



## ANALYSIS OF THE INDEPENDENT WORK OF THE STUDENTS AT THE MEDICAL COLLEGE

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### ABSTRACT

The independent work of students is one of the most important components of educative process. The aim of the study is to investigate the opinion of students studying in medical colleges on the use of self-employment as one of the most commonly used active methods. Materials and methods: The survey was conducted with 142 students I, II and III year on various aspects of the learning process through a questionnaire containing 25 questions. For our purpose we focused on issues related to self-employment. Results and discussion: According to 76.12%  $\pm$  1.1% of the surveyed students the amount of self-study was sufficient. The aid which students received in the development of their coursework in preparation of educational material, participation

in scientific conferences (reports, announcements and posters) and scientific information was appropriate for promoting self-work. Teachers encouraged independent work in 69.07%  $\pm$  1.85%.

**KEYWORDS:** independent work, students, medical college.

### INTRODUCTION

Independent work is one of the most essential components of the process of education at the Medical College. It is a conscious and purposeful activity which is carried out by the health care students based on educational aims preliminary set by the tutor/professor. It is a collaborative and interrelated activity between tutors and students. According to P. Petrov the problem with the independent work of the students is not a new one. The necessity of active independent and conscious work during the educational process has been realized and

highlighted by didactics since its very beginning. There are no more efficient means to manage the development of the students' cognition than their own independent work. During the process of independent work the students' psyche is formed and certain psychological processes are developed as well as their overall personality.<sup>[6]</sup>

In the system of the didactic categories, independent work has a controversial status as different authors offer different classification of independent work. B. P. Esipov defines independent work, included in the educational process, as such kind of “work which is carried out without the direct participation of teachers, but according to their instructions, in a specially provided for the purpose time; when students consciously seek to achieve the mission objectives, putting all their efforts in the process and showing the results of their mental and physical activity in one form or another”.<sup>[3]</sup>

According to G. Walter independent work is “a tool for training students to carry out independent activities, a tool for developing the ability to think and act independently. With the help of active independent work students should obtain new knowledge, consolidate, revise and put into practice the knowledge already obtained; by walking the road of independent work they should form the skills needed to work with their minds and hands” (M. Andreev).<sup>[2]</sup>

M. Andreev draws up the following summary of independent work – “work carried out by the students without the direct help of the teacher, which is based on the obtained knowledge, skills and habits and has a specific aim, determined by the teacher”.<sup>[2]</sup>

Pidkasisti considers the specific problem and activity an underlying factor of independent work which incorporates discovery and implementation of new knowledge through known methods.<sup>[7]</sup>

M. Mitova, S. Mladenova point that the independent work of the students is one of the most significant ways for organization of the educational and cognitive activity of the trained young professionals. It is in correlation with the different educational forms and is often included in them.<sup>[5]</sup>

The methods of the independent work are part of the methods for organization of the educational and cognitive activity. Different methods for independent work include:

- Methods for working with student's books and educational materials;
- Methods for independent work with tools and laboratory devices;
- Methods for independent task resolving and health cases;
- Method for independent observation of clinical environment or patients;
- Methods for independent development of projects, reports, abstracts, posters;
- Methods for independent work on models, dummies, patients as "live tools" in the clinical practice.

In terms of education the methods listed ensure independent acquisition of knowledge and skills, their consolidation and assimilation. They are particularly valuable in the consolidation of practical skills and habits. It is important how the activity itself will be organized. It is appropriate the students to be placed in conditions of interactive activity in the educational process at different levels like "teacher-student" and "student-student". Notwithstanding the interactive method chosen it is appropriate the approach of the group learning to be used. (D. Todorina 1994; Todorina D. 2000).<sup>[9]</sup>

According to Chr. Milcheva the share of the independent work in the education of students should increase. It is especially valid for the higher education where the increase of the independent work in the educational process has a positive growth.<sup>[4]</sup>

In the Medical Colleges the independent work is a basic part of the educational process. The student auditorium workload for the different subjects varies between 37 and 44 hours per week as during the last few years there is tendency of the increase of extra-auditorium independent workload.<sup>[4]</sup>

**The scope** of the survey is to study the Medical college students' opinion about the implementation of the independent work like one of the most common active educational methods.

## **MATERIAL AND METHODS**

The research was conducted during the academic year 2014/2015. 142 students of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years, studying Physiotherapy at the Medical College, Plovdiv were the object of the survey. For the purpose of the research we used an anonymous poll whose aim was to study the students'

opinion on the independent work. The questions in the questionnaire are part of a major survey including different aspects of the educational process.

The following methods were used: analysis of the scientific literature on the issue, anonymous poll, statistical method, graphic design.

## RESULTS AND DISCUSSIONS

Overall 142 students' opinions were studied of whom 43 in the 1<sup>st</sup> year, 47 in the 2<sup>nd</sup> year and 52 in the 3<sup>rd</sup> year of their education. Sorted by *gender* the prevailing number of students are male (52,05%). The aspect *age* includes three age groups as the most numerous one is the second group – 21-30 years old (73, 20%). The average age of the students who took part in the survey is 20, 93 y.o.

The purpose of some of the questions in the questionnaire was to determine the significance of the independent work in the educational process of the student physiotherapists.

The obtained results confirmed the positive attitude of the students towards the importance of the independent work (over 88, 02%), which according to their opinion would lead to increase in the theoretical knowledge, improvement of the practical skills needed for their further professional development and will provide them with bigger independence.

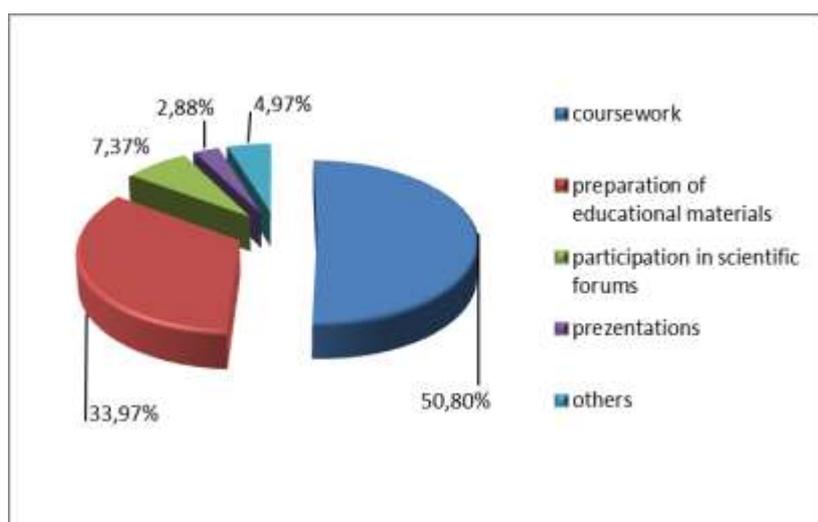
The students gave different answers to the question "Do you think that *your independent work* in the educational process is sufficient?" - 76,05±1,71% of them responded affirmatively and 23,95±1,71% gave a negative answer. The independent work is a decisive factor for the active role of the student in the educational process. The data shows that the students' independent work is not sufficiently present in their education.

Studying the students' opinion about the independent work among the health care students T. Popov realizes that it is completely sufficient for 59, 22% of them and for 40, 77% - insufficient.<sup>[8]</sup>

The analysis of the results show that for 80, 98% of the students the assigned independent work (abstracts, homework, course project, etc.) is useful and necessary.

**The development of projects** is an obligatory method for independent work in the educational process at the Medical College. The projects give opportunities to the students

not only to consolidate their knowledge and skills but also to show creativity in the recognition of the task assigned and to their skills in independent elaboration of health questions. The projects can be used for evaluation of the knowledge and skills of the student. The help that the students receive during the work on their coursework papers, during the preparation of educational materials, participation in scientific forums (reports, notices and posters), scientific information are appropriate forms for stimulation of their independent work. Most often students are helped by their teachers in their independent work on the preparation of their course works – 50,80% and in the preparation of educational materials – 33,97% (Chart1).



**Chart 1. Most often help by the teacher in the independent work of the students.**

Writing a coursework, a report or an aspect is a very good way to express independence on students' behalf. In this regard T. Popov clarifies that these forms are not used instead of examinations but they assist the real student's performance and the correct teacher's evaluation. A very effective way for making students more active is their participation in different experiments, projects models carried out by the teachers themselves. As well as their participation in conferences, symposia, etc. where they could present their reports, posters and visual aids.<sup>[9]</sup>

The question "Do the teachers *help you enough with your independent work, do they encourage it?* Was answered affirmatively by 69,71±1,85% of the students. The negative answer of 30,29±1,85% of the asked students is quite disturbing, however, which can be explained with the lack of interest by the students, or with insufficient competence and unwillingness on the part of the teachers.

These results are quite close to the ones of the survey that M. Aleksandrova, Kr. Markova, V. Petkov and M. Vizeva carried out about the help by the teachers that the student nurses receive during their independent work. According to them only 55% of the teachers assist their students in the realization of “some forms of independent work”. According to the authors “it is more the teachers’ fault who should focus more effort on this”.<sup>[1]</sup>

The independent work is subject to a research carried out by B. Torniova and M. Semerdzhieva among students from the Faculty of Public Health, with specialty of Public Health Management. Analyzing the results it became clear that the vast majority of students (91%) pointed out that the independent work has positive role for the increase of their knowledge and educational skills and habits. At the same time 35% of the interviewed survey respondents see the independent work as a possibility for increasing their knowledge. Regarding the performed tasks 42% think that the proportion of the creative tasks which help forming independence should be increased.<sup>[10-11]</sup>

There has been found relation between the educational course and the help that the students received by the teacher while doing independent works  $P < 0,001$ , ( $\chi^2 = 123,05$ ). The survey showed that 88,70% of the 3<sup>rd</sup> year students answered affirmatively and the lowest rating was given by the 1<sup>st</sup> year students - 55,90. An inverse correlation is observed  $P < 0,001$ , ( $r_{x,y} = -0,42$ ). The more academic experience the students have the less the negative answers are. The significant difference occurs because of the bigger educational experience of the 3<sup>rd</sup> students and the possibility that the students have to realize the acquired knowledge and practical skills in real clinical environment (table 1).

**Table 1: Correlation between the college year experience and the help that the teachers provide with the independent work of the students.**

Do the teachers help with the independent work		College year			Total
		1	2	3	
Yes	number	19	38	46	103
	%	44,1±3,22	80,8±2,90	88,7±2,22	72,5±1,85
No	number	24	9	6	39
	%	55,9±3,22	19,2±2,90	11,3±2,22	27,5±1,85
Total	number	43	47	52	142
	%	100,00	100,00	100,00	100,00

Taking into consideration the importance of the independent work for the preparation and development of the students it is necessary that we set higher requirements to the teachers for its realization.

The constant increase of the volume of scientific information and its significant complication, the education should form in the students skills and habits to independently seek new knowledge and develop their cognitive skills. There is no more effective managing tool for the cognitive skills of the students than their own independent work. During the educational process the teacher is not only a source of information but, but also an educator who teaches them different methods and approaches to carry out their independent work.

## CONCLUSION

The modern healthcare and the labour market are characterized by increased demands on the students. Every student who has started his education at the Medical College has the opportunity for successful professional realization which is motivation to acquire the most of the educational content and its realization depends on the quality of teaching. The better the college preparation is, the more opportunities for successful professional realization there is. The independent work at the Medical Collage is characterized by big diversity in terms of form and content, but the students participation in the extra-auditorium independent activities is not sufficient and the forms are quite identical.

The extra-auditorium activity is planned by the teacher, but is based on the student's self-organization and self-control, on their active behavior and it leads to professional formation and development. Although it is not directly supervised, it is planned and managed by the teacher through targeted explanations for its planning.

It is a huge mistake when the extra-auditorium independent work is not controlled and evaluated. The teacher as a professional shall take into consideration the individual abilities of his students and to choose the most suitable form of independent work.

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