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*I. Horbachevsky Ternopil National Medical University***METHOD OF SPECIFIC SITUATIONS ANALYSIS (CASE METHOD)
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ЯК ПЕДАГОГІЧНА ТЕХНОЛОГІЯ**

Abstract. The article focuses on the issue of using case method as an interactive way of training in the medical education. History as well as classification and types of case demonstration, alongside with the steps of case study implementation, interactivity and feasibility for the use of the method in training medical students at Latin and English classes are considered.

The use of case study at the practical classes has been found to contribute to the development of students' communication skills and ability to apply knowledge creatively. Besides, it develops group work skills as well skills in problem statement, search for the ways of addressing the problem, information collection and analysis, and rationale for one's standpoint. Furthermore, it is an active training method that strengthens motivation and interest in studying a subject on the whole. A student gets accustomed to teamwork, as well as to stand his (her) ground and listen to different opinions. This is the moment the exchange of knowledge occurs. Case discussion provides combination of practical and theoretical aspects of a subject as well as clear understanding of what the previously gained knowledge is needed for.

Key words: specific situations analysis; case method; innovation methods; learning technology; motivation; steps of case work.

Анотація. Статтю присвячено проблемі використання кейс-методу як інтерактивного методу навчання у медичній освіті. Розглянуто історію виникнення, класифікацію та види демонстрації кейсів, етапи роботи з case-study методом, проблему інтерактивності й доцільності використання цього методу під час навчання студентів-медиків на заняттях латинської та англійської мов.

Відзначено, що використання методу case-study на практичних заняттях сприяє розвитку комунікативних навичок студентів, дає змогу творчо застосовувати отримані знання, формує вміння працювати в групах, а також такі навички, як визначення проблеми, пошук способів її розв'язання, збір і аналіз отриманої інформації та аргументування власної точки зору. Крім цього, це активний метод навчання, який підсилює мотивацію і зацікавленість у вивченні предмета в цілому. Студент вчиться працювати в команді, відстоювати власну думку й слухати міркування інших. Під час обговорення кейса відбувається обмін знаннями між студентами, а також поєднання теорії і практики предмета; приходить розуміння того, для чого потрібні отримані раніше знання.

Ключові слова: аналіз конкретних ситуацій; кейс-метод; інноваційні методи; методологія навчання; мотивація; етапи роботи з кейсом.

Introduction. Development and improvement of methodological basis for teaching subjects, betterment of students' individual work, as well development and introduction of new effective means of knowledge quality control are among the main challenges of higher education upgrading. Introduction of innovations is expected to provide improved training quality [4].

Insufficient and sometimes openly low motivation of students for learning foreign language is an obstacle

to successful mastering Latin and English medical terminology. For improving students' motivation to master the basics of medical terminology, the teacher should focus on the introduction, in addition to traditional, the methods of teaching which would develop "ability to study individually, critical thinking, as well as capacity for self-discovery and self-realization in different types of creative activity". Interactive teaching methods are exactly the ways which arouse the interest in learning and develop one's

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creative potential, as well as intellectual and emotional spheres. Interactive technologies are the methods which help students in “discovering” themselves and revealing their personality. Case study is now gaining a growing popularity among the interactive methods of teaching at higher medical educational establishments [3].

The aim of the study is to disclose both the content of case study as an interactive method of teaching and rationale for its application at the classes of Latin and English for medical students. The task of the interactive study is to create comfortable environment for the students to feel themselves successful and intellectually capable. Methods of projects, brain storm, competing and cooperating groups, practical stimulation training are the main interactive ones. “Interactive” means capable of interacting, cooperating, dialoguing. Interactive teaching technologies is the next step in the evolution of academic university training system, education of highly professional scientific medical elite, and formation of self-contained individuals in the student community [2].

Methods. Methods of literary source analysis, outlining the essence of the teamwork that includes scientific basis for teambuilding, has been used in writing the paper. Theoretical analysis of scientific publications enabled to generalize different types of teaching methods and specifics of their use at Latin and English classes. Practical aspects of interactive teaching methods application were considered by the Ukrainian scientists (Z. Skrynnyk [2], M. Filonenko [3], O. Shenderuk [4], O. Shovkoplias [5], et al). Analysis of the methods of using professional interactive tasks to be applied for the development of team-building training has been identified as another group of research methods. The following interactive methods are suggested by the scientists to be used for professional training of future doctors: “Brain storm”, “Problem mosaic”, “True-false statements”, “Decision tree”, “Six hats of thinking” etc.

Results. Theoretical analysis of scientific literature enables to specify that case study implies pedagogical technology, based on situation modelling or application of a real situation for analysing specific case, identifying problems, searching for alternative methods of solving problems and making best possible decisions. The objective of the case study is to put students in a situation that requires decision making. Case is an actual event in a certain sphere of activity that provides basis for discussion in the academic group under the teacher’s supervision. In most cases, the students

involved are previously given access to the list of circumstances with underlying actual or imaginary situations. Students are supposed to determine essential and secondary facts, to select main problems, and to develop strategies and recommendations regarding further steps, an emphasis being made on the students’ individual work on the basis of collective efforts. In the process, the role of the teacher is reduced to monitoring and controlling students’ discussion [1].

A student, preparing for case discussion in the classroom, is expected to study facts, to make conclusions, to evaluate possible alternatives, and to choose the most appropriate plan of actions. What is more, the student is supposed to be ready to present his (her) ideas during discussion, to promote his (her) own point of view, and, if need be, to reconsider an initial decision. The student should be aware that benefits from the case can be only obtained through active involvement in the discussion.

The core of the case method is students’ individual activity in the simulated situation that enables to combine theoretical training and practical skills and to apply theoretical knowledge in addressing practical tasks. Discussion and debate are the components of case method, the students jointly analysing situation – case that enables to make practical decision, resulting in the evaluation of suggested algorithms for choosing the best one in the context of target task or problem.

Case demonstration may be in paper, multimedia or video format. Co-existing today are two classical case study schools: Harvard (American), searching for a single right decision, and Manchester (European) that suggests alternatives in solving a problem. American cases are larger by volume (20–25 pages and 8–10 pages of illustrations), whereas European cases are 1.5–2 times shorter. Today, European Case Clearing House (ECCCH), established in 1973 on the initiative of 22 higher educational institutions, is the leader in the field of case collection and distribution [2].

By type of tasks, case-event, case-exercise, and case-situation are distinguished. While teaching English for specific purposes, case-event may be used at the practical classes to illustrate diseases studied or substantiate methods their diagnostics. Case-exercise makes it possible to apply the skills in practise and is mostly used in differential diagnostics. The typical question in the case-situation is why the situation aggravates and how it can be corrected. Atypical tasks are used, which include complications of a main disease, and the algorithm of decision making in a particular situation is taught on the specific case.

Typically, a case-situation requires a lot of time to study, therefore previous individual preparation is desirable to save time.

By their volume and structure, cases are distinguished as complex and mini cases. Complex cases are large enough (from 15 pages), containing a lot of detailed information, primary data, opinions, and samples of documents. However, the information may be insufficient and poorly structured. A case may contain a few versions of decision, the best one to be chosen, but in some cases all decisions proposed are not optimal and the only way to solve the case is to propose one's own decision. Mini cases are practical situations, describing a problem in a concise manner (1–4 pages). The volume of information is sufficient for a student, possessing necessary knowledge and skills, to make an adequate decision.

It is advisable to apply analytical educational cases at Latin and English classes. Working on the case implies analytical reading of material, analysis of lexical and grammar structures, learning and training of a new vocabulary and, finally, formulation of the problem. After reading and analysing the text, the pattern of work on the analytical case suggests phased steps, similar to those with the other cases: group work, preparation of individual projects, broad discussion in groups.

While using case method, some rules of case compilation, including group work, should be observed. Besides, specifics of various age groups should be taken into consideration, and the role of the teacher should be identified properly, since in the case method his function is significantly different from the traditional one.

Case method consists of two phases. Phase I includes case planning, case creation, formulation of questions to the analysis of case clinical situation, development of methodological support for the students on case analysis and preparation for discussion, as well as methodological support of practical classes, involving case method. Phase II – teacher's direct work in discussing the case (introductory statement, organization of discussion or presentation, providing business atmosphere in the classroom, evaluation of each student's contribution into situation analysis, organizing work in small groups and information exchange, summing up, closing remarks, etc.).

At the preparatory phase of case study work the teacher, in accordance with objectives and task, chooses the cases needed and selects necessary literature. Students are united in 2 subgroups, 5–6 people

each. Group work is considered to be “one of the effective methods of encouraging motivation ... It maintains more favourable psychological and creative atmosphere in the classroom” [10, p. 109]. Moreover, group work, “provides activities in which people help each other; it is a way to help groups as well as helping individuals; and this method can allow individuals and groups to influence and change personal, group, organizational and social problems” [10, p. 109].

Preparatory phase includes teacher's short opening remarks. If the students lack previous experience with case study, they should be informed of the method as a form of active learning, as well as of the stages of their further work and evaluation criteria for the work on the method at the classes. This phase stipulates a great deal of extra-curricular work with different sources of information (basic texts, supplementary literature on the particular issue, references, video materials, Internet sites, etc.).

The main stage includes: 1) identification of the major problems of the situation analysed and the level of decision making, as well as of the objective, ways, restrictions and demands of the solution; 2) preparation for the formulation of one's own conclusions. Compulsory requirements of the stage are: inclusive participation in the discussion; possibility to make one's point and to get familiar with the other opinions; teamwork style that requires ability to listen to and take into consideration the thoughts of other students.

The final stage includes evaluation of the students' work on the following criteria: theoretical training, practical skills, clinical thinking, participation in the discussion, group interaction, competence approach to the solution of tasks, ability to make an adequate decision in atypical specific situation.

Thus, the case content should reflect educational objectives. The case may be short or long and may be taught specifically or in generalized manner. Information “overdose” as well as the information not directly related to the subject under discussion should be refrained from. On a whole, the case should contain proportioned information, enabling the students to grasp the core of the problem and providing all necessary data to solve it.

While solving the case, a student applies the knowledge gained and brings out his personal qualities, in particular teamwork ability, alongside with showing his (her) vision of the situation and proficiency in medical terminology. At that, the activity of everyone studying on this methodology depends on such factors as quantity and quality of participants, organizational

structure of the subgroup, its location, general organization of the work on the case, organization of discussion, summing up [5].

As an interactive technology, case study enables to approximate the process of studying to the actual practical activity of future specialists – students of higher medical establishments by developing their resourcefulness, ability to solve problems, analyse and diagnose. However, it is a mistake to believe that cases can substitute live communication with patients, physical examination, and lectures. Solution of the case is impossible without mastering theoretical material. Certainly, this teaching technology should be applied in close relationship with other methods of teaching (including traditional) which form regulatory knowledge in students.

Conclusions and Prospects for Research. 1. Case method is a simulation interactive method of teaching that enables to expand current scientific and educational paradigms and contributes to professional development of teachers and students.

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