Peer Review File

Article information: http://dx.doi.org/10.21037/atm-20-1651

Reviewer A:

Comment 1: How were the pre-lecture test and post-lecture tests performed and how were the students scored in these tests? How many questions were involved in the tests? Do the pre-and post-tests have the same difficulty? Is it possible that the post-lecture test is easier than the pre-lecture test so that the students all get higher scores?

Reply 1: Thank you for pointing out this crucial issue. The pre- and post-lecture test were exactly the same, therefore, the test difficulty was the same. The pre-lecture test evaluated the students' baseline knowledge level, while the post-lecture test evaluated the improvement in the students' performance after completion of organized pre-internship. The low pre-lecture scores are possibly due to the lack of ophthalmic knowledge in the students before the pre-internship. The participating students did not know that they would have the same test again after the pre-internship.

Changes in the text:

We have modified our text as advised.

- *The pre- and post-lecture test were exactly the same, therefore, the test difficulty was the same. Students did not know in advance that they would do the same test, so the post-lecture scores could reflect the improvement in the student performance after completion of organized pre-internship. (In "Methods", Page 5, paragraph 1, line 89-92,* **Research process***)*

Comment 2: The questionnaire uses a four-point scale and lacks a choice of "neutral" opinion, which forces a choice between "agree" or "disagree" when a respondent has no opinion. The authors may need to justify the rationale of using the four-point scale in the method section.

Reply 2: Thank you for pointing out this crucial issue. The disadvantage of the choice

of “neutral” opinion is due to the “Golden mean” idea which traditional Chinese culture advocates. Subjects may tend to choose a "neutral" option, so their true thoughts and attitudes may be covered up. The four-point scale is used to overcome this cultural tendency and to better reflect subjects’ opinions on the effectiveness and satisfaction of the two teaching modes.

Changes in the text:

We have modified our text as advised.

- *The four-point scale is used to overcome the Chinese cultural tendency to choose a “neutral” response and to better reflect the effectiveness and satisfaction of the two teaching modes. (In “Methods”, Page 7, paragraph 5, line 125-127,* **Student evaluations***)*

Reviewer B:

Comment 1: The group of students had all gone through the traditional pre-internship- why not choosing a group of pre-internship-naïve students?

Reply 1: Thank you for pointing out this crucial issue. One purpose of our study is to evaluate the effects and students’ satisfaction of the modified organized pre-internship compared to the traditional pre-internship. Therefore, only students who have participated in traditional pre-internship in the past were enrolled.

Changes in the text:

We have modified our text as advised.

- *Only students who have participated in traditional pre-internship in the past can evaluate the effect and satisfaction of this modified organized pre-internship mode compared to traditional pre-internship, so inclusion criterion was previous participation in traditional pre-internship in the Zhongshan Ophthalmic Center. (In “Methods”, Page 5, paragraph 1, line 83-87,* **Research process***)*

Comment 2: A parallel group of similar patients undergoing the traditional pre-internship by the same group of teachers was not available (as acknowledged by

the authors), at the very least, a historical comparison on improvement in performance scores between the traditional and the new models of pre-internship should be performed to understand the role of the new pre-internship model in a better context.

Reply 2: Thank you for the inspiring suggestion. We did not have a historical comparison in the current study because previous traditional pre-internship in our center did not have the setting of a pre-lecture and a post-lecture test which is necessary for evaluation on student improvement. In future study we could have two subsequent batches of students and allocate one batch to either traditional or organized pre-internship. Both batches need to go through a pre-lecture and a post-lecture test. At this condition, we could provide a historical comparison on improvement in performance scores between the traditional and the new models of pre-internship. This issue has been further addressed in Discussion.

Changes in the text:

We have modified our text as advised.

- *A historical comparison between traditional and organized pre-internship is unavailable in the current study because previous traditional pre-internship in our center did not have the setting of a pre-lecture and a post-lecture test which is necessary for evaluation on student improvement. (In "Discussion", Page 12, paragraph 5, line 240-243)*

Comment 3: The new organized pre-internship has components that are not evaluated in the current tests (e.g. soft skills etc.)

Reply 3: Thank you for pointing out this crucial issue. The improvement in student performance was evaluated by the difference of post- to pre-lecture test scores. The test mainly evaluated the improvement of basic theory and some components such as soft skills were not evaluated in the study. In future study, we should thoroughly evaluate student performance in multi-dimension, including basic theory and soft skills. This limitation has been added in Discussion.

Changes in the text:

We have modified our text as advised.

- *Last but not least, the improvement in student performance was evaluated by the difference of post- to pre-lecture test scores. The test mainly evaluated the improvement of basic theory and some components such as soft skills were not evaluated in the study. (In "Discussion", Page 12, paragraph 5, line 245-248)*

Comment 4: The introduction section is weak.

Reply 4: Per your comment, we have rewritten the introduction section to illustrate the importance of pre-internship in medical education, and the current situation and problems in medical pre-internship in China.

Changes in the text:

We have modified the introduction section as advised. *(In "Introduction", Page 4-5, paragraph 1-3, line 52-78)*

- *Pre-internship or fore-observation, is also known as physician shadowing in some countries. The transition from a medical student to a physician is a challenging process and may bring great stress for trainees (1-3). Therefore, pre-internship is set up in medical education to help students to ease the transition. The aims of pre-internship are not only to teach knowledge but also to help medical students to learn soft skills in clinical practice, including how to communicate with patients (4, 5), and explore potential interest in medical specialty (6, 7). Previous study found that a supervised pre-internship before the first job would be of great benefit (8). It is demonstrated that the pre-internship can increase students' learning enthusiasm (9), provide greater insight into the clinical role (10, 11), and help students to make career choices earlier (12).*
  In China, many medical colleges encourage lower-grade medical students to take part in medical pre-internship, and some of the medical colleges consider pre-internship as prerequisite to medical internship (13). However, lower-grade participants in pre-internship know little about medical knowledge, and the courses designed for senior medical students are not compatible with junior medical students' knowledge level. Despite its great importance, in China, the purposes of pre-internship education have not been clearly defined; there is

currently no specifically designed curriculum for pre-internship; pre-internship does not play its due role in helping medical students to complete the career transition (14). It is of great urgency to optimize the setting of courses of medical pre-internship in China to improve education quality (15).

Taking the ophthalmology pre-internship as a pilot, we have set up an organized pre-internship curriculum based on the rationale of "classroom, clinical practice, sharing and feedback". The purpose of this study was to evaluate the effectiveness of the modified organized pre-internship and to assess student evaluations. We present the following article in accordance with the STROBE guideline checklist.