Reviewer’s report

Title: Medication Safety Curriculum: Enhancing Skills and Changing Behaviors

Version: 2

Date: 17 March 2015

Reviewer: Terri Warholak

Reviewer’s report:

Compulsory Revisions

Statistics

- It is mentioned that means and standard deviations were used for continuous variables – but means were also done for ability and confidence questions (which use Likert scaled responses and are therefore ordinal). The uneven intervals between the categories have been shown in many studies. Therefore, I recommend doing one of the following:
  - Change this part of the analysis and use tests specifically for ordinal data (Mann-Whitney U); or
  - Perform psychometric analysis (Item Response Theory or Rasch analysis) to assess scale functioning. If the intervals really are equal (occasionally they are – but usually not) then you can just mention what you found.

- What is your alpha level? Please mention it here.

- This brings me to another point – I think you should employ an alpha correction for multiple tests (perhaps a Bonferroni correction).

Results

- It is common practice to not indicate that there is a difference from pre to post unless the difference is statistically significant. Therefore, verbiage like “Trends suggest that students enrolled in the course reported a heightened ability to evaluate medication appropriateness … (p=0.051)” should be changed to indicate clearly there is no difference. There are several more statements like this in the manuscript that need altered.

Minor Essential Revisions

Table 2

- Spell out the following – or put them in the Table key so that the Table can stand alone:
  - PCMH
  - OB/GYN

- Add percent to each cell in Table

Table 3
• Spell out the following – or put them in the Table key so that the Table can stand alone:
  o MR
  o PTA

• Again – I do not think means are appropriate and that an alpha correction should be employed.

Table 4
• Spell out the following – or put them in the Table key so that the Table can stand alone:
  o HCTZ
  o EHR (and in one place it says HER). #

Figure 1 and 2
• Spell out the following – or put them in the Table key so that the Table can stand alone:
  o MR

• For Figure 2 – add a label for the y axis

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

No