

# INTERACTIVE METHODS IN PRACTICAL TRAINING OF HEALTH CARE STUDENTS

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## SUMMARY

**Intensive social, economical and health problems of our times necessitate high requirements for the quality of training of Health care specialists. The object of the present report is to clarify the effectiveness of application of interactive methods in practical training of the future health specialists.**

**Key words:** interactive methods, training, professional competences, students.

## INTRODUCTION

Modern nurse and midwife have to possess basic professional competences enabling them to resolve independently the complex problems of the daily practice.

The activity of two subjects of training - lecturer and students is indispensable precondition for its effectiveness. Because of it, more and more often in pedagogical practice of higher medical school, together with traditional methods of training are used interactive ones – educative-cognitive/discussing/ tasks, cases, roles, plays, panel discussion, mind-mapping, synectic, invention.

In the basis of the terms “interactivity” and “interactive methods of training “is the word “interaction” (from English) which means reciprocal action, reciprocal influence inter - between and action - act, operation).

After El. Jeleva, interactive methods are “... a type of training technologies in which is present an interactive reciprocal action directed towards effective realization of practical training and entire formation of the future specialist” (3, p.69-73).

Interactive methods ensure such organization of the training process which is orientated towards increasing cognitive and creative activity of students. They are methodical approach in which the lecturer and students interact each with other during the lesson. In the role of subject in practical training, the future medical specialists master and perfect a number of knowledge and professional competences – skills for communication, cooperation, team activity, skills for resolving conflicts.

Practical training of students of specialities “midwife and nurse” is carried out by clinical /educative/ practice and pre - graduation practice. These two specific for higher medical school organizational forms of training are carried out in the real environment of medical institutions structure and

give students a unique opportunity to be direct observers and participants in health care for the patient. Important condition for optimizing practical training methods is the creative approach and the lecturer’s aspiration for using the most appropriate methods and means of training stimulating the creative thinking, cognitive activity and students professional interest.

## MATERIAL AND METHODS

The object of the present report is to clarify the effectiveness of application of interactive methods in practical training of the future health specialists like an approach in which the students participate actively in the process of building professional competences. The method of purposeful directly included observation fixing the manifestation of students cognitive activity /reproductive, interpretative, creative/ after the classification of T.I.Shamova:

- Reproductive activity characterized by instability of voluntary efforts and aspiration of the trainee for memorization and reproducing knowledge after a pattern.
- Interpretative activity is expressed by an aspiration for understanding the sense, the relations between processes and phenomena. Characterizing indicator is the great stability of voluntary efforts by which the student aspires to overcome the difficulty and to seek ways for its solution.
- Creative activity characterizes the trainee’s aspiration for penetrating profoundly in the essence of phenomena and their reciprocal relation. Manifestation of obstinacy for reaching objects and large cognitive interests is characteristic (4, p.208). Cases of missing manifestation of activity in students are registered as neutral position.

In pedagogical experimenting an excerpt of 60 students of speciality “midwife” participate, trained in Trakia University, Medical faculty, Stara Zagora. The excerpt is divided into one check group /traditional methods are used - oral presentation, explanation, demonstration, instructions, observa-

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tion, individual task, task on algorithm/ and three experimental groups /traditional and interactive methods are applied/.

## RESULTS AND DISCUSSION

In training of “Clinical practice” at experimental group except traditional methods, educative-cognitive /discussing/ tasks are used. They put for solving different in complexity problems referring to the medical history, objective state and special midwife’s care for pregnant women, women in child birth, gynaecological patients and new-born children; preparation and participation of midwife in different manipulations and investigations; prevention of different complications; behavioural algorithms in health care etc. A model task, applied during clinical practice with topic planned in the syllabus of second year “Cutaneous-diagnostic tests” in experimental groups, is the following : To the patient N.G. hospitalized in Gynaecological department, diagnosed with pelveoperitonitis is administered Cephazolin in dose of 2 groups for 24 hours, intravenously. The midwife makes a test for sensibility to the antibiotic on the flexor side of the forearm. On the upper scratch immediately after the instilling of the solution, she notices that the skin starts to get red. What does it refer and what is the right midwife’s reaction?

Panel discussion is suitable for mastering practical bases of care for patient as an interactive training method for interchanging thoughts and searching solutions on specific health problem, development of skills for accepting and standing one ground, for getting to the heart of the problem, for building skills for tolerant attitude to participants in students group. Using this method the following steps are kept: choice of suitable problem; defining subproblems; setting-up subgroups; instructing about discussion and presentation of results procedure; discussions in subgroups; presentation of results by spokesman; generalization of the final result (2, p.56).

For example in connection with the mastering of competences for realization of care for young mother offer Caesarean operation, before direct observation and work with similar clinical case, the experimental group is divided into four subgroups to which a subproblem is defined indications for Caesarean operation; contra-indications complications; behaviour and care of midwife: After the problems solution, spokesmen of subgroups present the results of the discussion. At the end they are generalized and general solution is achieved.

Role plays are applied in a clinical practice whose educative objects and tasks are connected with necessity of forming communication skills as a significant component of professional competences of medical specialists. In exercise on topic “Breast-feeding” for example, after demonstration, explanation and observation, the students, two by two, demonstrate suitable in their opinion models of behaviour and communication of the midwife with negatively disposed to the natural feeding young mother. Consideration of models, Discussion and choice of the best variant followed.

Another applied method - mind-mapping deserves consideration, in clinical practice connected with the necessity of demonstration, observation and realization of special midwife care for woman in child-birth with Rh isoimmunisation. The method represents simplified graphic image combined with a text whose aim is to keep and reflect logical relations and enable understanding and memorization of basic ideas (2, p.60). The following methodical steps are observed for that purpose: before-hand a text is chosen from the textbook “Midwifery” alluding to pathogenesis of the problem; subgroups are formed by three-four students; a summary is proposed about different types of mind-mappings; instructions by the lecturer; precisising the time for work; implementation of the task; presentation of mind-mapping models by spokesman of subgroups; placing of mind-mappings in view; generalization of the information by the lecturer.

The method analyzing of situations /case - study/ of explanatory type is used in clinical practice on the topic “Sterilization”. There students divided into subgroups of four-five, analyze and explain the significance of the basic rules that medical specialist has to observe in preparation of dressing for sterilization: the midwife works with clean and disinfected hands, with tidy hair on clean and disinfected panel; in folding it is not allowed threads being seen outwards; dressing is kept in special locker; it’s arranged into packages with exactly determined number of gauzes.

Generalized data prove the effectiveness of applied interactive methods in practical training (table 1).

Table 1. Manifested activity of students with and without application of interactive methods of training

Groups	Manifested activity			
CG	46,67%	40,00%	13,33%	-
EG1	13,33%	33,33%	33,33%	20,00%
EG2	20,00%	40,00%	26,67%	13,33%
EG3	13,33%	33,33%	33,33%	20,00%

Results are significantly better in students of experimental groups and stand out the importance of lecturer’s aspiration for stimulating and confirming the subjective position of the future medical specialist in the process of building professional competences. It is clear /table 1/ that almost half of the studied persons of CG didn’t manifest any activity at all during the training, while in the three EG, the cases of neutral position on the part of students are at the rate of 15,5%. As a whole, the biggest part is the average of all students, who have shown reproductive type of activity with characteristic for it aspiration for understanding, memorization and reproducing of knowledge on the topic after a pattern, with mostly learnt facts and algorithms for behaviour. The least number of students from CG demonstrate interpretative type cognitive activity, while in the three EG the average part is 31, 11%. Its manifestation is characterized by students’ aspiration for getting to the heart of the studied educative contents,

searching causal-effect connexions and dependences, necessary for clarifying the concrete clinical case.

In CG the purposeful observation registers no manifestations at the highest level cognitive activity-the creative. Although the least percentage of students of the three EG have manifested this type of activity during the mastering of professional knowledge, skills and competences, the manifested aspiration for profound thinking of the problem, the use of present knowledge and practical skills in changed conditions, deserve consideration.

Here the students interest towards the theoretical consideration of the given clinical case and independent solution of the problem is characteristic. Students who have manifested creative type of activity explain causal-effect connexions, give examples of their observations in practice, propose adequate and well-founded midwife's behaviour in the concrete case.

Carried out observation proves the application's effectiveness of interactive methods in practical training and gives reason to formulate the following conclusion:

Practical training contributes effectively to build professional competences of future medical specialists, provided,

it assures conditions for stimulating the subjective position of students and maximum opening of their activity. Interactive methods in practical training create conditions for active cooperation between lecturer and students in studying different aspects of health problem.

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