The use of case method to study Ukrainian language as foreign in medical higher educational institutions

O. M. Shevchenko

Department of Ukrainian Studies and Humanitarian Training, Poltava State Medical University, Poltava

Paper received 01.02.22; Accepted for publication 12.02.22.

https://doi.org/10.31174/SEND-PP2022-263X102-14

Abstract. This article analyzes the advantages of using the method of specific situations (case method) in medical universities of the foreign student’s professional training. The case method is considered as an educational technology based on solving specific situations (cases) during classes. Regularities and pedagogical principles of case method implementation in professional training of medical students are revealed. The understanding of the educational situation essence within the use of the case method is described – its need to reflect specific aspects of the future professional activity situation. The requirements for the construction of cases are analyzed on the basis of: sufficiency of data for situation analysis and decision-making; the ability to enter additional data in conditions that lead to changes in strategic and tactical decisions; multivariate achievement of the set goals. The general logic of work within the case method and the algorithm of its application are presented. The results of application of the case method within the research, didactic, communicative, diagnostic and applied aspects of its understanding are shown. It is concluded that the use of the method of cases in the training of foreign medical students gives students the opportunity to gain personally meaningful knowledge in situations of professional activities imitating and providing comprehensive communication of the student as a subject of educational and professional activities.

Keywords: case method, medical student’s professional training, tasks and goals of case method, characteristics of case (educational situation), case method algorithm.

Introduction. The training of a specialist with higher medical education at the present stage of society development makes certain demands both on educational standard content and the modern teaching methods introduction. The main goals are the formation and development of socio-professional competence skills (medical skills, research skills, socio-personal skills). Therefore, the main purpose of modern higher professional education is to train a specialist competent in the field of their professional activity, capable of effective work in profession at the level of international standards. In this regard, it is necessary to use such methods that would allow the full possible implementation of goals and objectives.

One of the modern methods, along with other educational technologies, is the case method, which allows to form student’s knowledge effectively in through their active personal involvement in the pedagogical process and the formation of their personal attitude to the acquired knowledge. Using the case method, students get not only the opportunity to master the information, remembering or memorizing it, but also to form an effective set of professional knowledge due to the fact that they are acquired in the process of active handling of information [4].

Literature review. The case method developed by Harvard scientists has become one of the interactive methods that has gained popularity in the United States, Britain, Denmark and other countries, where the case method is actively used in teacher training; in the US (J. Maan, D. Krukschen, etc.), England (M. Reichelt, R. Spring), Australia (A. Watson). Cases are actively used in the training of special disciplines of engineers in the United States – S. Smith, Canada – G. Cardos [9, p. 43].

As can be seen, today in the theory and practice, the professional education has accumulated a considerable experience in the use of the case method in the educational process and in higher education. But the problem of using the case method in the professional training of foreign medical students remains underdeveloped.

The purpose of the article is to describe the general didactic principles of the case method in the medical universities foreign student’s training.

Results. From the scientific literature, the case method or method of specific situations is considered as a method of active problem-situational analysis, based on learning by solving specific problems – situations (case studies) [5, p. 31]. The case method refers to non-game simulation active learning methods, the immediate purpose of which is the joint efforts of students’ group to analyze the situation – a case that arises when studying a particular material and to develop a practical solution. After considering all the options, the evaluation of the proposed algorithm is the best choice in the context of the problem.

The case method, as one of the active learning forms, is used in the teaching of various disciplines. Along with the improvement of analytical skills, the method of situational exercises stimulates the development of competencies, allowing the introduction of a competency-based approach to the training of specialists in the higher education. At the same time, case methods are a form of testing knowledge that develops the ability to separate the important from the partial, cultivate responsibility in decision-making and form the necessary skills in the learning process.

The essence of the method is to use specific cases (situations, stories, texts of which are called “cases”) for joint analysis, discussion or decision-making by the students in a particular section of the discipline [7, p. 62]. The case method is useful because it allows students to independently organize the process of learning material; they provide an opportunity to work with different sources of information and provide contextual learning.

This method does not require large material and time costs and it allows variability of training. The situational problem can be highlighted both when studying a new topic in the presentation of theoretical material, and can be used to generalize and systematize the material. The case method is effective in using the study of economic, social sciences, language and literature and professional disciplines [1, p. 109].

According to the principle of the case method, the educational situation is specially prepared and it is an analogue of a specific practical situation. This case may include a description of the disease, the circumstances under which
the patient received the disease, part of the doctor's report, the results of additional research methods, photos, tables, charts, etc. The main feature of the case is the presence of questions to be answered by the student. The teacher also determines the basic and auxiliary materials for the student’s preparation and a list of references.

In addition, each proposed situation should be methodically processed and adapted to the objectives of a specific practical lesson on the subject, i.e., each case should correspond to the curriculum in which it is solved, which contributes to the creation of purposeful and organized student work, classes, and during their discussion. This in turn, contributes to the formation of relevant professional skills in the context of the discipline, as well as consolidation of already acquired knowledge in related fields of medicine (traumatology, surgery, pediatrics, etc.).

It should be noted that learning situations on the principle of the case method for each practical lesson can be several; the variety of situations and work with them should teach students to analyze specific information, trace causation, and identify key issues [5, p. 30].

The use of case methods requires appropriate training of both students and teachers. Their content is determined by the discipline, where this form of teaching is used, and the degree of preparation of students, i.e. the use of case methods requires a differentiated approach, knowledge of preparation and teaching methods, special skills of communication with the audience.

The main requirements for cases are:
- sufficiency of data for situation analysis and decision making;
- the ability to make additional data in conditions that lead to the changes in strategic and tactical decisions;
- multivariate achievement of goals;
- reasonable choice of discipline or group of disciplines in which it is advisable to use case studies.

Cases have a clearly defined characteristics and purpose. They are usually related to a problem or situation that existed or exists now. In this case, problems or situations have already had a preliminary solution, or there is no solution. In this case, problems or situations have already had a preliminary solution, or there is no solution.

Depending on the tasks performed by the cases, they can be divided into: mini-situational; cases; generalizing cases; interdisciplinary cases.

Each of the problem situations considered in the case, must respond the following conditions. Cases should be:
- realistic, but not burdened with details;
- related to the material being studied;
- offer consideration of work situations that workers face in specific conditions;
- propose a plurality of solutions;
- improving students' skills in solving problems;
- improve practical skills;
- focus on finding appropriate ways to solve the problem;
- teach possible reactions to various situations;
- require the use of specific tools and concepts [3, p. 256].

A case that corresponds the following characteristics is considered as qualitative: a skillfully formulated story, to address an important problem; to describe a dramatic situation with a critical decision, to contain specific comparisons, to provide an opportunity to generalize conclusions; to have a central character, that contain the optimal amount of information; have a variety of problem solutions, ensure the interest of the audience in solving the problem, encourage them to work in groups, teach teamwork; form leadership skills.

When conducting case methods for educational purposes, teacher can define their main tasks as follows:
- self-realization of the students;
- selection of information that contributes to a balanced decision on the problem under consideration;
- increasing the level of mastering the material of the discipline;
- formation of managerial decision-making skills;
- acquisition of teamwork skills;
- formation of creative thinking.

In general, case studies are designed and used for a variety of instructional and course objectives. They include: 1) indirect socialization through the use of real experience; 2) development of personal rules of response and behavior to difficult situations; 3) development of skills to separate facts from assumptions; 4) workshop on defining goals and formulating strategies involving personal, organizational and inter-organizational relations; 5) improving the ability to apply theoretical foundations for practical purposes [2].

Analysis of the literature on active teaching methods allowed us to draw the following conclusions about the existing case methods:

Case-study method. This case method differs in a large amount of material, because in addition to describing the situation, the entire amount of information material that students can use is provided. The main emphasis in the work of the case study is the analysis and synthesis of the problem in decision making.

Case-problem method. The problem is clearly identified when describing the case. Thus, there is more time to develop solutions and discuss them in detail.

Case- Incident Method. The focus of this case method is the process of obtaining information. This form of work takes a lot of time, it can be considered particularly close to practice, because in practice the very receipt of information is an essential part of the whole decision-making process.

Stated-problem method. A characteristic feature of this case method is the provision of ready-made solutions and their justification. The task of students is, first of all, to get acquainted with the structure of the decision-making process in practice, to critically evaluate the decisions made and to develop alternative solutions.

At the Department of Ukrainian Studies and Humanitarian Training, the method of conducting classes using the case method involves the following aspects of work: first, before receiving the case, students must study the relevant theoretical material of the practical lesson, using educational and methodological complex, which contains the textbooks and the lecture notes. Secondly, students' work begins with obtaining a situational task (case). After getting acquainted with the case, a survey is conducted to understand the content of the case. One of the advantages of this technique is that when solving the situation, there are options for both independent and group work. Thirdly, after the students have studied the case, the person who presents the group's decision is singled out. A discussion begins, in which all the issues set out in the case should be covered. In addition to the oral answer, there must be a written form.
At the final stage of work with the case, a general discussion is organized, discussion of the obtained decisions, generalization and systematization of the obtained results and acquired knowledge while working on the case. Students' work is evaluated.

The main advantage of this method during a practical lesson is the ability to optimally combine theory and practice, which is very important when preparing a medical student. The student learns to apply the acquired theoretical knowledge in a specific practical situation, which in turn, contributes to the theoretical and practical knowledge systematization. Students develop strong skills in solving practical problems.

The ability to work with literature on the topic of the relevant practical lesson, develops students' in educational and professional skills, the ability to highlight relevant information for solving the problem and analyze it. In case of information lack motivates research activities. The ability to lead a discussion, argues their own point of view, persuade, and make a brief conclusion for the work done forms communication skills. During the analysis, students learned to act in a "team", analyze and make decisions. In addition, during the discussion of the case, certain social skills are developed: assessment of people's behavior, ability to listen, control yourself, etc. [7]. In this approach, students become equal participants in the educational process, during which they not only acquire certain methodological knowledge, but also acquire certain skills and abilities, professional experience. Disassembling the case, future doctors get a ready-made solution that they can apply in the future professional activities.

The results of this approach implementation relate to several aspects of activity, namely: research, didactic, communication, diagnostic and applied [8].

Research aspect. Case study allows for in-depth, detailed study of an object that has clear temporal and spatial boundaries, study of its unique structure, hidden mechanisms of its functioning, the set of relationships as a system or the dynamics of its development. The results of such study are usually of an applied nature as recommendations for this phenomenon, as well as other objects belonging to the same class and in similar conditions. It is perspective to use a research strategy to study cases in order to solve explanatory research problems (answers to the questions: "how?" and "why?"), in a situation of focusing on modern units of analysis that can not be controlled.

Didactic aspect. This is a method of specific situations, a method of situational analysis; learning technology that uses the description of real economic, social and business situations. Students should analyze the situation, gather the essence of the problems, anticipate possible solutions and choose the best ones. Such cases are based on real factual material or approximation to a real situation.

Communication aspect. Students are given descriptions of a certain situation that the real organization faces in its activities, in order to get acquainted with the problem and find its solution on their own or in a collective discussion. Mini-cases, which are used in combination with other methods and pedagogical technologies, are the most suitable for achieving the goals of subject teaching in the systems of general, primary and secondary vocational education and higher education.

Diagnostic aspect – is to classify cases on various grounds. Thus, depending on the structure of the case it can be: 1) structured cases (highly structured case) – a short and accurate description of the situation with specific figures and data. There are numbers of correct answers for this type of case. They are designed to assess knowledge, ability to use one formula, skill, technique in a particular field of knowledge; 2) unstructured cases are material with a large amount of data and are designed to diagnose style and speed of thinking, the ability to separate the main from the secondary and to establish the availability of skills in a particular field. For them, there are several correct answers and usually the possibility of finding a non-standard solution is not excluded.

Anti-stereotype (creative) cases (ground breaking cases) can be both very concise and detailed. Observing the outcome of such case makes it possible to see whether a person is able to think outside the standard, how many creative ideas he can give in the allotted time. If there is a group decision, can a particular person pick up someone's opinion, develop it and use it in practice.

Applied aspect. Modern consulting and auditing companies use this approach in job interviews. Our graduates must be armed with the skills to work with such techniques to look decent in the fight for the desired job. The application of the methodology allows at an early stage to identify the candidates' ability to analyze and synthesize, the ability to clearly and structurally formulate their thoughts.

Conclusions. Cases are a pedagogical resource, a universal tool for studying various disciplines, which are characterized by the fact that they involve finding answers to problematic questions. Cases are not aimed at obtaining ready-made knowledge, but at "creating" new knowledge, which involves the co-creation of student and teacher. The student acts as a coordinator of the learning process. At the same time, the result of the case is not only the acquisition of new knowledge, but also the acquisition of professional skills and values.

Thus, the use of the method of cases in practical classes in medical student’s professional training is quite appropriate and effective and promotes the formation and development of skills in professional, practical, research activities, social and personal skills, and it is a promising area for practical classes in medical activity. The case method promotes the development of students' independent thinking, the ability to listen and take into account an alternative point of view, to express their arguments. With this method, students have the opportunity to demonstrate and improve analytical and evaluative skills, learn to work in a team, find the most rational solution of the problem. As an interactive method of teaching, the case method has won a positive attitude from students, ensuring the development of theoretical principles and mastering the practical use of the material which influenced the professionalism of students and contributed to their maturation, formed interest and positive motivation in relation to learning.
REFERENCES


