Author's response to reviews

Title: How good is our Undergraduate Musculoskeletal Education? Evaluating a Curriculum

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Author's response to reviews: see over
Dear Editors;

Thank you to the reviewers for their consideration and remarks.

I have addressed all remarks provided by Reviewer 2 (please see below) and have made corresponding changes in the document as outlined in your email dated September 16, 2010.

This work was a qualitative study reviewing musculoskeletal education at a Canadian medical school. My colleagues and I found the case-study approach a robust methodology for analyzing a complex subject (the undergraduate MSK curriculum) that we felt would be valued by your readers.

There was one comment from Reviewer 2 that I wish to address. The reviewer felt that the paper needed to be shortened, and after careful thought, I have not done so. As outlined by Devers and Frankel[1], a major challenge with publishing qualitative research is the length needed to provide robust and structured methodology and results. I can confirm to the editors that this manuscript has been reviewed by at least 6 peers at our institution, and I have strived to limit the word count. I feel that further limitations would risk losing of the depth and richness of the information presented. As it stands, the total word count for the manuscript is 3,346.

Please do not hesitate to contact me at anytime if you have any questions.

Sincerely;

Marcia Clark
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Reviewer 1 comments:
No revisions needed.

Reviewer 2 comments:

1) Course construction with constructive alignment should be discussed (J Biggs et al).

This framework has been reviewed and is placed in the discussion on page 17 of the manuscript.

2) Limitations of the Kern framework should also be discussed.

I am unaware of any major limitations to the Kern Framework. This framework has undergone revisions (2nd edition, 2009[2]) to accommodate for the changing environment of medical education in North America, such as accreditation, a focus on core competencies (ACGME, RCPSC) and the growing use of information technology by institutions and learners. As stated by it's authors “the general principles of curriculum development remain timeless” (page ix, 2nd Edition[2])

This framework has a healthcare and medical education focus. It does involve a constant iterative and cyclical process; to curriculum design and evaluation which is critical if a curriculum is to retain its currency.

3) In order to clarify the context, a brief description of the medical education curriculum should be added.

There were 125 hours of formal instruction with 85 hours of lecture time and 31 hours of small group time scheduled.

The Course was comprised of three main sections or sub-specialties. These were dermatology, musculoskeletal medicine and special senses. Musculoskeletal medicine (MSK) included the topics and specialties of anatomy (histology, embryology, gross and clinical examination), rheumatology and orthopaedic medicine. Special senses included the topics relating to balance, vision, hearing, voice and sight or components of specialties of neurology and ear/nose and throat (ENT) medicine. The course followed the overarching themes of Clinical Presentations as outlined in Table 1.

4) How were the 139 students selected? Please describe data regarding age and sex distribution.
The 139 students that were selected for the study were the entire class enrolled in the medical school at that time.

I am unable to obtain the demographic data regarding age and sex distribution at this time. During the study period, 2006-07, I did not feel that it was pertinent information for the curricular review and did not request it during the review study period.

5) How were the students selected to medical school? Were all selected by the same means?

The students are selected for medical school, based on their Grade Point Average (after completing at least two years of full time university), Medical College Admission Test, Essays, and an Interview Process as outlined in Brownell et al. [3]

6) Were tests, grades and interviews used in the same amount in all 139 students?

I do not understand this question. If the reviewer refers to the process of medical school admission, the selection process is identical for all applicants. The assessment of learners for the MSK course was also the same for all 139 students.

7) A description of the pedagogic, scientific and clinical experience as well as formal education of the 101 teachers must be added apart from age and sex distribution of the teachers.

Please see next question.

8) Why were 101 teachers included?

There were 125 hours of formal instruction for Course II and a total of 101 faculty were involved in the delivery of the Course. This number of faculty were needed to assist with the lecture and small group format.

For the purposes of clarity, the word faculty is used to include faculty members, residents, and Fellows: Residents are physicians who have received their M.D., and are obtaining additional training in specialty areas of medicine such as internal medicine or surgery. Fellows have passed all of their licensing examinations and they are obtaining further sub-specialty training before beginning their practice. Faculty are practicing physicians in the specialties represented by Course II. The majority have private practices outside the University setting.

Due to the retrospective nature of the study, I am unable to obtain detailed information about the pedagogic, scientific and clinical experience as well as formal education of the 101 faculty used to deliver the course.
9) During what time period did the study take place?

This study took place in 2007 to 2008 looking at data from the Class who graduated in 2009. The Course occurred in the Fall of 2006.

10) The question in the title of the paper ”How good is our Undergraduate Musculoskeletal Education?” is not answered clearly enough. Please modify the title.

The title has been modified to:
Musculoskeletal Education: A Curriculum Evaluation at one University

Editor Requests:

Ethics for this study was obtained by the University of Calgary, Office of Medical Bioethics. Ethics ID – E-21197

Survey – end of course evaluation from Faculty and Students has been uploaded. These are titled: Course II Student Survey_CIS.doc and Faculty Evaluation of Course II.doc