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## **General Surgery and Surgery: Textbooks for Training Foreign Medical Students**

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**Abstract:** The most important thing in education is the development of future doctor is *method of preliminary diagnosis* of any disease, including surgical. The previously used textbooks on surgery has been described mainly the clinical manifestations of diseases and their treatment techniques, without clarifying the principles and preliminary diagnosis capabilities for students. After medical education the doctors of the general medical practice tasks determinations basic requirements of scope of knowledge and practical skills for graduating student of institute of higher education of IV level of accreditation: goal-directed methodical algorithm of questioning of the patient (getting anamnesis), physical examination, substantiation of provisional diagnosis, determinate algorithm of additional methods of investigations with analysis of received results, differential diagnosis, forming clinical diagnosis, substantiation of treatment program and its realization. In the future the young doctor can work not only the doctor of family medicine, but also the expert of other directions, for example - the surgeon. For preparation to practical workies application textbook "General Surgery" for students 2-3 years education and textbooks "General Surgery" and "Surgery" for 2-6 years education English language foreign students and including information on methods and principles of forming of preliminary diagnosis, differential diagnosis, clinical diagnosis and treatment of surgical patients (Ed: Bereznytskyi, Zakharash, & Mishalov, Shidlovskiy, 2016, 2019).

**Keywords:** Surgery, Students, Textbooks

### **Introduction**

For the quality of treatment of patients, doctors need to learn and master the stages of diagnosis. Methods of diagnostics: Analogy method, which is possible in case of typical (classical) manifestation of a disease. Inductive method, which is based on the initial hypothetical generalization with the findings validation. Substantiated diagnosis, based on the doctor's mentally synthetically activity, which sequentially analyses all the present symptoms and verifies their compliance with the disease. Method of differential diagnosis (most reliable), which excludes all signs of other similar diseases.

The most important thing in education is the development of future doctor is method of preliminary diagnosis of any disease, including surgical. The previously used textbooks on surgery has been described mainly the clinical

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manifestations of diseases and their treatment techniques, without clarifying the principles and preliminary diagnosis capabilities for students. In the future the young doctor can work not only the doctor of family medicine, but also the expert of other directions, for example - the surgeon.

At the same time, the fact is obvious that if these capabilities are not peculiar to everyone but only to some doctors, it becomes an indicator not for mass professional thinking but personal qualities of a definite person. Broad medical activity, which includes a significant amount of both patients and medical personnel, frequency of main diseases (socially significant in many respects) and requirements on rendering high quality medical care demand mass training of clinical thinking. First of all, it is demanded by the training of the diagnosis recognition process.

*How is the training performed now?* Nowadays, the nosological principle of training dominates. A student studies one or another disease using textbooks and lectures. Thus, the student learns symptoms of the given disease in general, without relation to one or another concrete patient. Later at a lecture, a teacher presents a patient with the disease under study to the group of students, explains specific symptoms using patient's example and checks how students acquired the particular nosological form. Thereby conclusions are made about a young doctor's ability to recognize diseases and to treat patients who have the given disease. Both teachers and students are sure that a fund of knowledge about many diseases is formed in this way and the doctor will be able to do his job professionally by accumulation of this knowledge.

## **Method**

For education of medical students in textbooks "General Surgery" and "Surgery" including information about methodology of the forming preliminary diagnosis. After the thorough questioning and physical examination of the patient the doctor has to make sampling of pathological symptoms in their both subjective and objective manifestations. Preliminary diagnosis is substantiated by referring to the complaints of the patient, using their successive presentation, starting with the most evident ones. Each complaint must include all various subjective shades of the pain manifestation in this patient (for example, localization of pain, its displacement, intensity, character, irradiation, and ways of the pain relief).

After the sequential referring to each complaint, in order to justify the preliminary diagnosis, the anamnesis (history) disease and life of patients is used that shows the time when the disease arose, the nature of its course and the patient's subjective evaluation of possible factors that led to occurrence of the disease.

Method of physical examination for forming preliminary diagnosis including of special methodical: visual inspection of body patients, palpation of body patients (abdomen and other parts), percussion of body patients (chest and abdomen), auscultation of body patients (chest and abdomen) for information about of pathological manifestation any surgical diseases.

Correctly of results of method questioning and method physical examination may be application for effective forming of preliminary diagnosis. All stages of the method of forming the preliminary diagnosis are very detailed in the textbooks "General Surgery" and "Surgery" and allow medical students effectively develop discipline Surgery under primary diagnosis.

To implement the system of planning, monitoring and evaluation of the education quality for a real degree of assimilation of students with specific components of the program during the academic year of surgery training and discipline for module "Abdominal surgery" in general based on the cumulative number of ranking points for the European Credit Transfer System (ECTS). (The European higher education area. (1999); Magna Charta Universitatum. (1988).

This will improve the quality of learning discipline among the four-six years students of enrolled this year, and develop common indicators for professionally-oriented exam after 6 year of study to get a general level of theoretical and practical knowledge and skills of physicians interns of surgery.

The Department of Surgery № 1 of the Dnipro State Medical University was conduct structured, multiple planning of the study process and the use of different forms of the staging control. Taking into account the Standard program of the discipline, Curriculum, Working program for the department was create the specific actions by teachers, students and interns of surgery to achieve theoretical and practical knowledge, necessary resources and sequence of technological operations with the use of credit-modular system. (Sulyma et al., 2017).

Thus, the substantial module “Surgical Gastroenterology and Proctology” includes “Syndrome of chronic pain in the upper region of abdominal cavity”, “Syndrome of mechanical jaundice”, “Syndrome of an acute pain in perianal area”, “Syndrome of rectal prolapses” and “Diarrhea-inflammatory syndrome”, combining similar diseases or their complications in the form of so-called educational elements, where, for example, a practice training for “Syndrome acute pain in perianal region” contains “Acute hemorrhoids”, “Acute anal fissures”, “Acute paraproctitis” and “Inflammation of the epithelial coccyges passage”.

This approach is appropriate to expediently use the time of practical training, examine patients according to pathological syndrome, mastering the skills in classes with medical simulators, and perform preliminary and differential diagnosis with the definition of a rational treatment program.

To support the learning process developed by the principles of credit-modular system using multimedia lectures, the textbooks “General Surgery” and “Surgery”, methodological guide of development for students and interns, methodological guide of development for teachers, hand book and individual plans for students and interns, journal of the teacher. (Berezhnysky et al., 2016; 2019).

## **Results and Discussion**

Textbooks “General Surgery” and “Surgery” for medical English Language students including all educational information about methods diagnostic of surgical diseases, and preliminary diagnosis, in particular. Education of students 2-6 courses of medical university using the proposed textbook increased their interest and motivation. With this tutorial, students preparation not only clinical manifestations of disease and surgical techniques and their medicaments therapy. This tutorial helps students learn different methods and stages of diagnostics of surgical diseases, starting with a preliminary diagnosis.

Experience of using this textbooks “General Surgery” and “Surgery” and credit-modular system in teaching and measuring knowledge of surgery since 2016 suggests that this approach is effective. Received results underscore the increased objectivity in the control of knowledge on the part of teachers' interest and increasing students and medical interns' interest to master a subject, that allowed to prepare a general practitioner in surgery and surgeons, and integrate in the future in practical public health in Ukraine and worldwide.

## **Conclusion**

Given, that the level of qualification of the doctor is in the first place in various gradation systems of educational societies it's understood the necessity to improve the quality of the doctor in institutes of higher education, in which directed implementation of the credit module system to the educational process.

The doctors of the general medical practice tasks determinations basic requirements of scope of knowledge and practical skills for graduating of student of institute of higher education of IV level of accreditation: goal-directed methodical algorithm of questioning of the patient (getting complains, anamnesis), physical examination (visual inspection, palpation, percussion, auscultation), substantiation of provisional diagnosis on the basis of the revealed syndromes, determinate algorithm of additional methods of investigations with analysis of received results, differential diagnosis between similar diseases, forming clinical diagnosis taking into account the International Classification of Diseases in Edition #10, substantiation of treatment program (place of treatment: home, ambulatory or clinic; time beginning of treatment: urgent or plan; methods of treatment: medicament's or surgical intervention; rehabilitation and prevention of recurrent after treatment) and its implementation. New textbooks “General Surgery” and “Surgery” may be used for effective preparation of students and young doctors for forming preliminary diagnosis, as the first stage of diagnosis of diseases.

## **Scientific Ethics Declaration**

The authors declare that the scientific ethical and legal responsibility of this article published in EPHELS journal belongs to the authors.

## References

- Bereznytskyy, Ya., Zakharash, M., & Mishalov V. (2016). *Surgery: textbook for students*. Vinnytsya (Ukraine): Nova knyga, 648 p.
- Bereznytskyy, Ya., Zakharash, M., Mishalov, V., & Shidlovskyy, V. (2019). *General surgery: textbook for students*. Vinnytsya (Ukraine): Nova knyga, 328 p.
- Magna Charta Universitatum. (1988). Bologna, Italy, September 18, 1988..
- Sulyma, V., Bereznytskyy, Y. & Molchanov, R. (2017). Textbook “surgery”: principles of making the preliminary diagnosis. Conference Proceedings. 7<sup>th</sup> IRCEELT-2017. 21- 22/04/17, Tbilisi, Georgia. – P.920-924.
- The European Higher Education Area. (1999). *Joint declaration of the european ministers of education*. Bologna, June 19, 1999

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