Author's response to reviews

Title: Teaching strategies for coping with stress - the perceptions of medical students

Authors:

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Author's response to reviews: see over
Reply to reviewer 1:

Dear Reviewer
Naiemeh Seyedfatemi,

Thank you for reviewing our article. We have tried to embody all of the proposed suggestions, as follows:

Major Compulsory Revisions:
1. The research design was mentioned as an action research. In action research you need to do changes in management levels and you have to involve managers for organization or institute. In this study which is a quasi-experimental study with extra focus group for assessment of stressors and initial data. or it can be a kind of very small mixed-method study not action research.

Reply: Concerning the research method, we agree with you that it is not action research and have given a different description as follows:

This is a descriptive and exploratory study. Qualitative data were obtained through focus groups and quantitative data were derived from an instrument containing questions evaluating an elective course on strategies for coping with professional stress offered to medical students.

The research was conducted at the Faculty of Medicine, Federal University of Goiás (UFG), in the city of Goiânia, state of Goiás, center west region of Brazil. All students registered in the “Strategies for coping with professional stress” class in the first semester, 2011, participated in the study. The research protocol, No. 027/2011, was evaluated and approved by the HC/UFG research ethics committee.

The class, given by the researcher and a psychologist, was offered to medical students as an elective and totaled 32 class hours, with one class per week. Class content was developed taking into account both data from the literature and complaints from students in the focus group at the beginning of the semester.
Qualitative data were collected by means of the focus group technique, which is a technique that makes it possible to discover participants’ perceptions, beliefs, values, attitudes and social representations in regard to a specific topic (in our case, stressors in medical school and the strategies used to cope with them). In this research, focus groups were used to better understand the specific context of the students for whom the class was intended.

The focus group, was conducted early in the first half of 2011, with the participation of nine students enrolled in the "Strategies for coping with professional stress" class. This was an intentional sample, since the invitation was extended to all the participants on the first day of class. The researcher was the coordinator and the session was recorded and later transcribed in full. A Free and Informed Consent Form (FICF) was read and signed.

The guiding questions were:

What are the stress factors perceived during the medicine course?
What are the strategies used to cope with them?

The mixed questionnaire (some multiple choice questions, some questions with Likert-type responses and some open questions) was self-completed by the students. This questionnaire was created and administered by the researcher on the last day of class, after the FICF was read and signed. Questions concerned: (1) evaluations of the class, (2) participation of each student, (3) opinion of teaching methods and class contents and (4) the meaning of the class in personal life. The questionnaires were administered to all the students with the objective of learning about the experiences they had in the class.

2. Methodology was written vague, the intervention program or content (coping strategies) is overload and too much during 32 hours of doing or carrying out.

Reply: Concerning vagueness in the way the methodology was described, we made the revision described above and believe we have corrected this deficiency. As to the consideration that there may have been too much content for 32 hours of class, we also felt this as the class progressed so we asked a question about it in the questionnaire. The response of the 31 students was the following:

3.
What did you think of the class workload?  

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<tr>
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<tbody>
<tr>
<td>Ideal</td>
<td>20</td>
<td>64.5</td>
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<tr>
<td>Could have been a little lighter</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>Could have been a little heavier</td>
<td>8</td>
<td>25.8</td>
</tr>
<tr>
<td>No information</td>
<td>1</td>
<td>3.2</td>
</tr>
</tbody>
</table>

So we don’t believe that the students were overloaded because the topics were dealt with in a pleasant way in order to involve the students using diversified techniques.

4. Evaluation of the program was not relevant with the article title and main objective of the study.

**Reply:** It was remarked that the evaluation of the program was not relevant to the title of the article or the objectives of the study. Our understanding was that the important thing was to show how the class was constructed, taking into account the specific group for which it was intended. We believe that student feedback is essential. To resolve this discrepancy, we are proposing a new title which is *Teaching strategies for coping with stress – perceptions of medical students.*

5. Discretionary Revisions: wiring style needs to change and edit by native English editor –

**Reply:** As far as the English style is concerned, we will send the article to another translator who is both a native English speaker and a specialist in the health area.

We thank the peer reviewer for her attention and are ready and willing to make any other necessary changes.

Sincerely,

Maria Amélia Dias Pereira e Maria Alves Barbosa

Goiânia, November 2, 2012
Reply to reviewer 2:

Dear Reviewer
Ritesh G Menezes,

Thank you for reviewing our article. We have tried to incorporate all of the suggestions proposed as follows:

Reviewer’s comments:
The purpose of the paper is clear and is set within the wider context of BMC Medical Education.
I have a few minor suggestions/comments for alterations.

Minor essential revisions:
1. Abstract: Mention where Federal University of Goiás is located (place & country). Mention this even in the last paragraph of the ‘introduction’ section and the second paragraph of the ‘methodology’ section.
   Reply: We agree and the new version reads as follows:

Introduction: The undergraduate medical course is a period full of stressors, which may contribute to the high prevalence of mental disorders among students and a decrease in quality of life. Research shows that interventions during an undergraduate course can reduce stress levels. The aim of this paper is to evaluate the Strategies for Coping with Professional Stress class offered to medical students at the Federal University of Goiás, in the city of Goiânia, in the state of Goiás, in the center west of Brazil.

Methods: (second paragraph)
The research was carried out at the Faculty of Medicine, Federal University of Goiás, in Goiânia, in the state of Goiás, in the center west region of Brazil. All of the
students registered in the “Strategies for coping with professional stress” class in the first semester, 2011, participated in the study.

The research protocol, # 027/2011 was evaluated and approved by the HC/UFG research ethics committee.

2. Methodology: Avoid the term “action-research” study. I am not entirely sure that “action-research” study is the correct description for this study. Provide a more suitable simple alternative term acceptable to all.

Reply: We agree that this study cannot be considered action research so we have rewritten this section as follows:

This is a descriptive and exploratory study. Qualitative data were obtained through focus groups and quantitative data were derived from an instrument containing questions evaluating the elective course about strategies for coping with professional stress offered to medical students.

3. Methodology: Kindly describe (in brief) the medical curriculum at Federal University of Goiás, Brazil

Reply: We have added the data requested in the second paragraph in methodology, as follows:

The research was carried out at the Faculty of Medicine, Federal University of Goiás, in Goiânia, in the state of Goiás, in the center west region of Brazil. This faculty is public and offers 110 openings per year. The students are selected by means of a competitive entrance examination with approximately 60 candidates per opening.

Add a note on sample selection & size.

Reply: This note is already contemplated inside the article in the methodology:

Thirty-three students attended the "Strategies for coping with professional stress" class, of whom nine spontaneously agreed to participate in a focus group to identify stress factors in medical school and the strategies used to address them.

The questionnaires were administered to all the students with the objective of learning about the experiences they had in the class.
4. Discussion-last paragraph: Syntax of the sentence should be specifically taken care of.

Reply: We agree and have modified the sentence as follows:

Research limitation: the students in the study were third and fourth year medical students only and the results cannot be generalized to all medical students

Major compulsory revisions:
1. Discussion: The ‘discussion’ section needs to be strengthened revolving round the results of the study.

Reply: We agree and have rewritten the discussion, adding students’ comments, providing examples of what they reported in the focus groups and wrote in relation to the significance of the class in their opinion.

Discussion

The stressors mentioned by students in the focus group coincide with those found in literature such as competition, knowledge overload, difficulty in budgeting time among a large number of activities and too little time for leisure activities, individualism, responsibility and social expectations of the doctor's role [12]. Federal University of Goiás medical students clearly identified their difficulties: Participant 1: “What’s missing in medical school is coordination among subjects... often all the tests fall on the same week.”

Participant 2: “We don’t have much space for our personal life... we kind of live for the course 24hours a day. For example... you get an e-mail with a clinical case at 11 pm and you have to study it for the next day at 7 in the morning.”

Participant 3: “One of the things that I think most stress students here is what I perceive as the tremendous competitiveness among medical students.”

Sahi et al. (2009) found that among medical students in Pakistan, the most common sources of stress were related to psychosocial and academic concerns, high parental expectations, frequency of examinations, the vastness of the academic curriculum, sleeping difficulties, concern for the future and loneliness [13].
The strategies that the group identified for coping with stress were quite diverse, covering almost all categories found in the research done with this specific population.

Examples of what students said:

Participant 1 “...and I try to see what my limit is, because I think that it is very important for everybody to respect their limits. I have a limit and there comes a time when I can’t study any more, so I stop, you know, because it doesn’t do any good.”

Participant 2: “...one thing I didn’t mention...one thing is a priority for me and that is reading...above and beyond medicine”.

In a qualitative study at the UFSC Faculty of Medicine, Zonta et al. (2006) identified appreciation of interpersonal relationships and everyday life phenomena, balance between study and leisure, time management, health care, food and sleep, physical activity, religiosity, working on one's own personality to deal with adverse situations and seeking psychological assistance.[14]

The topics chosen for the class and the teaching strategies used were consistent with the National Curriculum Guidelines[15], which state that "the course in medicine should use methodologies that emphasize active student participation in constructing knowledge and integrating content and should stimulate the interaction between teaching, research and extension / service; and the student should look after his/her own physical and mental health and seek well-being as a citizen and as a doctor." The dialectical methodology used in this class favors the development of mental operations, providing the student with feelings or moods loaded with personal experience and renewal.[16]. In this study, the great majority of students felt involved with the in-class dynamics and reported that they learned a lot and that they would like to continue having learner-centered classes.

The students were quite receptive to this approach, which met the expectations of some and surpassed those of others. On the first day of class several students said they had only chosen this class to meet elective requirements and because the class time was convenient, but on the final questionnaire only one student responded that the class had that meaning for him. Most considered it a worthwhile experience and that it had brought benefits and reflections, with positive effects on their quality of life.

Examples of comments from students:

Participant 1: “I learned some techniques that were really helpful in coping with daily stress. Learning to be more assertive was particularly important. This had been a real problem for
Participant 2: “I added physical activities, the avoidance of automatic thinking, respect for my desires and limits and spending more time with friends and family to my life.”

Participant 3: “This class brought up some important points in the area of self-perception and reflection which were great because they helped me revisit some problem areas I had. I have attempted to incorporate breathing practice into my daily life.”

Participant 4: “The strategies really do help in a number of ways. But I still think that changes only happen with a deeper and more individual approach. But in the class the strategies help people who don’t think about their behavior to think more and also to relax.”

2. Limitations of the study should be clearly stated.

Reply: The text was changed as indicated in item 4 in the minor revision section (above)

Research limitation: the students in the study were third and fourth year medical students only and the results cannot be generalized to all medical students.

Level of interest: An article of importance 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: I do not have any competing interests in relation to the aforementioned paper.

We would like to thank the reviewer for his attention and are ready and willing to make any other necessary changes.

Sincerely,

Maria Amélia Dias Pereira e Maria Alves Barbosa

Goiânia, November 5, 2012.