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MEDICAL EDUCATION: STRENGTHENING THE INTEGRATION OF PRACTICE AND RESEARCH PROCESS

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Abstract. The article discusses issues related to the practice and research activities of students, which is one of the urgent problems of medical education. Tasks on the methods of retrospective analysis are highlighted to enhance students' interest in scientific activities during the internship. The data of the retrospective analysis were discussed and, according to these results, the increase in the effectiveness of practical activities was assessed during the process.

Keywords: medical education, practice, scientific activity, retrospective analysis, integration, risk factors.

Introduction. Reforming the system of higher education, including medical, is focused on studying the paradigm of education, the main goal of which is the formation of a competently motivated student's ability to carry out active educational, self-educational, practical and scientific activities [6,12].

The modern educational system in medical higher educational institutions should be focused on strengthening the role of practice and science. At the same time, the issues of high-quality passing of educational and industrial practices with an assessment of the effectiveness of scientific and professional tasks being solved require special attention [4,5].

The success of scientific activity depends on the motivation of students and teachers for mutual understanding and close cooperation, the integration of students' knowledge with the experience of using modern pedagogical technologies in the process of mastering academic disciplines, passing educational, scientific and industrial practices [9].

To date, science has accumulated a sufficient fund of knowledge necessary to solve the scientific problem of the formation of professional competence of students - future doctors in the process of industrial practice [1,6]. The analysis of modern research on the problems of medical education testifies to the growing interest in the problem of the formation of professional and personal qualities of a specialist as a result of educational processes carried out in certain organizational and pedagogical conditions. Work was devoted to solving the problem of the unity of professional and personal development, where approaches to improving the practical training of a future specialist are considered [5,8].

Analysis of existing pedagogical approaches to determining the conditions for the formation of professional competence of future specialists made it possible to draw a conclusion about the insufficient elaboration of the issues of using the possibilities of students' industrial practice in clinics [7,13].

The formation of the professional orientation of the future doctor in the process of passing industrial practice is successful when integrating the educational material of practical training with the educational and research activities of students [1,2].

The modernization of educational systems actualizes the need for continuous improvement of the training of medical personnel in medical educational institutions. Their insufficient competence and, as a consequence, the lack of professional mobility actualize the issues of creating an integral system of education quality by strengthening the role of independence and active cognitive activity of students, especially during the period of various types of practice. The growth of scientific interest in this problem is due to the presence of a number of objective problems in the organization of practical, student activities, carried out on the basis of medical institutions [10].

Treatment and prophylactic institutions, which are the basis for the practical training of specialists and implement a professional-adaptive functions, act as a kind of training ground where students develop their abilities, improve professional knowledge, acquire the necessary practical and scientific research skills, master the experience of collective interaction and individual responsibility for the results labor, master deontological and sociocultural norms [5,9].

The revealed contradiction made it possible to formulate the research problem, which consists in the search for scientific-theoretical and organizational-methodological approaches to the formation of a productive clinical experience in the conditions of combining the scientific approach of teaching with the practical professionally directed activities of students [3,12].

Purpose of the study: involvement of students in the research process during practical training and teaching methods of retrospective analysis (for example, diseases of the gastrointestinal tract)

In recent years, an increase in the number of patients with diseases of the gastrointestinal tract has been noted in the world. The prevalence among adults over the past 10 years has increased by 1.5 times, in addition, it has significantly "younger", the average age since the diagnosis has decreased from 55 to 35 years, the proportion of women has increased by 15%. Diseases of the gastrointestinal tract are characterized by alternating periods of exacerbation and remission. Patients are mainly worried about abdominal pain, dyspepsia, and also, there are motor disorders of the intestine, weight loss. Complications can arise at any stage.

In addition, various causes and risk factors are very important, such as: unhealthy diet; alcohol and smoking abuse; stress, inflammation; connective tissue diseases; side effects from taking medication; trauma; hereditary metabolic disorders.

Materials and research methods. During the practice, each group of students was given separate tasks for retrospective analysis: to analyze data on lifestyle, diet, working and living conditions, past and concomitant diseases,

The material of the study was the patients of the clinics of the Tashkent Medical Academy treated for exacerbation of diseases during 2019-2021. The study involved 607 patients. All examined patients were divided into two groups. The first

group consisted of 362 (59.6%) female patients and the second group - 245 (40.4%) male patients. The average age was 46.7 ± 2.4 years.

Results and discussion.

Data of the first group of students: As a result of a retrospective analysis, it was revealed that the duration of the disease - 5 years or more was noted in 546 patients (90%), 1-2 years in 43 patients (7%) and up to a year - in 18 patients (3%), which characterizes the need for inpatient treatment of patients with a history of long-term illness.

All patients underwent an assessment of their social status and lifestyle.

By education, the first and second groups of patients with higher education were 25 (10.2%) and 25 (6.9%), respectively. The number of people with secondary education was 3 times more than with higher education. 80% of patients in both groups were temporarily unemployed and retired.

The active lifestyle among patients was 78 patients in the first group (21.6%) and in the second group 167 patients (68.1%), physical inactivity was observed more often in the first group - 284 patients (78.4%).

Data of the second group of students: In group I, inappropriate nutrition was observed in 340 patients (93.9%) and in group II - in 228 patients (93%). The most frequently consumed food among patients was characterized with a predominance of fatty foods in the first group, spicy foods in the second group, salinity in the second and flour products in the first group (Table 1).

Table 1

The nature of the diet of patients with chronic pancreatitis

Indicators	First group		Second group		P
	aбс	%	aбс	%	
Fatty food	337	93,1	93	38,0	P<0,001
Spicy food	121	33,4	179	73,1	P<0,001
Salinity	205	56,6	184	75,1	P<0,001
Flour products	107	29,6	205	83,7	P<0,001
Meat products	134	37,0	211	86,1	P<0,001
Sweets	98	27,1	74	30,2	P>0,05
Carbonated drinks	87	24,0	168	68,6	P<0,001
2-3 meals a day	333	92,0	128	52,2	P<0,001
4-5 meals a day	17	4,7	47	19,2	P<0,001

Data of the third group of students: in determining risk factors such as alcohol consumption and smoking in the first group was observed in 5 patients (1.4%) with an experience of 5 to 20 years and in 11 patients (3.0%) with a duration of more than 10 years, respectively. (Table 2).

table 2

Features of the working and living conditions of patients were most often associated with the following factors

Indicators	First group		Вторая группа		P
	abs	%	абс	%	
Psycho-emotional stress	319	88,1	213	86,9	P>0,05
Exercise stress	1	0,3	42	17,1	P<0,001
Mental stress	27	7,5	18	7,3	P>0,05
Sedentary image	54	14,9	72	29,4	P<0,001
Contact with animals and birds	33	9,1	81	33,1	P<0,001
Dust contact	94	26,0	153	62,4	P>0,05
Contact with chemicals	13	3,6	48	19,6	P<0,001
Household work	57	15,7	175	71,4	P<0,001
Housework	21	5,8	7	2,9	P>0,05
Hypothermia	68	18,7	33	13,4	P>0,05

In the second group, alcohol consumption was observed - 49 patients (20%), of which 42 patients (17.1%) had less than 10 years of experience, 7 patients (2.8%) had chronic alcohol consumption, smoking - 105 patients (42 , 8%), with experience from 3 to 25 years.

Among patients of groups I and II, psychoemotional stress was observed most often, mental stress was in equal proportions. Indicators like household chores and hypothermia prevailed in the first group, other working conditions such as physical activity, sedentary work, contact with animals, dust and chemicals and household chores were most common in patients of the second group.

Data of the fourth group of students: in all patients, on the basis of anamnesis, physical and laboratory-instrumental examination, diseases of various organs and systems were revealed. When assessing concomitant diseases in group I, the most common were chronic gastritis, chronic cholecystitis, condition after CEK, in group II - gastric ulcer, liver cirrhosis, irritable bowel syndrome. Other diseases were observed in equal proportions without sharp fluctuations (Table 3).

Table 3

Past and concomitant diseases of patients with CP.

Indicators	First group		Second group		P
	abs	%	abs	%	
ARI, ARVI	360	99,4	241	98,4	P>0,05
Hepatitis A	40	11,0	25	10,2	P>0,05
Hepatitis B	13	3,6	10	4,1	P>0,05

Hepatitis C	1	0,3	2	0,8	P>0,05
Chronic gastritis	210	58,0	114	46,5	P<0,01
Peptic ulcer 12.p. to.	46	12,7	61	24,9	P>0,05
Gastric ulcer	4	1,1	2	0,8	P>0,05
Chronic cholecystitis	214	59,1	113	46,1	P>0,05
Cholelithiasis	5	1,4	4	1,6	P>0,05
Cirrhosis of the liver	1	0,3	5	2,0	P>0,05
Condition after HEC	13	3,6	2	0,8	P>0,05
Diabetes	5	1,4	3	1,2	P<0,05
Irritable bowel syndrome	5	1,4	17	6,9	P>0,05
Coronary heart disease	22	6,1	15	6,2	P>0,05
Hypertonic disease	43	11,9	30	12,2	P>0,05
NDC	178	49,2	145	59,2	P<0,05
Chronic pyelonephritis	11	3,0	7	2,9	P>0,05

Data of the fifth group of students: the first time the diagnosis was made by specialists such as a general practitioner, therapist, surgeon and gastroenterologist: in the first group - 20 (5.52%), 151 (41.7%), 11 (3.0%) and 92 (25, 4%), in the second group - 12 (4.9%), 128 (52.2%), 5 (2.0%) and 75 (30.6), respectively, in groups I and II - 88 patients (24 , 3%) and 25 patients (10.2%) were diagnosed by other specialists.

The frequency of referrals during the year averaged once a year - 18.5%, 2-3 times a year - 51%, 3-4 times a year 28.5%, more than 6 times - 2%.

The results were discussed with a group of students and recommendations were made on statistical analysis skills. During the practice, the skills of patient management and medical care were observed. Based on the work done by each group and the results obtained, students' recommendations were formed. After the discussion, the students gave clear advice in the process of admitting patients who applied to the clinic. At the same time, the group curators emphasized the development of the ability to ask targeted questions when collecting a rational anamnesis.

Conclusion. The quality of training of specialists is in direct proportion to the level of knowledge gained in the process of theoretical training, the acquisition and consolidation of practical and scientific skills obtained during training and industrial practices in leading medical institutions and at clinical sites. The latter play a leading role in the preparation and adaptation of students to further professional medical activity.

Practical training in the educational process consists in conducting practices in accordance with curricula and programs in the relevant areas of specialist training. This stage is considered as important for consolidating theoretical and scientific knowledge.

The effectiveness of practice depends on the correct implementation of forms and methods of theoretical, scientific, practical training of students: high-quality fulfillment of the requirements of industrial practice; support of students in scientific and practical conferences, initiative in solving practical problems and a scientific approach to family practice.

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