

International Journal of Human Sciences Research

THE ANALYSIS OF THE IMPACT OF THE PRACTICE FOR THE TEACHING OF MEDICAL SEMIOLOGY FOR STUDENTS OF MEDICINE COURSE OF THE INSTITUTION: UNIVERSIDADE DE FORTALEZA

Karin Virginia de Souza Rodrigues

Débora Vanessa Frota Santos
<http://lattes.cnpq.br/6476557643768206>

Diovana Ximenes Cavalcante Dourado
<http://lattes.cnpq.br/5543327803011923>

Lucca Viana Moreira
<http://lattes.cnpq.br/9085029429639442>

Carlos Nobre Rabelo Junior
<http://lattes.cnpq.br/1326193851649909>

Célio Vidal Pessoa
<http://lattes.cnpq.br/7630712377498383>

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: Medical semiology is a crucial assessment method for the construction of diagnostic hypotheses, through the collection of anamnesis and physical examination in search of important findings for the creation of an effective clinical reasoning. In addition, it directs the rational request for exams and helps to establish a good doctor-patient relationship. Thus, it is essential that this assessment is improved during medical training. In this context, a cross-sectional, observational, analytical, quantitative and qualitative study was carried out, with the application of a questionnaire using the GoogleForms tool, to evaluate students of the medical course at the University of Fortaleza, in order to analyze the importance of different methodologies of teaching semiology during medical training. The results obtained showed that the practical performance in a hospital environment is an effective method of teaching semiology, favoring the solidification of learning through contact with patients, observation of clinical findings, collection of anamnesis and constant physical examination.

Keywords: Medical Semiology. teaching methodologies.

INTRODUCTION

Medical semiology is the science that evaluates the patient in a direct and methodical way in search of findings that are crucial for the creation of a logical and coherent clinical reasoning, evaluating, together with that, not only the anamnesis, but also the semiological and their possible associated factors. This assessment is of fundamental importance for the rational and targeted request of complementary exams. However, over time, it is clear that the emergence of several technological devices has corroborated the overvaluation of complementary methods to the detriment of an adequate semiological evaluation, due,

among other factors, to the rooting resulting from the socio-political situation in which requesting tests is something positive for the patient (AZEVEDO, et al. 2009; RIBEIRO, et al. 2018).

However, it must be noted that the excessive request for complementary exams, in addition to the increase in avoidable public expenditures, can cause iatrogenesis for the patient. These facts could be avoided with an adequate semiological assessment. In addition to the aforementioned importance, semiology is of great importance in medicine since it is the crucial moment for the good establishment of the doctor-patient relationship, which is fundamental not only for the comfort of the patient, but also for the good adherence and effectiveness of the therapeutic plan. (COSTA, et al. 2018).

For a good semiological evaluation, in addition to scientific knowledge (theoretical and practical) it is essential to perceive its value. Thus, the crucial moment for building a good evaluator is the learning process during college. Because it is a discipline at the beginning of the clinical cycle, being one of the first moments of contact with the patient and for constantly dialoguing with the different medical areas and causing some fear to students due to its great complexity, which makes it a pedagogical challenge (STOCK, et al. 2012).

A major milestone for medical education that must be highlighted is the development of the Flexner Report developed by the American educator Abraham Flexner in 1910, in which medical education was critically analyzed and one of its main criticisms was the fact that medical education was doctor to be purely theoretical. This report mobilized great debates around medical education, causing a considerable curricular change. Thus, the medical curriculum started to consist of two years of theoretical study in a laboratory

environment and two years of practical study in a hospital environment. Only then did this greater contact between medical students and patients occur, being a major milestone for the development of medicine (FERTONANI, et al. 2015).

Since then, medical students began to experience contact with patients, however, focused, for the most part, on the disease following the biomedical model. Added to this is the fact that there has not been an ideal preparation for doctors who would now also assume the role of educators, thus not taking care to teach good communication and doctor-patient relationship. This fact has been a challenge since then for the good development, not only of health professionals focused on teaching, with the construction of differentiated teaching methods focused on valuing the teaching of semiology techniques.

METHODOLOGY

This is a cross-sectional, observational, analytical, quantitative and qualitative study, carried out through the application of a questionnaire using the electronic tool GoogleForms, made available between August 16 and August 30, 2019. The questionnaire was prepared by the monitors and guiding professors and applied to students of the Medicine course at the University of Fortaleza (UNIFOR) of the discipline of Medical Skills, which has as theoretical-practical classrooms the Hospital Geral Waldemar de Alcântara (HGWA) and the Hospital Infantil Albert Sabin (HIAS).

The questionnaire contained several questions about the semiological findings, in order to analyze the importance of learning Medical Semiology and its different teaching methodologies, seeking to identify the most effective way of consolidating the subjects. Therefore, it was directed to second semester students, who are starting theoretical contact

with the discipline, fifth semester students, who are starting to carry out practices in a hospital environment, with collection of anamnesis at the bedside and physical examination, and sixth-semester students who have already gone through both the theoretical and practical learning experience of semiology. The total sample consisted of 40 students, who agreed to participate, agreeing with the Free and Informed Consent Term, 11 from the second semester, 12 from the fifth semester and 17 from the sixth semester. The questions asked were divided into those aimed at the analysis of general theoretical knowledge and those aimed at students' perception of the importance of learning medical semiology for their professional future.

RESULTS AND DISCUSSION

In general, regarding questions related to theoretical content, students in the fifth and sixth semesters showed better results than those in the second semester, which highlights the importance of direct contact with the patient for the consolidation of knowledge, reinforcing the idea that the semiological findings are better fixed when observed in practical experience. The hospital environment favors this learning by enabling contact with patients with different semiological findings, in addition to encouraging the student to correlate the clinical finding with the pathology presented by the patient.

In some questions of correlation between semiology and clinical practice, the fifth semester students obtained better results than the sixth semester students, as in the identification of the semiological findings of a pleural effusion, with respective correct answers of 83.3% and 76.5 %. The same occurred in the identification of the Charcot triad, with 100% of correct answers for the first and 88.2% for the others. Although it is

not possible to rule out occasional mistakes and successes, these findings may suggest the importance of periodic review and frequent contact with these subjects and findings for the maintenance of knowledge, as fifth-semester students, in addition to practicing semiological skills, are also participating. of theoretical classes with some of these subjects being addressed continuously (TABLE 1).

As for the questions related to semiological maneuvers, with the exception of the flick sign, most of the correct answers were obtained by the sample of sixth-semester students, which may be related to the learning strengthened by the constant practice of these maneuvers, since from In the fifth semester, UNIFOR Medicine students begin the clinical cycle and start having frequent contact with patients. These results corroborate the idea that, in semiology, the greater the practical experience, the more rooted the learning (TABLE 2).

Regarding the use of literature for the study of semiology, 27.3% of the second semester students believe that it is sufficient for learning, while 36.4% of them disagree and the other 36.4% say that maybe. Meanwhile, 100% of the sample of fifth and sixth semester students agree on its importance. The results show that

Questions	2nd semester	5th semester	6th semester
Ascite	36,4%	75%	94,1%
breathing sounds	54,5%	18,2%	52,9%
Koplik's sign	0%	25%	11,8%
Pleural effusion	45,5%	83,3%	76,5%
Deviation of the ictus cordis	72,7%	83,3%	82,4%
myxedema facies	9,1%	75%	76,5%
cholangitis	36,4%	75%	88,2%
Charcot's Triad	81,8%	100%	88,2%
nedrotic syndrome	18,2%	83,3%	88,2%

TABLE 1 - Correlation of semiological and clinical findings

Questions	2nd semester	5th semester	6th semester
Breakdown of B2	18,2%	58,3%	58,8%
flick signal	27,3%	50%	100%
Schuster maneuver	27,3%	91,7%	88,4%
Courvoisier's Sign - Terrier	45,5%	83,3%	94,1%
Giordano's sign	36,4%	100%	100%

TABLE 2 - Semiological Maneuvers

students understand the value of literature as a source of study, however, before having contact with the practice, they are divided as to whether only reading would be enough for a good understanding of the subjects (GRAPHS 1, 2 and 3).

Do you consider the literature sufficient for learning medical semiology?

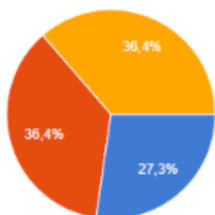


CHART 1: 2nd Semester (11 answers)

Do you consider the literature important for semiology?



CHART 2: 5th Semester (12 answers)



CHART 3: 6th Semester (17 answers)

● Yes
● No
● Perhaps

According to the students' perception, learning semiology is essential for carrying out medical practice, with 100% of students agreeing with this idea. In addition, the results demonstrate that knowledge about this subject strengthens security in making contact with the patient, with 54.5% of the second semester

students stating that they do not feel safe to deal with him a first contact, while 100% of the sample of students in the fifth and sixth semesters agree that the practical experience helped them to know how to better deal with this situation (GRAPHS 4, 5 and 6).

When you think about a first contact with the patient, do you feel safe to deal with it?

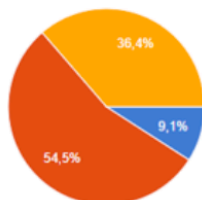


CHART 4: 2nd Semester (11 answers)

Do you think that after this experience you know how to deal better with the patient?



CHART 5: 5th Semester (12 answers)



CHART 6: 6th Semester (17 answers)

● Yes
● No
● Perhaps

In view of the above, it is evident that theoretical learning, based on reliable literature, combined with practical experience, enable an effective consolidation of semiology, which is essential for carrying out a more efficient medical practice in the investigation of the patient's signs and symptoms in detail, making it possible to obtain more reliable diagnostic impressions.

CONCLUSION

The present study showed that students, after going through the medical semiology practice module, in which they come into contact

with real patients in a hospital environment, performing their history collection and physical examination, achieved better results in the questionnaire, both in the questions about the semiological maneuvers, as well as in the correlation of the semiological findings to the patient's clinic. The data found confirm the importance of semiological practice for the consolidation of theoretical knowledge, which has already been acquired since the second semester of the course, aiming at a greater fixation of the content, in addition to providing students with greater security to conduct the consultation in the next practices.

REFERENCES

- AZEVEDO, M H, PAIVA, A F A et al. Iniciação ao exame clínico: primeiras vivências do estudante de medicina na interação com o paciente hospitalizado. **XI Encontro de Iniciação à Docência**. UFPB-PRG. 2009
- COSTA, Gilka P O, HERCULANO, Thuany B, et al. Enfrentamentos do Estudante na Iniciação da Semiologia Médica. **Revista Brasileira De Educação Médica** 42 (2) : 79-88; 2018
- FERTONANI, H P, PIRES, D. E. P. et al. Modelo assistencial em saúde: conceitos e desafios para a atenção básica brasileira, 2015.
- RIBEIRO, Marina Franklin; FREITAS, Letícia Silveira; BARATA, Jaqueline Marques Lara .A avaliação de estudantes de medicina de uma faculdade de Belo Horizonte, em relação ao processo de ensino-aprendizagem da relação médico-paciente. **Revista Médica Minas Gerais** 2018; 28: e-198.

STOCK, Fabíola Schauffler; SISSON, Maristela Chitto; GROSEMAM, Suely. Percepção de Estudantes de Medicina sobre Aprendizagem da Relação Médico-Paciente após Mudança Curricular. **Revista Brasileira De Educação Médica**. 36 (1) : 5-13; 2012