Author's response to reviews

Title: Medication Safety Curriculum: Enhancing Skills and Changing Behaviors

Authors:

Kelly Karpa (kjd136@psu.edu)
Lindsay Hom (lindsaylea9@gmail.com)
Paul Huffman (huffmanpaulg@gmail.com)
Erik Lehman (elehman@phs.psu.edu)
Paul Haidet (phaidet@hmc.psu.edu)
Shou Ling Leong (sleong@hmc.psu.edu)

Version: 3
Date: 20 June 2015

Author's response to reviews: see over
Response To Reviewers’ Comments:

Dear Editor and Reviewers of BMC Medical Education,

Thank you for the opportunity to have such a thorough review of our manuscript. We believe the comments and suggestions that we received have strengthened our manuscript. We are especially encouraged by Reviewer #2’s comment that this is an article of outstanding merit and of interest in the field, as well as her enthusiasm about using our manuscript in her quality improvement class!

We have addressed each one of the reviewer’s comments and outlined our modifications below.

**Reviewer 1:** In response to reviewer # 1, the manuscript was proof-read again and a few misspellings have been corrected. This reviewer suggested that we could strengthen the conclusion by including a summary of student outcomes post-course. To date, we have not collected any data in this regard. We mention this as a potential future direction.

**Reviewer 2:**

In the background section, we spelled out United States. The AAMC report is correctly cited as Report X (e.g. “Report Ten” – the AAMC uses X as a Roman numeral).

In the methods section, I described that the control students were the same as students enrolled in the course; specifically, it is mentioned that the control group of students had a desire to participate in the course, but were unable to overcome the scheduling issues necessary with their required clerkships to make it work.

In response to Reviewer #2’s concerns about statistical analysis and results, we consulted with the chairman of biostatistics at our college of medicine campus. He assisted us in changing the analysis method to the Wilcoxon Rank sum (also known as Mann-Whitney U) test for our ordinal data analyses and employed a Bonferroni correction where applicable. Furthermore, we removed phrases that “suggested” statistical significance when p-values were close to p=0.05.

The abbreviations were spelled out in the tables or table legends, as suggested.

**Reviewer 3:** The discussion section has been re-written and we have emphasized reasons why we think the curriculum was effective.

Regarding the question about scale of Figure 2, the vertical bar went to 7 because we needed to account for the standard deviation bars. At the suggestion of Dr. Chinchilli (chairman of our biostatistics department), we have chosen to display this data as a box-and-whisker plot instead of a graph as we had done initially.

The students entering the course do not necessarily know a priori that there is an emphasis on medication management. In fact, the data we have reported in the current manuscript represents data collected during the first 2 years that the course was offered when students would not have known what to expect; therefore, it is unlikely that any student chose to participate in this elective because of a
particular interest in medication safety. Thus, we do not believe that this manuscript represents data from a special group of students that have an interest in medication management. Instead, medication management is just one small component of the curriculum. The bulk of curricular time is actually in the clinic – caring for a small panel of patients longitudinally. The personal and longitudinal relationships that students form with one preceptor and their small panel of patients is the reason that students enroll in this elective.

The question regarding medication reconciliation has been addressed in the discussion. While undoubtedly, pharmacists are ideally suited to perform medication reconciliation and certainly there are hospitals where this is the norm, most often pharmacists are not involved in medication reconciliation at hospitals and academic medical centers in the USA – purely from a cost perspective (e.g. pharmacists in the USA cannot bill payers for performing cognitive functions, only dispensing activities). Until payment reform occurs, this task will likely continue to fall primarily on nursing staff members or medical trainees.