provinces. On a positive note, the authors conducted appropriate statistical analyses to answer the study objective.

Results: The results are presented clearly and in a logical order, using appropriate statistics and tables. Discussion: The discussion is well-written. The authors interpreted the key findings, compared them with other studies and commented on implications.

Conclusions: The conclusions are based on the findings.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

As indicated in the previous section the title does not provide accurate representation of the study objective and content. The study identified gaps in pre-training knowledge but the title seems to present a CME program.

Q 5 Are the keywords appropriate?

Continuing medical education is a stretch. Unless the authors rewrite the manuscript including post training knowledge improvement, I would replace "continuing medical education" with "knowledge".

Q 6 Is the English language of sufficient quality?

The quality of English language is of good quality.

Q 7 Is the quality of the figures and tables satisfactory?

Yes.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)

The references are okay but I would encourage the authors to expand the peer reviewed articles on knowledge of primary care physicians.

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 y	our comments:						

Major revisions.