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Objective Structured Clinical Examination's adaptation for final evaluation of the curricular component "Semiological Bases"

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ABSTRACT | BACKGROUND: The combination of both physiological knowledge of a variety of sistems and the clinical findings it is of extreme relevance to the medical student learning process. The proposal of a simulated enviroment, with clinical data collection and regular physical examination, is crucial to this process. The Semiological bases of Escola Bahiana de Medicina e Saúde Pública module, used by the OSCE's 4th semester medical students, capacitate them for such means. SUMMARY OF WORK: The evaluation logistic was divided into two segments: the first one was made through a theorical exam with close questioning, exhibiting images and videos, but also containing an open-ended question requesting a construction of a fictional clinical case; in the second one it was applied a practical exam segmented by different fields of medical knowledge (neurological, cardiovascular and respiratory/abdomen), with the evaluation of 120 students and followed by the teacher's feedbacks at the conclusion of each field exam. SUMMARY OF RESULTS: The experience was important, however, it is notable the need for a complex management and understanding of the evaluational process. Discussion between students and teachers happened in behalf of the development of such proposal. CONCLUSIONS: The application of theorical exams throughout the semester combined with a practical exam (the OSCE) at the conclusion of the curricular component Bases Semiológicas had significant weight to the whole process.

KEYWORDS: Education. Teaching. Medicine.

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Background

The OSCE (Objective Structured Clinical Examination) is one of the best methods that can be used to evaluate medical students and health professionals¹. OSCE'S efficiency is justified primarly because it unifies theoretical knowledge in patient care, interpersonal healthcare facility communication and the practice based on the learning process². Such parameters are not found in old methods, which only judge the theoretical knowledge and are incapable of precise evaluation of the quality of the student or professional communication with the patient³. Nowadays, there are still problems in the medical student learning regarding a better and more accurate view of the biopsychosocial condition of the patient. Therefore, it is important that the student, in several occasions, can learn how to approach the patient as an individual, full of fears and uncertainties, in order to better understand the variety of healthcare facilities situations⁴.

Having the knowledge of OSCE's academic qualities, the curricular component "Semiological Bases" provided itsfelf of concepts and ideas of such method to finally present a better dynamic in the teaching and learning process. The component structure was thought as an OSCE's adaptation, so there can be a more precise, fast and objective method that also acknowledges the importance found in the care, understanding and communication between the medical professional and the medical patient.

Summary of work

The evaluation process was divided into two parts containing a theorical exam and a practical one based on the OSCE's standards, both related to the subjects studied throughout the semester.

I) Theorical exam containing 15 closed questions and one opened response question: the closed ones had 5 different responses to be marked, containing also images and videos projected into the classroom according to its respective questions, allowing the students the same amount of time for answering them. The opened response question asked the students to create a fictional medical clinical case based in specific symptoms studied throughout the semester. II) Practical exam with specific medical fields (neurological, cardiovascular and respiratory/ abdomen): 5 students alternately had 15 minutes per medical field. The themes of the practical exam were chosen by lot following a previously disclosed list with topics based on each medical field. The demonstration of the physical examination test ocurred imediately after the draw, finishing with the teacher's feedback which informed the students grades but also opened opportunity for discussion of any inquiries or remarks regarding any mistake made by the students.

This exam was applied to 120 medical students on their respective academic activity days, 60 students per day. Being that these 60 students were again divided into two other groups that alternated the beginning of the examination process between the first and second part of it. At the end of the exams, an individual feedback test was applied offering the students, anonymously, a chance to tell their teachers what they thought of the whole experience.

Summary of Results

Although considered as important to the semester conclusion, the elevated number of students in each medical field of knowledge required a complex management of the academic evaluation process. The construction of a fictional clinical case was responsible for significant delay in the fields alternation because part of the students took longer to finish the task. The difficulty of time management, which some teachers were responsible for, also was a significant factor for the delay.

Conclusions

Thestudentsfeedbackandtheteacher'smeetings, both full of complaints, suggestions and overall exchange of experience, led to detection of adjustment needs. One of the adjustments proposed the application of theorical exams throughout the semester so there can be one final exam at the conclusion of each module/field of the academic discipline (neurological, cardiovascular and respiratory/abdomen). Regarding the practical exams, they will keep happening at the end of the semester, reducing the complexity of the

Inter. J. Health Educ., Salvador, 2019 October;3(1):61-63 Doi: <u>10.17267/2594-7907ijhe.v3i1.2300</u> | ISSN 2594-7907 evaluation and improving the discipline's evaluation process management.

Author contributions

Carvalho FM participated in the conception of the work, data collection, data analysis, writting, article review and manuscript submission. Menezes SM participated in the conception of the work, data collection, data analysis e writting. Aleluia I participated in the conception of the work, data collection, data analysis, writting. Filho HCL participated in the conception of the work, data collection, data analysis, writting. Batista AVM participated in the conception of the work, data collection, data analysis, writting. Santos TR participated in the conception of the work, data collection, data analysis, writting and article review.

Competing interests

No financial, legal or political competing interests with third parties (government, commercial, private foundation, etc.) were disclosed for any aspect of the submitted work (including but not limited to grants, data monitoring board, study design, manuscript preparation, statistical analysis, etc.).

References

1- Amaral FTV, Troncon LEA. Participação de estudantes de medicina como avaliadores em exame estruturado de habilidades clínicas (OSCE). Rev Bras Educ Med. 2007;31(1):81-89. doi: <u>10.1590/S0100-55022007000100011</u>

2- Franco CAGS, Franco RS, Santos VM, Uiema LA, Mendonça Nb, Casa AP et al. OSCE para competências de comunicação clínica e profissionalismo: Relato de experiência e metaavaliação. Revista Brasileira de Educação Médica. 2015;39(3):433-441. doi: 10.1590/1981-52712015v39n3e02832014

3- Dahlin M, Söderberg S, Holm U, Nilsson I, Farnebo LO. Comparison of communication skills between medical students admitted after interviews or on academic merits. BMC Med Educ. 2012;12:46. doi: 10.1186/1472-6920-12-46

4- Gomes AP, Rego S. Transformação da educação médica: é possível formar um novo médico a partir de mudanças no método de ensino-aprendizagem?. Rev Bras Educ Med. 2011;35(4):557-566. doi: <u>10.1590/</u><u>S0100-55022011000400016</u>

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