Title: The effectiveness of web-based and face-to-face continuing education methods on nurses' knowledge about AIDS: A comparative study

Authors:

   Alireza Khatony (akhatony@gmail.com)
   Nahid Dehghan Nayery (Dehghann@sina.tums.ac.ir)
   Fazlolaah Ahmadi (Ahmadif@modares.ac.ir)
   Hamid Haghani (Hagh511@irms.ac.ir)
   Katri Vehvilainen-Julkunen (Katri.VehvilainenJulkunen@uku.fi)

Version: 3 Date: 31 March 2009

Author's response to reviews: see over
The effectiveness of web-based and face-to-face continuing education methods on nurses' knowledge about AIDS: A comparative study

Dear respected Editors and reviewers,
I would like to express my special gratitude to you for having excellent comments on my paper. I tried to revise the paper based on your comments and to address all of them here in a point-by-point style. The revisions are also highlighted in blue in the main document.
Reviewer: Greg Ryan

ABSTRACT
1. Methods section, 3rd sentence – “one day lecture course” contradicts later statements about it being a 3-hour lecture. It was corrected and is highlighted in blue in the Abstract (page 2)

2. BACKGROUND SECTION:
- 2nd para, 3rd and 4th sentences – “…face-to-face teaching methods often encourage passive learning…For these reasons….” This is a considerable generalization to make, especially when substantiated by just two references that are almost ten years old. The authors do raise an important idea here though which needs to be addressed more systematically throughout the paper – namely, that a well-designed continuing education program that is based on sound educational principles can result in quality learning experiences and outcomes. Whether online or face-to-face, it is the quality of the design and delivery that is the key to effective learning, regardless of the mode of presentation. There needs to be more discussion of educational principles underlying good design, throughout the paper.
I tried to provide more detailed information and more discussion about this topic. I also, provide some more information about web-based as well as face-to-face education in Iran with citing newer references. (Page 4 and page 5)

3. - Sentence 5, same para – “As a result……changing or complementing face-to-face methods.” In what way/s? The reference cited here is also somewhat old.
The next paragraph was attached to this paragraph and some additional information was also provided for better description of the problem (Page 5)

4.- 5th para, 1st sentence – “Although many web-based programs have been developed in recent years….” Where? About what? By whom? For which target groups?
Needed information was added. (Page 6)

5. - Same para, next sentence – “Thus, little knowledge exists concerning web-based education outcomes….” Do the authors refer here to web-based education in general (which would be a false
claim) or is this meant to refer specifically to AIDS education for nurses? Clarification is needed.
We meant about continuing education in our country, Iran. It was revised in the text (page 6)

METHODS SECTION:
6. Sample and data collection – how was random selection obtained, and how did this process relate to the “inclusion criteria”? What is meant by the “blocking random allocation method? How was “having the necessary skills” ascertained?
How was reliability of the knowledge questionnaire obtained? What statistical test was used?
We use a systematic random sampling method for this study. Based on our sampling method, we selected the eligible subjects i.e. those subjects who had the inclusion criteria. To ensure equal number of subjects in each group, we used the blocking random allocation method for random assignment. We ask the participants to self-report their skills about using computer and Internet. All of this information in addition to the information about obtaining reliability of the knowledge questionnaire were provided in the text in blue color. (Page 7 and 8)

7. The focus of the study is the two different modes of delivery. The authors have provided detail of the similarities in content, but how did the pedagogy of the two conditions compare? More detail is needed (see earlier comments about educational design).
Detailed information about each method’s pedagogy was provided. (Page 9, 10 and 11)

8. Were course resources available to both groups – eg course readings?
The course resources were also not available for the groups. I tried to clarify this issue in the main document (Page 9 and 10)

9. How did the interactivity occur with the face-to-face group – eg the same interactive questions about an HIV patient that were used in the self-study text?
The participants in face-to-face group were able to ask their emerging questions and to participate in emerging discussions and to make their class notes. Hence, the interactivity for the face-to-face group was also ensured (Page 10).

10. What was the role of the ‘teacher’ in both conditions?
The role of the teacher in web-based group was explained in Page 10 and in face-to-face group in page 11.

11. Was the post-test ‘open-book’ – i.e. did the face-to-face group have access to their class notes, and did the online group have access to the online program during the post test? The post test was not open-book. This has been also addressed in Page 11 in the last paragraph before the data analysis section.

12. What was the expected time commitment for the online participants? The expected time commitment for the answering to the knowledge questionnaire for web-based participants was 30 minutes. This is highlighted in the limitation section. (Page 15)

13. What was covered in the 1-day workshop about online programs – how did this relate to the activities in the online AIDS program? The required information are available in Page 9.

14. What is the influence of the following factors on the study conclusions:
- same instrument used for pre and post-test
- test-retest within 3 hours for face-to-face group versus one week for web group
These factors were inevitable limitations of the study which were discussed in the limitation section (Page 15 and 16)

RESULTS SECTION:
15. How was data collected regarding the self-report of hours to complete the online course? We included two questions in the post-test questionnaire which were as follows: "how many hours did it take you to complete the online course?” and "which educational method do you prefer for future continuing education programs, traditional face-to-face method or web-based one?” How was the question worded in both groups, that led to the findings regarding taking part in more continuing education using the same method? These information are provided in page 10.

DISCUSSION SECTION:
16. There are additional limitations in the study that should be acknowledged – see relevant earlier questions by reviewer. They were all acknowledged in the limitation section
Minor Essential Revisions

ABSTRACT
17. Conclusions section – this is a logical leap and needs to be more consistent with the conclusion section of the main body of the paper
It was revised in the Abstract section (Page 3)

MAIN BODY OF PAPER
18. The grammatical errors were corrected as suggested by the respected reviewer.

METHODS SECTION

RESULTS SECTION
19. 1st para, 3rd sentence – what are “internal wards”?
By internal wards we meant internal medicine (vs. surgical) wards such as oncology, hematology etc. (page 12)

20. Last sentence in this section – how was this question asked?
It was asked in a format that discussed above which is also available both in page 10 and 14.

Thank you for your valuable comments.
Sincerely

Reviewer: Vernon Curran
Please go to the following pages
Reviewer: Vernon Curran

1. Why are the authors calling this quasi-experimental when they had random assignment? Would this not be a true experimental design? Although we had random assignment but we could not strictly control some of the intervening variables. As such, we name this study a quasi-experimental study.

2. Further information on instructional design of each format would be useful, e.g. types of technology used for the web-based format and further description of the learning activities.
Further information on instructional design of each format was provided and is available in page 9, 10 and 11.

3. What types of questions were used on the assessment? MCQs? T/F?
We used multiple choice questions. We addressed this fact at the end of page 7.

Tables 2, 4 and 5 are not necessary but could simply be discussed in the text.
These tables were deleted and included in the text.

Thank you very much for your valuable information.
Sincerely