



**I.K.AKHUNBAEV KYRGYZ STATE
MEDICAL ACADEMY**

**ANALYTICAL REPORT ON THE
QUALITY ASSESSMENT OF THE EDUCATIONAL
PROCESS AT THE I. K. AKHUNBAEV KYRGYZ
STATE MEDICAL ACADEMY**

(2018)

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The report was prepared by a working group set up by the Rector of KSMA No. _ _ _ of 2017 with the technical support of the Swiss Embassy project "Medical Education Reforms in the Kyrgyz Republic".

Composition of the working group:

G. A. Dzhumaliev-KSMA Vice-Rector for International Relations and strategic development

Stambekova K. N.-Head of the educational and methodical department of KSMA

A. Zh. Sultashev – Head of the Department of Education Quality Management

U. Mukambetov-Leading specialist of the Center for Clinical Skills Development and Knowledge Assessment

Ismailova Zh. S. - Consultant of the project " Medical education reforms in the Kyrgyz Republic»

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INTRODUCTION

As part of the implementation of the "Strategy for the Development of Education in the Kyrgyz Republic" and the "Plan for the Implementation of the Education Strategy in the Kyrgyz Republic for 2012-2020", with the technical support of the Swiss Bureau for Development and Cooperation (SDC), the I. K. Akhunbaev Kyrgyz State Medical Academy (KSMA) is carrying out activities on the reform of medical education. The state educational standard for the specialty "Medical Care" has been revised, training programs have been developed with a focus on training a general practitioner, and a catalog of competencies of a graduate of the faculty of "Medical Care" has been developed.

State Educational Standards (SES) for specialties were revised and approved in 2015, while SES 560001 Medical Care was revised as part of a pilot implementation in 2012. In 2018, it was expected to graduate students who studied under the State Educational Standard in 2012. The introduction of the new state educational standard provided for an increase in training hours for clinical practice, a transition from the subject-based method of training to problem-oriented (integrated) training, and the decentralization of industrial practice.

In 2009, KSMA started creating a quality management system (QMS) based on the international standard ISO 9001, taking into account the recommendations of the European Association for Quality Assurance in Higher Education (ENQA). One of the principles of internal quality assurance of higher education is to improve the quality of educational programs implemented on the basis of regular monitoring and evaluation of the educational process at the university.

In order to improve the quality of the educational process at KSMA and evaluate academic programs in various specialties, as well as the State Educational Standard of 2012, various types of assessments were conducted in the 2017-2018 academic year: assessment of the personnel potential of KSMA; assessment of students' satisfaction with the quality of educational programs and the organization of the educational process, including the satisfaction of graduate students (6th year). In addition, an analysis of the academic performance of students of medical faculties of KSMA and the effectiveness of management and support services was carried out.

This report presents the results of the conducted assessments, conclusions and recommendations for improving the quality of the educational process in KSMA.

The presented results are aimed at improving the quality of the educational process in KSMA and are primarily a tool for determining the areas of application of efforts for the development of KSMA, and should not be used as a tool for punishment.

1. EVALUATION OF THE EDUCATIONAL ENVIRONMENT AND SUPPORT SERVICES

1.1. Evaluation of management effectiveness

Implementation of the main activities of KSMA and faculties is carried out through the development, approval and implementation of the strategic development plan of the university, work plans of structural divisions, faculty and departments.

Documents that provide long-term planning for the development of KSMA include::

- Development strategy of I. K. Akhunbaev KSMA for 2010-2020
- KSMA Development Strategy Implementation Plan for 2017-2020
- Annual plan for the implementation of the KSMA Development Strategy.
- Annual Academic Council work schedule
- Annual calendar plan of work of the Rectorate Council
- Annual work schedule of the Faculty Academic Council
- Annual work schedule of the Academic Council for Science
- Annual calendar plan of work of the Scientific and Technical Commission
- Annual calendar plan of work of the Council for the Quality of Education
- Annual work schedule of the Main Educational and Methodological Committee
- Work plans of structural divisions;
- Work plans of deaneries and departments;

Strategic and annual plans of the KSMA are developed within the framework of the implementation of the Concept for the Development of Education in the Kyrgyz Republic until 2020, the Strategy for the Development of Education in the Kyrgyz Republic, the Plan for the Implementation of the Strategy of Education in the Kyrgyz Republic for 2012-2020 and the three-year Action Plan for the implementation of the Strategy of Education in the Kyrgyz Republic for 2018-2020.

The development strategy of I. K. Akhunbaev KSMA for 2010-2020, developed and approved on December 25, 2009 by Rector A. Z. Zurdinov, and contains 10 strategic directions (published on the KSMA website: <https://kgma.kg/>). In 2017, the KSMA Strategy was supplemented with new tasks and a Plan for its implementation for 2017-2020 was developed. The main goal of the Strategy is international recognition and support of the image as a flagship of medical and pharmaceutical education in the Kyrgyz Republic.

Approaches to the development of plans have been changed based on the implementation of the following principles::

1. *Event specifics:*

- excluded activities formulated as goals and objectives;
- activities that are functional responsibilities of officials are excluded;
- activities that are the responsibilities and functions of structural divisions are excluded;
- excluded are activities that do not lead to a specific result of solving the problem.

2. *Structure and focus:* activities are planned according to the objectives of strategic directions.

3. *Measurability:* the expected results and indicators are indicated (to track the progress and effectiveness of the implementation of activities).

4. *Informative value:* specify deadlines for execution, responsible performers, and expected sources of funding.

5. *Accessibility for wide discussion:* the draft is published on the KSMA website, and a hard copy is distributed to interested parties.

The mission of KSMA is to meet the needs of students in obtaining high-quality education, training specialists in accordance with international standards, and meeting the needs of the state and society in providing highly qualified specialists. The KSMA mission is published and available on the website <https://kgma.kg/>.

In order to create a successful educational environment and increase the attractiveness of educational programs, procedures for managing all types of activities have been developed in accordance with the requirements of the QMS, and there is a database of regulatory and instructional documents of the Ministry of Education and Science of the Kyrgyz Republic and the Ministry of Health of the Kyrgyz Republic.

Documents on the organization and management of academic, scientific and extracurricular activities are developed by departments that directly use them in their

work. Documents are developed in accordance with the requirements of the quality management system.

The effectiveness of the management organization in KSMA is ensured by a mixed model with strict vertical interaction between senior managers, middle managers and subordinates. For each target program, responsible performers are assigned in linear-functional blocks, which are in double subordination: vertically - to the head of the corresponding organizational complex, and horizontally-to the target manager (the organizational structure of the KSMA is based on the following criteria).*See Appendix 1).*

Differentiation of functional responsibilities of managers allows to achieve effective organization of work, implementation of the set strategic goal of the university and fulfillment of tasks facing the team.

In the course of carrying out its educational, scientific and extracurricular activities, KSMA is guided by the legislative acts of the Kyrgyz Republic regulating the activities of educational organizations and internal regulatory documentation (regulations, orders, orders).

In order to create a successful educational environment and increase the attractiveness of educational programs, a process model was developed in accordance with the requirements of the QMS (Figure 1.1), the main and auxiliary management processes, responsible persons and structural divisions were identified (Table 1.1.).

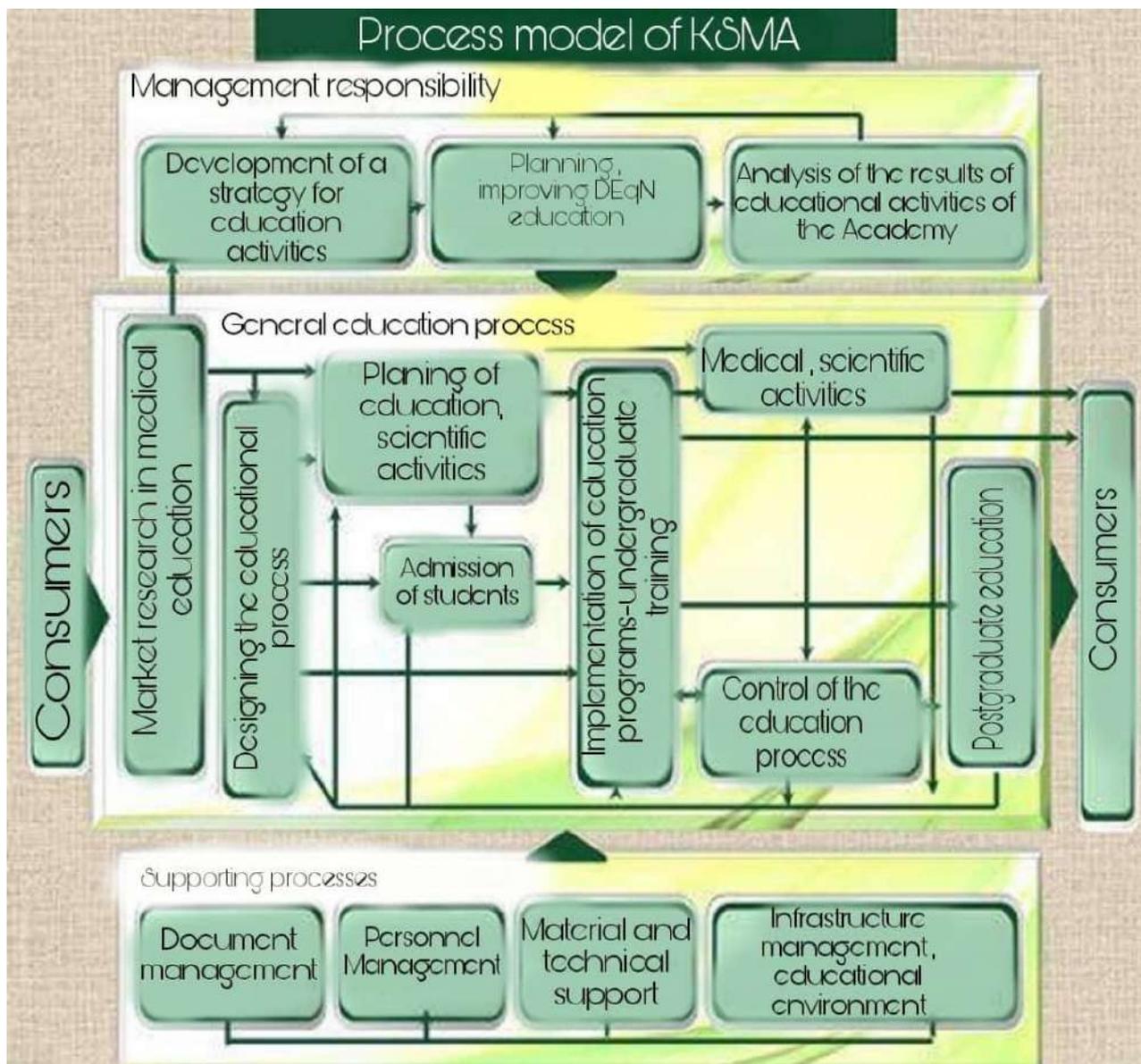


Fig. 1. 1. KSMA process model

Table 1.1. Register of processes of the Educational quality management system of the I. K. Akhunbaev KSMA

Main processes	Process Manager	Responsible structural divisions	Departments involved in the process

"Medical education market Research and customer satisfaction analysis"	Vice-Rector for Research and Medical Work	Quality Management Department	Department of International Relations, Deans ' Offices, Faculty of International Relations, graduate Departments
"OOP design and development"	Vice-Rector for Academic Affairs	Educational and Methodological Department	Profile committees, deans ' offices, departments
Implementing OOP	Vice-Rector for Academic Affairs	Educational and Methodological Department	Deans ' offices, departments, Library, Software and System Support Department,
4. "Scientific and innovative, medical activities and training of highly qualified personnel"	Vice-Rector for Research and Medical Work	Department of Scientific and Clinical Work	Center for Advanced Training and Continuing Education, DESCB, ITRCBMR, ULNMC, VNLUC, Departments
5. "Pre-university training"	Director	of the Pre-university Training Center Pre-university Training Center, Medical School	Lyceum, Medical

school 6. "Admission of students"	Chairman of the Admissions Committee	Admissions Committee	Deans ' offices, student office management sector
7. "Postgraduate education"	Vice-Rector for Research and Medical Work	Faculty of Postgraduate Education	Dean's Office of the Faculty of Postgraduate Education, Department
8. "Control of the educational process"	Vice-Rector for Academic Affairs	Educational and Methodological Department	EMD Sectors, Quality Management Department, Student Office Management Sector,
			deans ' offices, departments
9. "Educational and extracurricular work with trainees"	Vice Rector for Educational Work and State Language	Department of Educational and Mass Organizational Work	Deans, departments, curators, state language Sector, Department for Anti-terrorist work and Civil Defense
10. "Strategic planning and International activities"	Vice Rector for International Relations and Strategic at Planning	Quality Management Department, International Relations Department	Structural divisions, deans ' offices, departments

Auxiliary processes	Lead the process	Responsible structural divisions	Departments involved in the process
1. "Human Resources management"	Head of the Legal and Human Resources Department	Legal and Human Resources Department	EMD, Department of Financial and Economic Work, Department of Scientific and Clinical Work, Center for Advanced Training and Continuing Education
2. Documentation and Information Environment Management	Head of the General Department Press Secretary	General Department, Press Service	Archive, Department of Legal and Personnel Work, deans ' offices, structural divisions, editorial and publishing Department, Software and System Support Department, Library
2. "Infrastructure and Production Environment management"	Head of Administrative and Economic	Department of Financial and Economic Work and Accounting,	Procurement and Material Support Sector, structural divisions, Center

	working	production a- operation naya service,UMO	developed in foreign languages, student's language gorodok, Wudenchesky campus "Tash-Dobo», software anti-terrorist organization work and civil service defense
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In order to ensure the collegial management of the educational process, the following public bodies function in the KSMA:

- in terms of teaching, research, methodological work, recruitment and training of scientific and pedagogical personnel-the Academic Council;
- in terms of making operational decisions in all areas of activity - the Rector's Council;
- in terms of ensuring the quality of educational activities – Council for the Quality of Education, CMO;
- in terms of organizational activities - the Board of Trustees; □ in terms of financial activities - the Finance Committee.

The Academic Council is the highest public and professional management body of KSMA. The main task of the Academic Council is to consider the main issues of the Academy's activities and unite the efforts of the entire team to implement the decisions of the Government of the Kyrgyz Republic, the Ministry of Education and Science of the Kyrgyz Republic and the Ministry of Health of the Kyrgyz Republic to ensure high-quality training of specialists. In its work, the Academic Council is guided by the laws of the Republic, regulations of the Ministry of Education and Science of the Kyrgyz Republic, the Charter of the KSMA, the Regulations on the Academic Council of the KSMA. The Academic Council is elected from among the heads of structural divisions, highly qualified teachers, and student assets. The work of the Academic Council of KSMA is organized according to the plan, which is approved at the last meeting of the Academic Council in the academic year. Meetings are held monthly (except: February, July, August) on the last Friday of the month.

Operational issues that reflect various areas of KSMA's current activities and are not included in the Academic Council meeting plan are considered at meetings of the Rectorate Council, which includes heads of departments of the university. Rectorate meetings are held monthly (except: June, July, August) on Thursday of the second week of the month. Its work plan covers the entire complex of operational problems of the KSMA.

Certain issues related to educational and methodological work are discussed in advance at the conference. **Faculty Academic Council** (Chairman-Vice-rector

for Academic Affairs, Secretary). The Faculty Academic Council consists of all head teachers of departments. Meetings are held monthly (except in the summer months) on Thursday of the 3rd week of the month.

Questions related to scientific research work are discussed at the conference. *Scientific Council for Science* (Chairman-Vice-rector for Clinical and Scientific Work, Secretary-Head of the Department of Scientific innovation and Clinical work). The Academic Council for Science includes all heads of departments of KSMA. Meetings are held monthly (except for the summer months and April – Science Days)

The Rectorate Council is a consultative and advisory collegial body that considers issues related to the organization and implementation of educational, scientific, medical, financial, economic and economic activities of the Academy. The work of the Rector's Council is regulated by the Regulations on the Academy's Rector's Council approved by the Rector. Meetings are held monthly (except in the summer months) on Thursday of the second week of the month.

The Council for the Quality of Education is a collegial advisory body functioning on a voluntary basis, whose main activities are to determine and update the goals and policies in the field of quality, plan and coordinate work on the creation, implementation and improvement of the Academy's quality management system, and address some fundamental issues of its development. Meetings are held monthly (except in the summer months) on Thursday of the second week of the month.

Meetings are held regularly, once a month *The Main Educational and Methodological Committee* of the KSMA. The activity of MEMC covers the main problems of methodological support and improvement of the educational process, generalization and dissemination of best practices in the organization and improvement of educational and methodological work, the introduction of new training technologies. Meetings are held monthly (except during the summer months.) Tuesday of the third week of the month.

The Board of Trustees is a co-management body of a state institution that does not have the status of a legal entity and is formed in accordance with the procedure established by the Law of the Kyrgyz Republic **About the Board of Trustees** of May 30, 2014 No. 81. The purpose of the Council is to promote the improvement of the quality of services provided, transparency of the activities of social institutions, as well as the efficiency of the use of extra-budgetary funds.

The Council formed in accordance with Chapter 2 of the Law of the Kyrgyz Republic "ABOUT the Board" from among the able-bodied citizens of the Kyrgyz Republic, with experience in social institutions, or social activities and business representatives, scientific and educational organizations, cultural institutions and social

sector, non-governmental and international organizations, representatives of commercial and non-commercial organizations, student and parent associations.

The Finance Committee is a recommendation and advisory body. The purpose of the finance committee is to ensure maximum transparency and transparency in the planning, distribution and use of budgetary and extra-budgetary financial resources of the KSMA. Meetings are held as required.

Pre-graduate training is handled and supervised by the Vice – rector for Academic Affairs, post-graduate training-by the Vice-rector for Scientific and Clinical Work and the Dean of the Faculty of Postgraduate Medical Education (FPME).

Planning, organization of the educational process, control of educational and methodological work and assessment знаний of students' knowledge is carried out by Educational and Methodological Department (EMD) of the Academy under the supervision of the head of the department.

The EMD consists of: (1) the sector for planning, implementing and providing methodological support for educational programs, (2) the sector for organizing the educational process, and (3) the Center for Clinical Skills Development, Knowledge Assessment and Industrial Practice (CCSDKAIP).

Since 2010, educational and methodological profile committees (EMPC) have been established and are working in specialties, which include specialists of departments, UES and UCS coordinators, course coordinators for modules.

Since 2012, the introduction of electronic office management using AVN software was launched, the modules "Admissions Committee", "Personnel Department", "Student Personnel Department", "Distance Learning", partially "Training Department" and "Deans' offices" were introduced. However, the following modules have not yet been implemented: "International Department" "Accounting" and "Student Performance".

1.2. KSMA infrastructure Assessment

KSMA has its own material and technical base for high-quality training of specialists, as well as a campus for students to live on. The total area of the Academy is about 20.8 hectares (built-up area of 3.15 ha), on which are located: 6 educational buildings; 6 hostels, Center for development of clinical skills, assessment of knowledge and practice, Dental educational scientific clinical, Educational and medical research medical center, the campus Tash-Dobo, High scientific and medical training center. Raimzhanova, Educational sports and recreation center "Ak-Bulun" (Ak Bulun village, Issyk-Kul region). The total area of its own premises is 70113.0 sq. m. In addition, on the basis of contracts concluded with 27 healthcare organizations, there are training facilities with a total area of 7 063.41 sq. m. On the basis of operational management rights, there are educational premises with a total area of 7 063.41 sq. m.

There are 9 square meters or more per 1 (one) student, which meets the license requirements.

33 lecture halls are involved in the educational process, laboratory and practical classes are held in 525 classrooms (Figure 2), both in their own educational buildings and at the clinical bases of healthcare organizations in Bishkek.

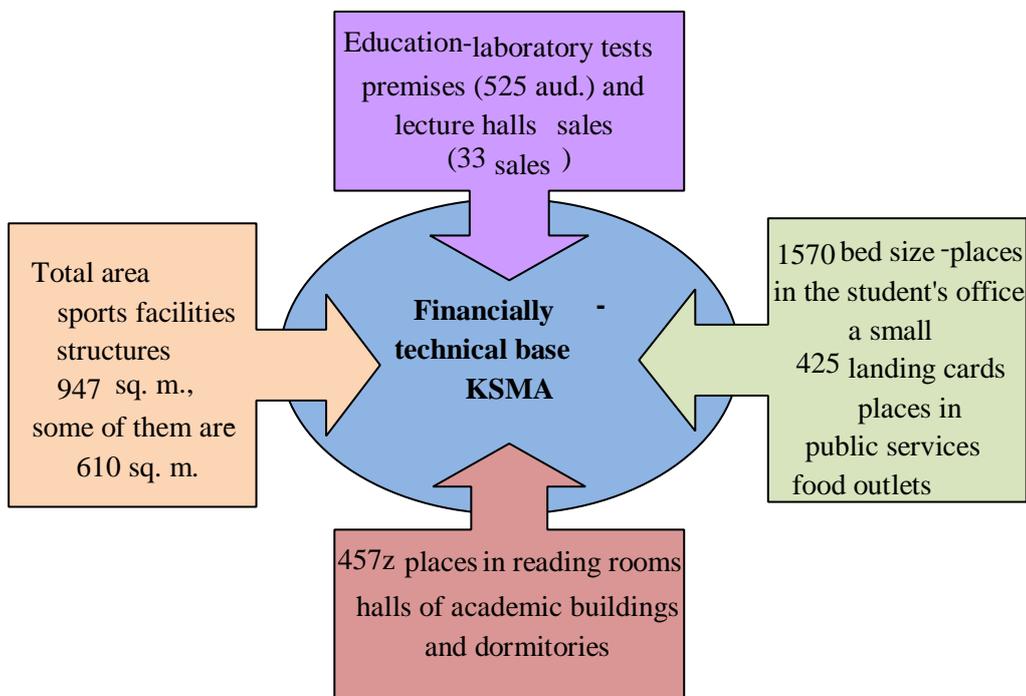


Fig. 1. 2. Material and technical base of KSMA

The departments have 668 computers, 180 laptops, 154 portable projectors, and 2 interactive whiteboards. All computer classes have a local network that allows you to connect to the global Internet via a server. The department of distance learning is equipped, software "Doodle" and "Moodle" are installed for conducting remote classes with students in the regions.

Clinical bases for the KSMA are both health organizations in Bishkek, all health organizations at the republican level, and health organizations in the regions. A total of 148 clinical databases (*Appendix 2*), of which 72 are located in Bishkek and 76 in the regions.

1.3. Evaluation of the book availability of the educational process

The provision of students with educational and methodical literature in their specialties is 1 textbook per student for compulsory subjects and methodological manuals, and for additional literature-also 1 textbook per student.

In the library, readers are served at 5 book delivery terminals, 5 reading rooms with 317 seats, and 3 electronic resource rooms with 35 seats.

The book collection of the library is more than 556 thousand copies, the electronic resources of the library is 4241 units.

According to the computer database of the library fund, the availability of books with hard versions of textbooks on subjects was 50%. This is due to the fact that only textbooks starting from the year 2000 were entered in the computer database, and the entire library fund was not included.

Table 1.2. KSMA Electronic Library Resources

Type of electronic resources	2015	2016	2017	2018
Books in electronic format	1610	1713	2518	2603
Educational materials	606	765	1060	1095
Materials, appendices to textbooks and magazines on CD, DVD-disks	165	216	373	388
Videos	-	-	152	155
TOTAL:	2381	2694	4103	4241

In order to automate such library processes as acquisition, systematization, cataloging, reader search, book issuance and administration, the automated library system "IRBIS64" is implemented, the modules "Reader" and "Book Issuance" are used, the database "Reader" is created.

Reading rooms with 180 seats are organized in the dormitories of the campus.

Since 2015, the official website of the Academy's library <http://library.kgma.kg/>, where provided access to the electronic library catalog, the database of teaching AIDS and lectures in online mode, the following electronic resources: clinical protocols, guidelines from the Ministry of health, training courses Kyrgyz research and education computer network KRENA, Corporate abstract repository, Kyrgyz Virtual Scientific Library www.kyrgyzstanvsl.org, Russian Scientific Electronic Library, eIFL electronic Resources, Polpred.com.

Every year, the teaching staff publishes educational and methodological developments and other publications, including in English and Kyrgyz.

Table 1.3. SWOT analysis of the effectiveness of educational process management

Strengths (<i>S-strengths</i>)	Weaknesses (<i>W - weaknesses</i>)
<p>1. Availability of organs of collective management ;</p> <p>2. functional nature of the two-level management system, which provides operational management with a certain degree of autonomy and corresponding responsibility of structural divisions</p> <p>3. the organizational structure of KSMA does not allow duplication or "falling out" of the scope of management functions regulation;</p> <p>4. mobility of the management system with a certain degree of performance of certain functional responsibilities;</p> <p>5. strengthening of the position in the market of educational services</p>	<p>1. Management quality policy is not defined of KSMA education;</p> <p>2. Не определены цели Quality goals are not defined .</p> <p>3. AVN modules are not fully implemented, which does not allow you to fully launch electronic office management.</p> <p>4. Not all participants in the educational process are highly motivated to achieve a new quality level of the educational process.</p> <p>5. The lack of its own multidisciplinary clinical base and the growing autonomy of healthcare organizations creates a shortage of places for practical training in Bishkek;</p> <p>6.</p>
Opportunities (<i>O - opportunities</i>)	Threats (<i>T - threats</i>)
<p>1. the possibility of developing the KSMU infrastructure;</p> <p>2. integration into the global educational space through the development of academic mobility of students and teaching staff.</p> <p>3. growing interest in vocational education from international foundations</p> <p>4.</p>	<p>1. change of management;</p> <p>2. insufficient funding from the state;</p> <p>3. A conservative approach. employees and teachers in relation to the introduction of modern management and training methods;</p> <p>4. Fierce competition of higher education institutions in the country, due to dumping of tuition fees;</p>

CHAPTER 2. ASSESSMENT OF THE KSMA HUMAN RESOURCES POTENTIAL

KSMA trains full-time specialists on a budget and contract basis at 8 faculties and 58 departments.

The total number of full-time teachers of the teaching staff of KSMA is 1103 people, including 663 full-time (main employees), which is 60.1 %. The share of full-time teachers in the total number of teachers of the educational program under license requirements must be at least 70%.

Taking into account the student body (6534 in total), there are 9.8 students per full-time teacher, i.e.-10:1 (and including freelance teachers-6:1), which corresponds to the minimum licensing requirements – no more than 12:1.

Currently, KSMA employs 62 full-time doctors of sciences, 228 candidates of Sciences, 5 academicians and 2 corresponding members of the National Academy of Sciences of the Kyrgyz Republic, 40 full-time professors, 124 full-time associate professors.

The share of full-time teachers with an academic degree and / or academic title in the total number of students is 45.5%, which meets the licensing requirements - at least 40%. Detailed information on departments is provided in *See Appendix 3*.

Professional development of teaching staff is carried out within the framework of continuing postgraduate education both in specialty courses and in pedagogy courses. For this purpose, the KSMA has a Center for Advanced Training and Continuing Education. Training is conducted according to a plan that is drawn up and approved for each academic year. The plan is formed on the basis of an analysis of the completion of teaching staff courses and submitted applications from departments. In addition, within the framework of academic mobility of teaching staff, training is conducted at various courses, seminars, trainings, as well as professional congresses, congresses, and symposiums abroad. Thus, in 2017-2018, 105 teachers studied and / or exchanged experience abroad. More than 140 teachers of KSMA completed advanced training courses for the 2017-2018 academic year. Within the framework of the project "Reforms in medical education", a number of training seminars were also held for teaching staff to increase the capacity of KSMA teaching staff.

In order to increase the motivation of teachers to improve the quality of teaching, KSMU developed and implemented a rating assessment of the activities of KSMA teaching staff, aimed at recognizing the academic performance of employees, their scientific achievements and pedagogical qualifications.

One of the main objectives of such an assessment is to improve the quality of work of a particular teacher and, through this, achieve broader goals – to improve the quality of educational programs and the new quality of educational activities of the academy.

The rating assessment of the activity of teaching staff consists of three main indicators::

1. Self-assessment results;
1. Students 'satisfaction with the quality of teaching academic subjects and professional skills of the teacher -" Teaching staff through the eyes of students»;
2. Results of certification (expert assessment).

This report presents the results of the self-assessment of teaching staff and "Teaching staff through the eyes of students" conducted in 2018.

2.1. Self-assessment of the teaching staff (2018)

Due date: March 2018

Subject of assessment: KSMA faculty members

Subject of assessment: quality of teaching academic subjects and professional skills of KSMU teachers.

Sample: 927 teachers (57 departments) participated in the assessment, including both main and part-time teachers.

Assessment method: self-assessment using Questionnaires.

Two electronic forms of self-assessment of teaching staff (Questionnaires) were specially developed for conducting the self-assessment of teaching staff.):

1. Self-assessment form for teaching staff of clinical departments;
2. Self-assessment form for teaching staff of theoretical departments.

Self-assessment of the quality of professional activity of teaching staff was carried out in the following blocks of teaching staff activity:

- I. Qualification potential (title, degree, etc.);
- II. educational, organizational and methodological work,
- III. research work;
- IV. providing consultative and methodological assistance to practical healthcare;
- V. medical and diagnostic activities (for clinical departments);
- VI. educational and socially significant activities, image of KSMA.

Method of collecting information: Each teacher independently filled out an electronic form. The Department of Education Quality Management of KSMA received an electronic version of the completed form by e-mail, and a hard version (printed on paper) signed by the teacher and the head of the department with supporting documents.

The assessment was made for each criterion, for which a certain score was assigned in the range from 5 to 50 points, depending on the significance of the criterion. The final assessment of the teacher's activity was derived by simply summing up the points. To assess the rating of teaching at the department, an average score was calculated.

The following values were set as the interval rating scale:

1. for theoretical departments:

- low rating – up to 280 points; □
- middle rating - from 280 to 400 points;
- high rating: over 400 points.

2. for clinical departments:

- low rating-up to 2400 points; □ average rating - from 2400 to 4500 points; □ high rating: over 4500 points.

Feedback: The results of the self-assessment of teaching staff were discussed at a joint meeting of the Rector's office and the department. The overall final report is considered at a meeting of the Council for the Quality of Education. The printed version of this final report will be presented to all structural divisions of the KSMA.

Self-assessment results

As a result of the self-assessment, which involved 23 theoretical departments (322 employees) and 34 clinical departments (605 employees), it was found that most of the departments rated themselves low (Figure 3). Thus, among the low – rated theoretical departments there were 14 departments (60.9%), with an average rating-7 departments (30.4%) and with a high rating there were only 2 departments (8.7%). Among the clinical departments with a low rating-22 departments (64.7%), with an average – 7 departments (20.6%) and with a high rating score there were only 5 departments (14.7%).

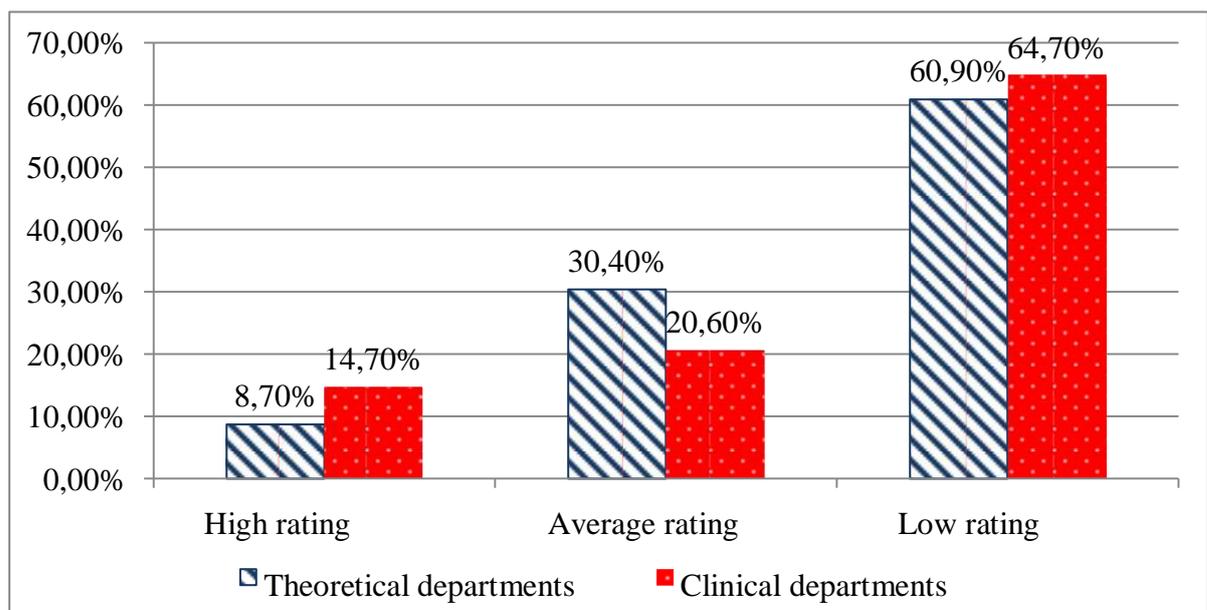


Figure 2.1. Comparative assessment of rating indicators of theoretical and clinical departments of KSMA for the 2017-2018 academic year

When analyzing the blocks of professional activity of teaching staff of departments, according to the results of self-assessment, it was found that in the block of educational, organizational and methodological work, theoretical and clinical departments rated themselves at approximately the same level (Figure 2.2.). Obviously, this is due to the fact that there are established norms of loads for educational, methodological and organizational work.

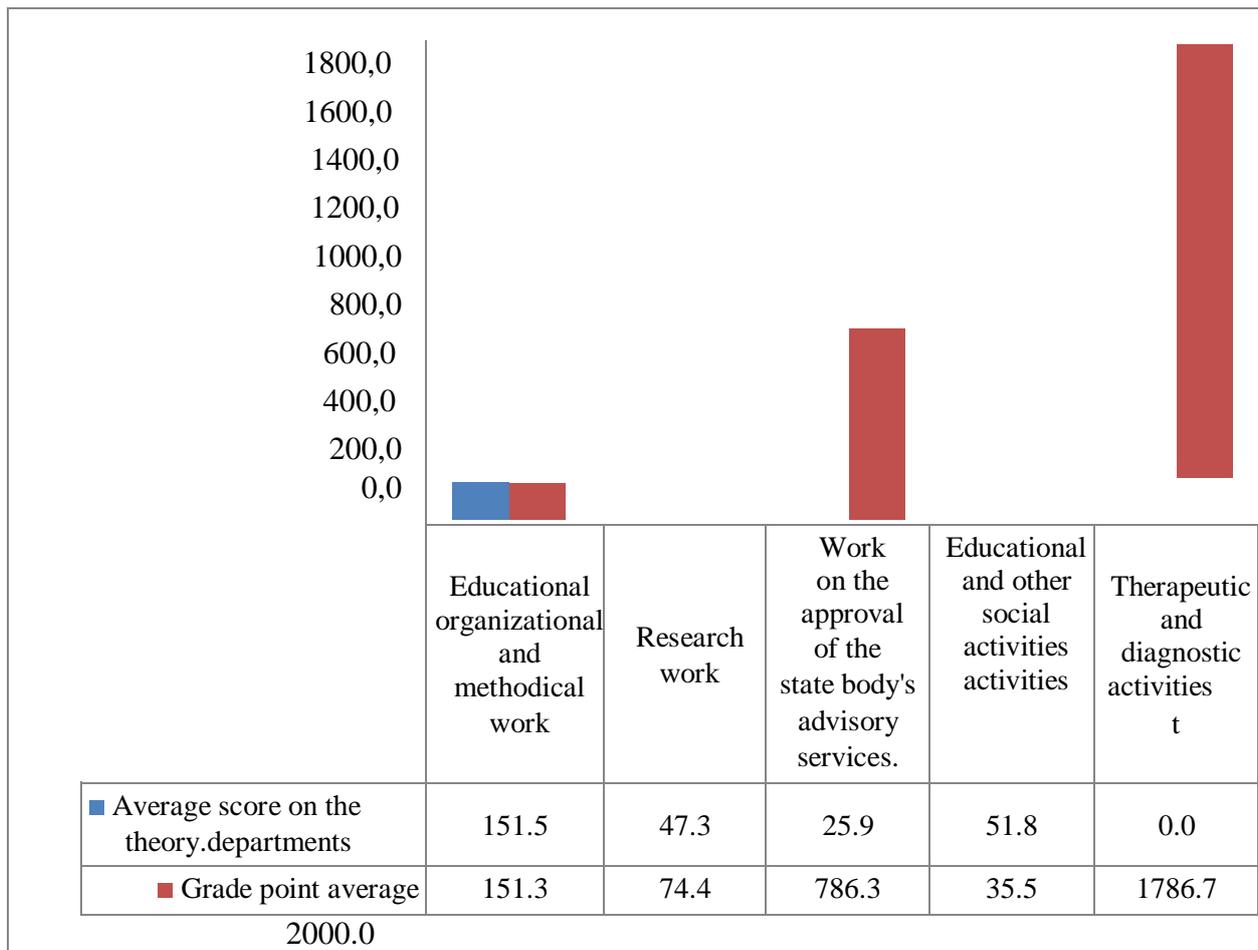


Figure 2.2. Comparative assessment of departments ' activities by indicator blocks

In terms of research and advisory assistance to state institutions and organizations, the indicator for clinical departments is higher than for theoretical ones.

In terms of educational and social work, the indicators are higher for theoretical departments than for clinical ones.

Clinical departments note the prevalence of medical and diagnostic work and providing advice to healthcare organizations over educational, methodological, scientific

and educational work. In this case, it is necessary to review the rating system (number of points) for these blocks of teaching staff activity.

Detailed information on departments is presented in Tables 2.1 and 2.2.

Table 2.1. Summary data on the rating self-assessment of teaching staff of theoretical departments

n/a number	Departments	Rating ratings (in points)				
		Educational and methodical materials. working hours	Scientific research center. activities	Advisory services	Educational activities	Total score
High rating - over 400 points						
1	General and wedge. epidemiology	263	141	43	71	518
2	General hygiene	255.0	66	31.25	66.3	418.5
Average rating – 280-400 points						
1	Foreign and Latin languages. languages	170	59	136	28	393
2	Philosophy and general sciences	145.65	47	80	79	351.7
3	Hygiene disciplines	140	61	51	90	342
4	Kyrgyz language	146	77	13	106	342
5	Pathophysiology	187	60	10	60	317
7	Normal and top. anatomii	168	25	21	86	300
8	Histology, cytology, and embr.	224	41	13	21	299
Low rating - up to 280 points						
1	Basic and wedge. pharmacology	186.6	55	15.2	9.8	266.6
2	Pharmacognosy I /	1165	48	2	45	260
3	UEF and TLS	157.98	23.33	0	78	259.3
4	Public health	98	95	34	30	257

5	Medical Biology	142	33	42	39	256
6	Physical	Education 80	2	2	157	241
7	VMP	157	0	0	73	230
8	Physics, Mathematics, Computer Science	127	22	37	20	206
9	Microbiology	115,77	115.77	46.11 3.39	36.39	201.7
10	Foundation and wedge. physiology	122	42	14	18	196
11	Wedge. rehabilitate. and physical therapy	93	36	24	31	184
12	Russian language	129,29	27,08	5	20	181,4
13	Pathological anatomy	97	53	19	8	177
14	Biochemistry	116	29	1	18	164
Average score in theoretical departments		152	47	26	52	260

Table 2.2. Summary data on the rating self-assessment of teaching staff of clinical departments for the 2017-18 academic years

Item number	Department	Qty Teaching staff	Rating ratings (in points)					Total
			Educational method. working hours	Scientific research. working hours	Consulting services	Therapeutic work	I'm an educator at work	
High rating - over 4500 points								
1	Anaesthesiology	25	223	99	25628	111	2	26063
2	Faculty of Surgery	15	124	87	108	7452	31	7802
3	Neurosurgery	12	68	82	13	6572	18	6753
4	Traumatology	14	113	113	3	5842	37	6108

5	General Surgery C K	22	97	132	5	4709	15	4958
Average rating – 2400-4500 points								
1	Pediatric surgery	28	71.4	37.9	5.2	4343.1	4.5	44.62
2	Hospital surgery with OH	19	265	242	23	3618	91	4239
3	Surgical dentistry	21	123	45	10	3446	38	3662
4	Obstetrics and Gynecology №1	14	292	124	141	2629	52	3238
5	Propaedosurgery	17	145	92	57	2457	29	2780
6	Faculty therapy	45	127.7	121.4	51.91	2320.2	60.9	2682
7	Otolaryngology	15	122	60	20	2180	39	2421
Low rating-up to 2400 points								
1	Phthisiology	10	178	127	104	1805	73	2287
2	Oncology	14	137	47	9	1805	15	2013
3	Obstetrics and Gynecology №2	17	262	85	81	1256	46	1730
4	Urology	10	87	64	31	1511	24	1717
5	Ophthalmology	10	124	32	65	1360	21	1602
6	Faculty of Pediatrics	25	123	35	21	1159	46	1384
7	Hospital therapy with PHC	23	158	79	66	900	42	1245
8	Dermatovenerology	10	170	77	6	919	25	1197
9	Infectious diseases	16	170	66	77	656	64	1033
10	Radiation diagnostics	8	91	64	0	806	15	976
11	Children's infections	16	144	147	56	433	39	819
12	Neurology	17	124	28	9	574	27	762
13	Nursing	11	199	72	18	260	108	657

14	Pediatric Dentistry	20	130	40	7	437	26	640
15	Family Medicine	24	221	58	9	206	32	526
16	Hospital Pediatrics	25	178	19	11	262	13	483
17	Forensic medicine	7	95	109	14	239	16	473
18	Propedev. children's diseases	16	182	20	10	178	17	407
19	Proped. internal diseases	16	223	23	44	67	35	392
20	Medical Psychology, MON	19	127	29	20	173	28	377
21	Therapeutic dentistry	21	142	37	0	35	26	240
22	Orthopedic dentistry	23	108	36	12	27	52	235
Average score on the wedge. departments		605	151,3	74,392	786,327	1786,69	35,51	3130,1

2.2. "Teacher through the eyes of a student"

In order to study students' opinions on the quality of teaching academic subjects and the professional skills of teachers, a survey of students of all faculties and courses "Teacher through the eyes of students" was conducted.

The sample type is quota.

The survey is conducted among students of all 8 faculties from the 1st to the 6th year. In total (sample size), 3125 students took part in the survey (Table?) and 563 teachers (51% of the total teaching staff) of 57 departments were evaluated.

Method of collecting primary information – a survey using the questionnaire "Teacher through the eyes of students" (*Appendix 4*). The method of filling out the questionnaire is an individual form of student's answers to the questionnaire questions in electronic format in computer classes (the venue is the Testing Center), as well as in on-line mode using a specially developed computer questionnaire program of KSMA.

The survey was conducted in May 2018.

In order to get acquainted with the specifics of working with the questionnaire in each student stream surveyed, a preliminary short briefing was conducted by the responsible person from the software and system support department.

The respondents evaluated the work of teachers on 9 qualities:

1. Clarity and accessibility of the presentation;
2. Stimulating interest in studying the discipline;
3. Ability to form systematic thinking in students;
4. Using an interactive learning method (the student's ability to ask questions);
5. Audience ownership skills;
6. Demeanor;
7. Availability for extracurricular consultations;
8. Corruption risk;
9. Quality of teaching (general assessment).

The assessment was made using the Likert scale (a question with a suggestion to indicate the degree of agreement or disagreement with a certain statement) for five possible answers:

1. Totally disagree
2. I don't agree
3. I doubt
4. I agree
5. I totally agree

Assessment of the degree of satisfaction of students was carried out according to a consolidated assessment, calculated as the specific weight of the sum of positive responses

("totally agree" and "agree"), from the maximum possible amount of responses.

In question 8, "No corruption", the inverse value method was applied.

In the summary assessment, the degree of student satisfaction of more than 80% was assessed as high, in the range from 50% to 80% – as average, and less than 50% - as low. **Survey results:**

According to the results of the survey, the overall high satisfaction of students with the quality of teaching at KSMA was noted – 84.1% (Figure 2.3.).

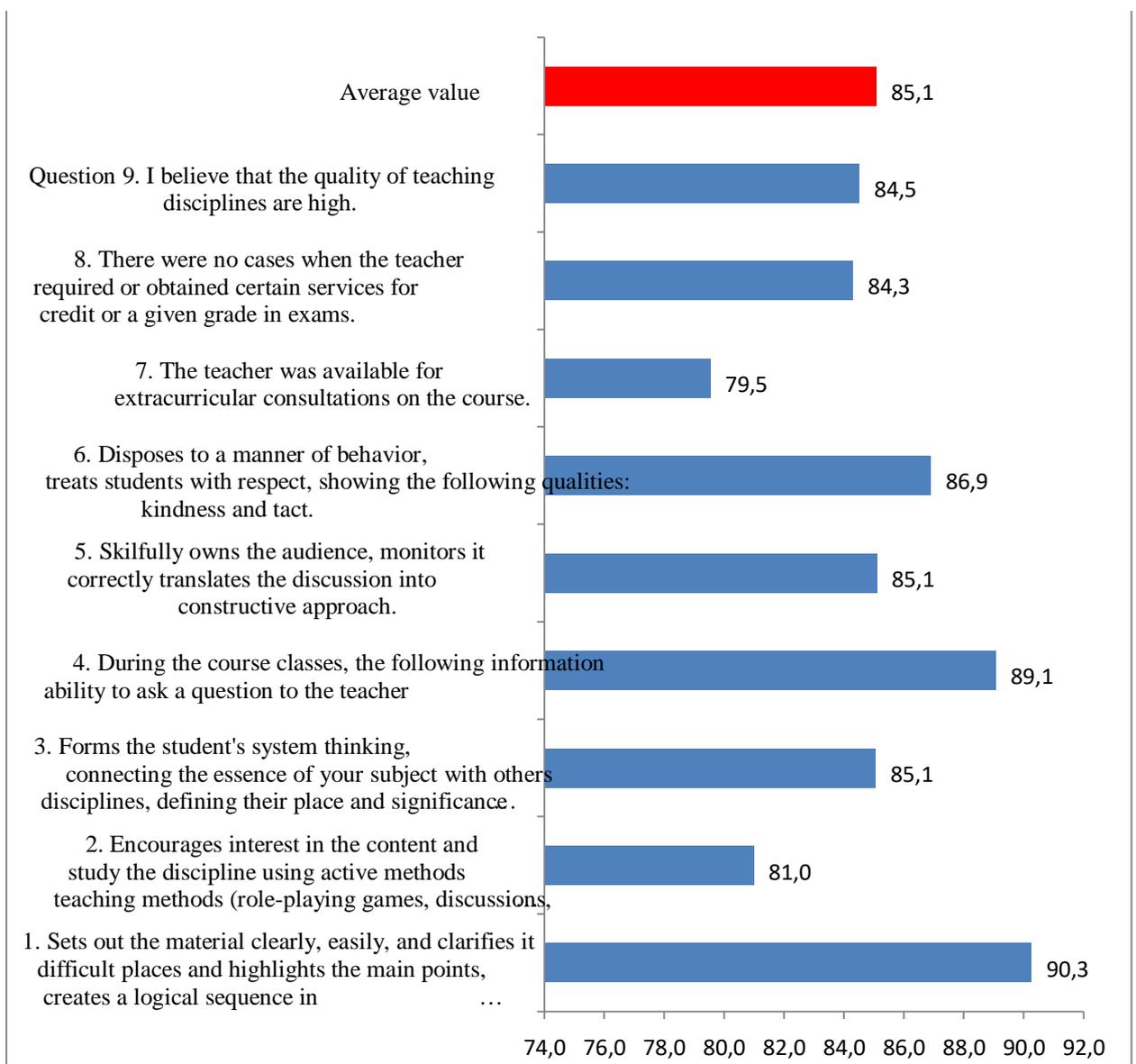


Figure 2. 3. Students ' satisfaction with the quality of teaching and professional skills of KSMA teachers (2017-2018)

The greatest satisfaction of students was noted by the clarity and accessibility of the presentation of the material by teachers (90.3%) and the ability to ask a question to the teacher (89.1%). The lowest indicators were noted for the availability of teachers for extracurricular consultations in the course (79.5%) and the use of interactive teaching methods (81%) (Figure 2.4.).

It should be noted that the satisfaction of students in these blocks of professional skills of teachers of theoretical departments does not differ much from the teaching staff of clinical departments.

However, in general, students' satisfaction with the quality of teaching in clinical departments is slightly higher than in theoretical departments: in theoretical departments – 85.5%, in clinical departments-91.8%.

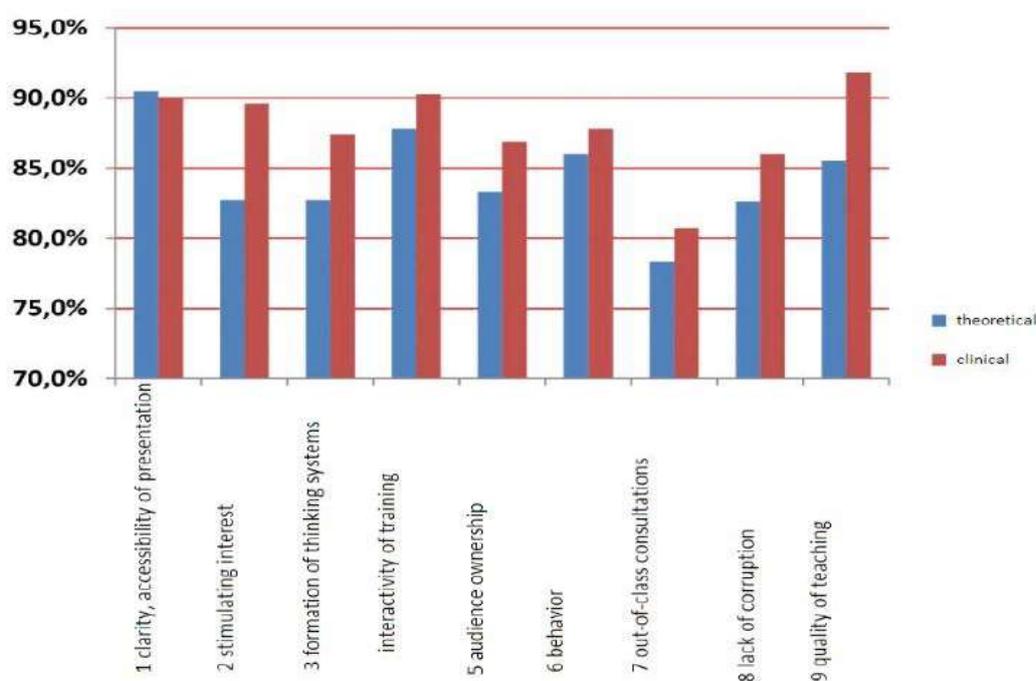


Figure 2.4. Students ' satisfaction with the quality of teaching academic subjects

It should be noted when analyzing question 8- " Were there any cases when the teacher demanded or sought certain services for a credit or a given grade in exams?» the inverse value method was used and the question was reformulated as follows: "no corruption" (84.3%). Despite the fact that students 'satisfaction with the absence of corruption can be assessed as "high", it is worrying that about 15.7% of the surveyed students still answered that there were cases when the teacher demanded something for the exam or credit. At the same time, the percentage of such responses was higher when evaluating the teaching staff of theoretical departments. However, it should be noted that when discussing the survey results with the departments, some teachers noted that the question was not asked clearly and students may have been disoriented in this question.

Detailed information on satisfaction with the quality of teaching by department is presented in Fig. 2. 5.

Table 2.3. SWOT analysis of KSMA faculty and staff quality

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Availability of a point-rating system for evaluating the activities of teaching staff; 2. Overall high student satisfaction with the quality of teaching at KSMA – 84.1% 3. The greatest satisfaction of students in terms of clarity and accessibility of the presentation of the material, the ability to ask a question to the teacher. 4. . 	<ol style="list-style-type: none"> 1. Inadequate system of assessments (points) for self-assessment of clinical departments, in particular medical work. 2. The lowest satisfaction rates were found in the availability of teachers for extracurricular consultations and the use of interactive teaching methods. 3. The presence of some dissatisfaction with the absence of corruption;
Features	Threats (risks)

<ol style="list-style-type: none"> 1. Development of a catalog of teacher competencies and introduction of clear criteria for professional assessment of teaching staff activities, in particular, in providing advice, developing UMS, and organizing SRS. 2. Revision of the point-rating system of self-assessment of teaching staff, in terms of medical, diagnostic and advisory work 	<ol style="list-style-type: none"> 1. Resistance on the part of the conservative-minded part of the teaching staff to the introduction of the catalog of teacher competencies. 2.
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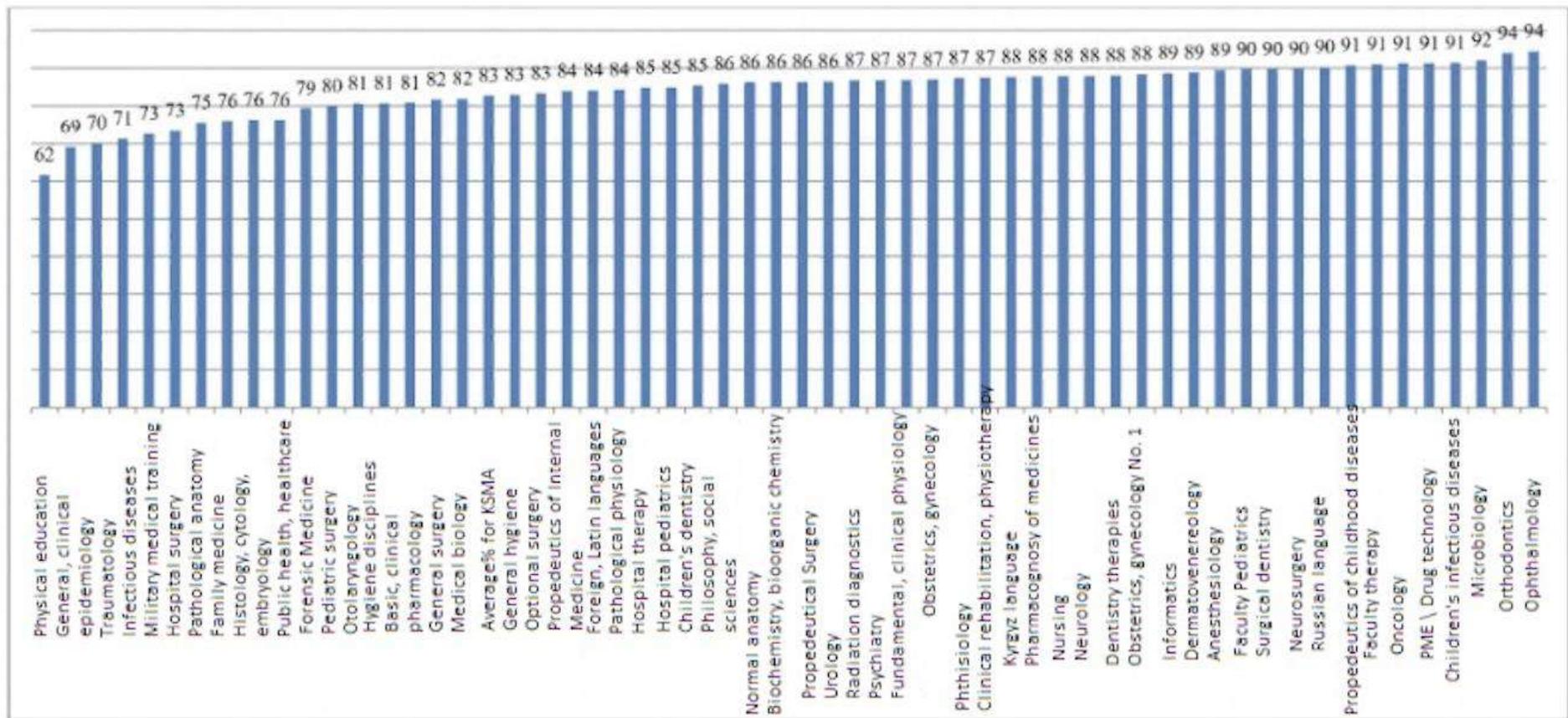


Figure 2. 5. Student satisfaction with the quality of teaching in departments (2017-2018)

CHAPTER 3. STUDENT SATISFACTION ASSESSMENT QUALITY OF TRAINING PROGRAMS

This chapter presents a descriptive and analytical report on the results of a student survey conducted from May 1 to May 19, 2018 among students of KSMA from the 1st to the 6th year at all faculties (Order of the Rector of KSMA No. R-42 dated 2.05.2018).

The purpose of the study is to assess students' satisfaction with the quality of the educational program and evaluate the work of KSMA departments.

Main research objectives:

- assessment of the overall satisfaction студентов of KSMA students with the quality of the educational program;
- determining the degree of student satisfaction with the curricula of modules and various disciplines;
- formation of a rating of departments based on the results of a student survey;
- develop recommendations for improving the quality of the educational program and plan corrective and preventive measures. **Evaluation method:** a sociological survey using specially designed questionnaires to study satisfaction with the quality of modules for students of 1-3 courses (*Appendix 5*), for 4-6 courses (*Appendix 6*) and the quality of disciplines (*Appendix 7*).

Rating scale: The assessment was made using the Likert scale (a question with a suggestion to indicate the degree of agreement or disagreement with a certain statement) for five possible answers:

1. Totally disagree
2. I don't agree
3. I doubt
4. I agree
5. I totally agree

Students' satisfaction was assessed using a composite score calculated as the proportion of the sum of positive responses ("totally agree" and "agree") from the maximum possible sum of responses. In question 8, "No corruption", the inverse value method was applied.

In the summary assessment, the degree of student satisfaction of more than 80% was assessed as high, in the range from 50% to 80% – as average, and less than 50% - as low.

For the convenience of processing the received data, automation of information input and processing was carried out. As on-screen forms, we used the text of

questionnaires directly created for the survey in the AVN program using the questionnaire editor. Additionally, an additional program has been developed for displaying reports in the form of graphical data. The survey was conducted on the bases of the Center for Clinical Skills Development and Knowledge Assessment, the electronic library and the Department of Physics, Mathematics, Computer Science and Computer Technologies of KSMA.

Selection: two-stage-cluster. The sample was formed in accordance with the requirements of the organization of sociological research. The percentage distribution of questionnaires among groups of students is calculated in accordance with the number of students of all faculties. A 95% confidence interval (margin of error) of ± 4.9 was chosen%;

According to the report generated in the AVN system, 3125 students participated in the electronic survey **3125**. Students of all 8 faculties participated in the evaluation of academic programs of various disciplines.

A survey of satisfaction with the training programs of the modules was conducted among students of the faculties "Medical business" No.1, No. 2 and IG.

3.1. Assessment of students ' satisfaction with the quality of academic modules

The introduction of a modular-integrated training system in KSMA was started in 2001 at the faculties of "Medical Science". In 2012, with the technical support of the project "Reforms of medical education in the Kyrgyz Republic", as part of a pilot project, the PLO for the specialty "Medical Science" was revised. In 2015, the State Educational Standard 3 (GOS3) for the specialty "Medical Science" was developed and approved based on the implementation of a pilot project on the reform of medical education. In 2015, an assessment of satisfaction with the quality of modules was carried out among students of physical therapy 1-3 years of study, i.e. among students who studied under the pilot educational program introduced in 2012.

In order to assess the quality **of module curricula** and compare progress in improving the quality of modules, a survey of student satisfaction with the faculties of "Medical Business" was conducted in the spring of 2018. At other faculties, only one module "Introduction to the specialty" is currently implemented in the 1st first year, so the evaluation of modules was carried out only in the faculties of Medical Science. Assessment of satisfaction with the quality of modules was carried out according to the following criteria::

1. Explain the purpose and objectives of the module at the beginning of classes
2. Interrelation of disciplines in the module
3. Content of disciplines in the module
4. Applicability of the obtained theoretical knowledge in practice

5. Provision of methodological and educational literature
6. Organization of independent work and consulting services
7. Comprehensibility of the knowledge assessment system
8. Objectivity of the final exam
9. Quality of teaching by module
10. The usefulness of previously completed modules in mastering this module (for students of 4-6 courses).

In total, the curriculum for the specialty "Medical science" includes 25 modules and blocks. Student satisfaction assessment was carried out for all modules and blocks (Figure 3.1.).

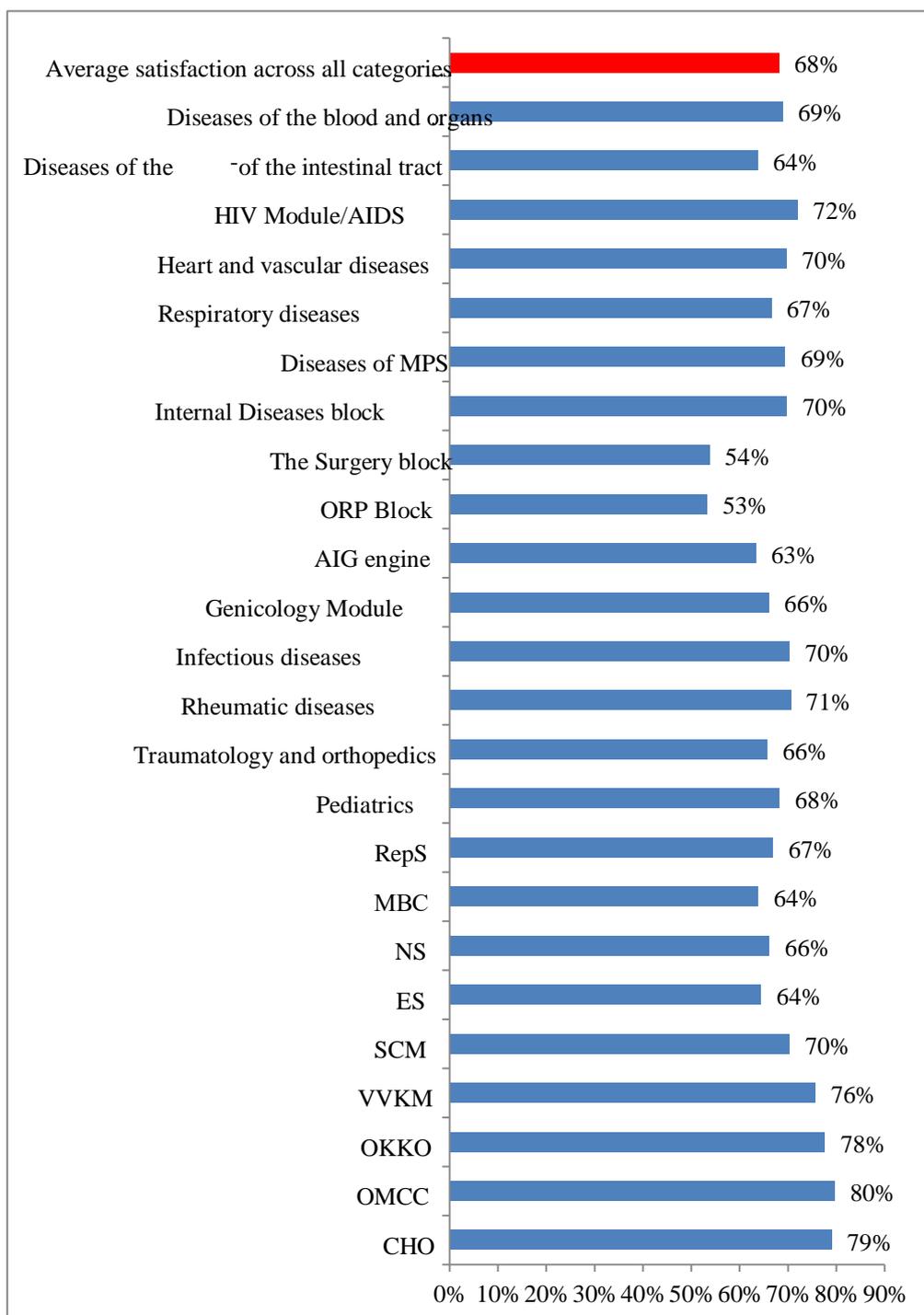


Figure 3.1. Satisfaction of students of the Faculty of "LD" with the quality of modules and blocks conducted for the 2017-2018 academic year

On average, the overall satisfaction of students of the Faculty of "Medical Business" with the quality of the modules conducted was 68%, which is estimated as average satisfaction.

The greatest satisfaction of students was noted in the modules " From molecule to cell "(OMCC) - 80%, " Man, Society, Health "(CHOZ) - 79%, and " From cell to organ "(OKCO) – 78%, conducted in the first 2 courses of study.

The lowest satisfaction of students is noted in the blocks "General Medical Practice" (ORP) (53%), " Surgery "(54%) and " Obstetrics and Gynecology " (63%), conducted in 4-6 courses of study.

It should be noted that in general, students ' satisfaction with the organization and curriculum of modules during the assessment in 2018 increased compared to the assessment conducted in 2015.

Satisfaction with the quality of 1st-year physical therapy students ' modules
Module " Man, Society and health "(CHOZ): Satisfaction with the CHOS module in the 2018 study increased by an average of 30% compared to 2015 (Figure 3.2), while satisfaction with almost all questions was at a high level and amounted to more than 80%.

Module " From molecule to cell "(OMCC): Satisfaction with the module in the 2018 study (89%) increased by 10% compared to 2015 (79%) (Figure 3.2). At the same time, satisfaction with the two most problematic criteria noted during the assessment in 2015 increased: (1) availability of literature and (2) organization of independent work of the student.

Module " From cell to organ "(OKKO): Overall satisfaction with this module is quite high-86%, but it is necessary to pay attention to the organization of the SRS disciplines of this module, since this criterion shows the lowest level of satisfaction (77%). A comparative evaluation of this module was not carried out, as previously, in 2015, this module was not available.

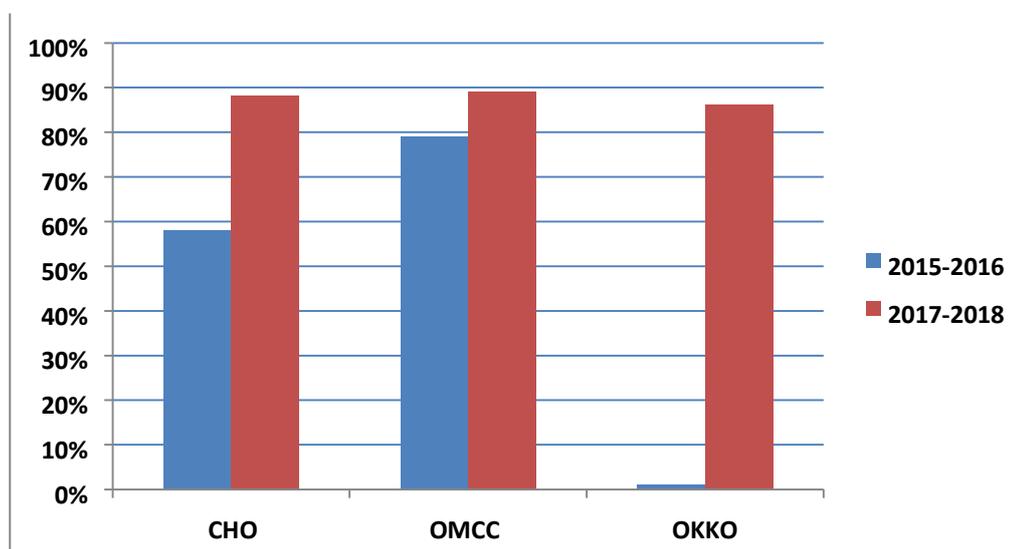


Figure 3. 2. Comparative data on satisfaction of 1st year students with the quality of modules (2015-2016, 2017-2018 academic years)

Satisfaction with the quality of 2nd year physical therapy students ' modules

Module "Introduction to Clinical Medicine" (VVKM): Satisfaction with this module is average (74%), although it should be noted that satisfaction increased by 20% compared

to 2015 (54%) (Figure 3.3). There was an increase in satisfaction with the provision of educational and methodological literature for the module, the conduct of the final exam and the clarity of the content of the module's disciplines. However, there is a rather low satisfaction with the organization of the SRS disciplines of this module and the new knowledge gained.

The Endocrine System (ES) module: Overall satisfaction with this module is average (72%). Extremely low satisfaction was noted by the criterion of availability of educational and methodical literature (36%), although there is a slight increase compared to the 2015 assessment. In general, compared to the 2015 assessment data, satisfaction decreased slightly (Figure 3.3), mainly due to a decrease in student satisfaction with the organization of test control, by almost 20% according to this criterion.

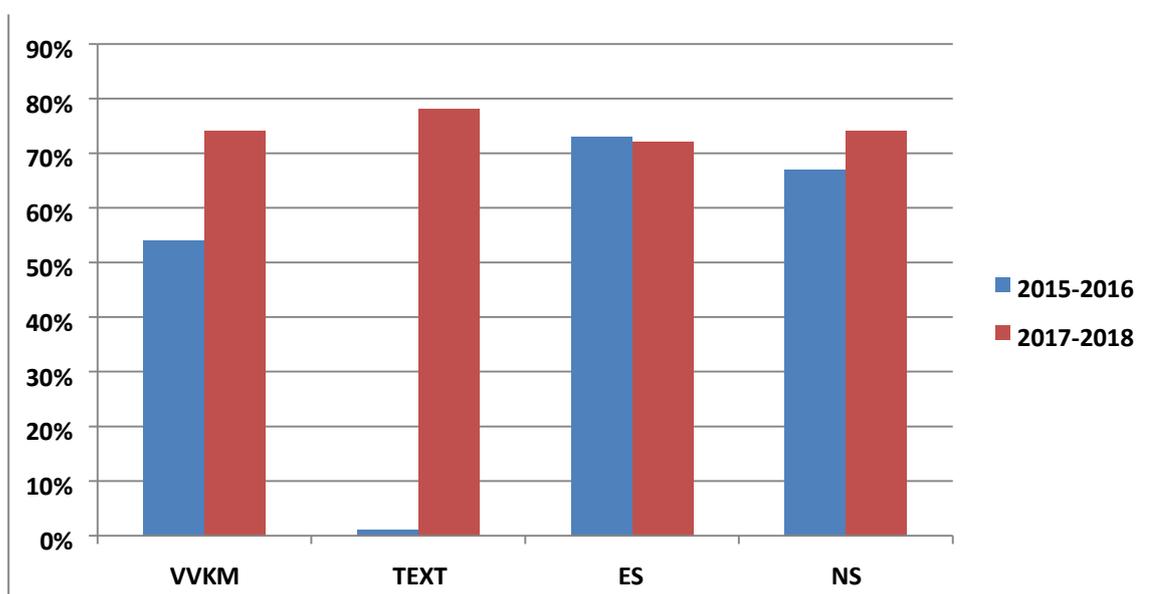


Figure 3. 3. Comparative data on satisfaction of 2nd year students with the quality of modules (2015-2016, 2017-2018 academic years)

Module " Nervous system "(NS): Overall satisfaction with this module is average (74%), but it is 8% higher than in the 2015 assessment (Figure 3.3), mainly due to an increase in satisfaction with the provision of educational and methodological literature. Despite the increase in satisfaction with the organization of the SRS compared to the 2016 assessment (33% in 2015 and 54% in 2018), satisfaction with this criterion remains low. There was a decrease in students ' satisfaction with the objectivity of the test control by almost 4% compared to the 2015 assessment.

Module "Musculoskeletal system" (SCM): Overall satisfaction with this module is average (78%) (Figure 3.3). Extremely low satisfaction was noted by the criterion of availability of educational and methodological literature (40%).

It is not possible to conduct a comparative evaluation of this module with the data of the 2015 survey, since this module has not been previously surveyed.

Satisfaction with the quality of 3rd year physical therapy students ' modules

Module "Urinary system" (MVS): Overall student satisfaction with this module in the 2018 assessment is average (75%), but 4% higher than in the 2015 assessment (Figure 3.4). The highest satisfaction values were noted for the clarity of the module's goals and objectives, the relationship between the module's disciplines and the comprehensibility of the disciplines. There is a slight increase in satisfaction with the availability of educational and methodological literature and the organization of SRS (31% in 2015 and 48% in 2018). Despite the increase in satisfaction with the organization of the SRS, satisfaction with this criterion remains extremely low. In addition, there is a decrease in students ' satisfaction with the objectivity of the test control by almost 17% compared to the estimated data of 2015.

Module "Cardiovascular system" (CVS): Overall student satisfaction with this module is average (70%), but it is 14% higher compared to the estimated data for 2015 (Figure 3.4). The highest satisfaction values were noted for the clarity of the module's goals and objectives, the relationship between the module's disciplines and the comprehensibility of the disciplines. The increase in satisfaction was mainly due to the increase in satisfaction with the provision of educational and methodological literature and the organization of SRS. However, despite a slight increase in satisfaction with the SRS, satisfaction with this criterion remains low (39% in 2015 and 55% in 2018). In addition, there is a decrease in student satisfaction with the organization of test control by almost 18% compared to 2015.

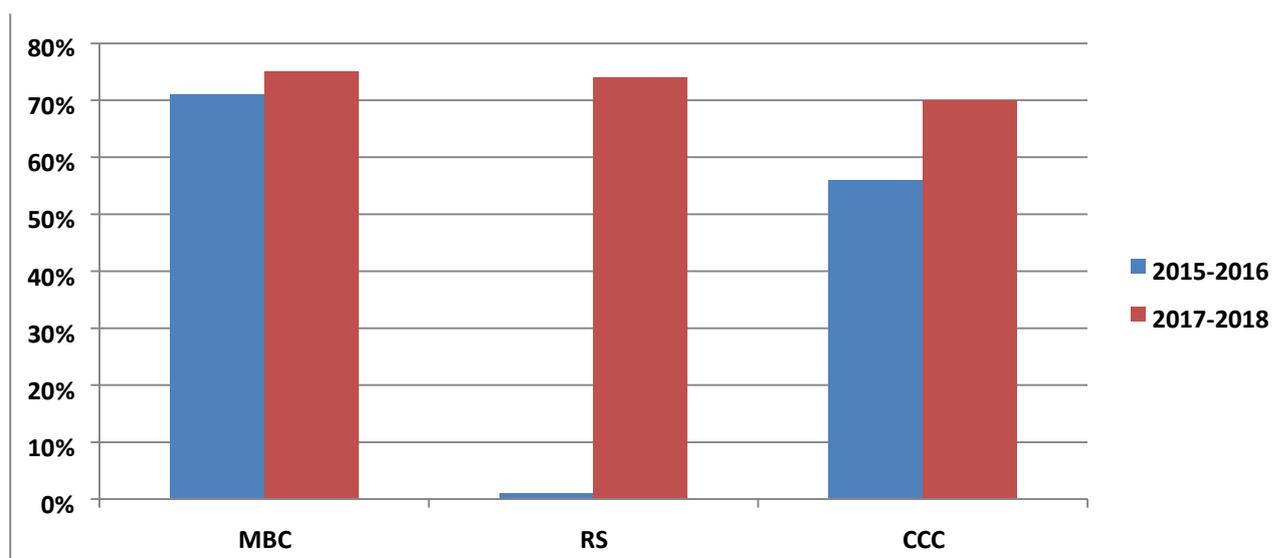


Figure 3.4. Comparative data on the satisfaction of 3rd year students with the quality of modules (2015-2016, 2017-2018 academic years)

Module " Reproductive system "(RS): Overall student satisfaction in this module is average (74%). It was not possible to carry out a comparative assessment of satisfaction in this module, as the assessment of this module was not carried out in 2015. Low satisfaction was noted in relation to the organization of the SRS - 49%, the provision of educational and methodological literature, the organization of test control and the quality of training of specialists. The highest satisfaction values were noted for the clarity of the module's goals and objectives, the relationship between the module's disciplines and the comprehensibility of the disciplines.

Satisfaction with the quality of physical therapy modules for 4th-6th year students

This section presents the results of the student satisfaction assessment conducted in 2018. It was not possible to conduct a comparative evaluation of modules of 4-6 courses in the specialty "Medical Science", since in 2015 the evaluation of these modules was not carried out due to the fact that at the time of the evaluation, students studying under the pilot program in 2012 had not yet reached the level of studying these modules. Students' satisfaction with the quality of modules of 4-6 courses in the assessment conducted in 2018 was estimated as – average for all modules and ranged from 53% (ORP block) to 72% (HIV/AIDS Module).

The Pediatrics section": Overall satisfaction with the quality of this module was – (Fig. 3. 5). The highest satisfaction – 76.9% - was noted by the criterion of interconnectedness of disciplines in the module. In 75.9% of the responses, students note that the knowledge acquired earlier in 1-3 courses helped them to master this module. 75.2% of students agree that their theoretical knowledge of the module will help them in their future practical activities. The lowest percentage of satisfaction (52.1%) was noted by students in the organization of independent work (SRS) and providing advice.

Module " Traumatology and orthopedics": Overall satisfaction with the quality of this module was – (Figure 3.5). The highest satisfaction – 79% - was noted by the criterion of interconnectedness of disciplines in the module; in 76%, students note that the knowledge gained earlier in courses 1-3 helped them to master this module; 75% of students noted that the goals and objectives of this module were explained at the beginning. Low satisfaction of students was noted by the criterion of organizing independent work (44%) and providing advice.

Module " Gynecology": Overall student satisfaction in the module was 66% (Figure 3.5). The greatest satisfaction was noted by the criterion of interconnectedness of disciplines in the module (77%). In 78% of cases, students note that the knowledge gained earlier in 1-3 courses helped them to master this module. 75.2% of students agree that their theoretical knowledge of the module will help them in their future practical activities. The

lowest percentage of satisfaction (51%) was recorded in the organization of independent work (SRS) and providing advice.

Section " Obstetrics and Gynecology»: Overall satisfaction of students in the module was 63% (Figure 3.5). The highest satisfaction (74%) was noted by the criterion of interconnectedness of disciplines in the module. In 72% of cases, students noted that the content of all subjects of the module was clear. Low satisfaction was noted for organizing independent work (49%) and providing advice. A low percentage of satisfaction with the provision of methodological and educational literature in the disciplines of the module is 54%.

General Medical Practice (ORP) section: Overall satisfaction with the quality of this module was 53% (Figure 3.5). The highest satisfaction – 68% - was noted in the paragraph on the interconnectedness of disciplines in the module. In 58% of cases, students note that the knowledge acquired earlier in 1-3 courses helped them to master this module. 65% of students agree that the theoretical knowledge they have gained in the module will help them in their future practical activities. Low satisfaction was noted in the organization of independent work (40%), providing advice, providing methodological and educational literature on the module's disciplines (46%).

The "Surgery" block (BX): The overall satisfaction of students with the quality of the module was 70% (Figure 3.5). The greatest satisfaction – 64%) was noted by the criterion of interconnectedness of disciplines in the module, in 63% students note that the knowledge gained earlier in 1-3 courses helped them to master this module. 57% of students noted that the goals and objectives of this module were explained at the beginning. Low satisfaction was noted in the organization of independent work (41%), providing advice, satisfaction with the provision of methodological and educational literature in the disciplines of the module (47%).

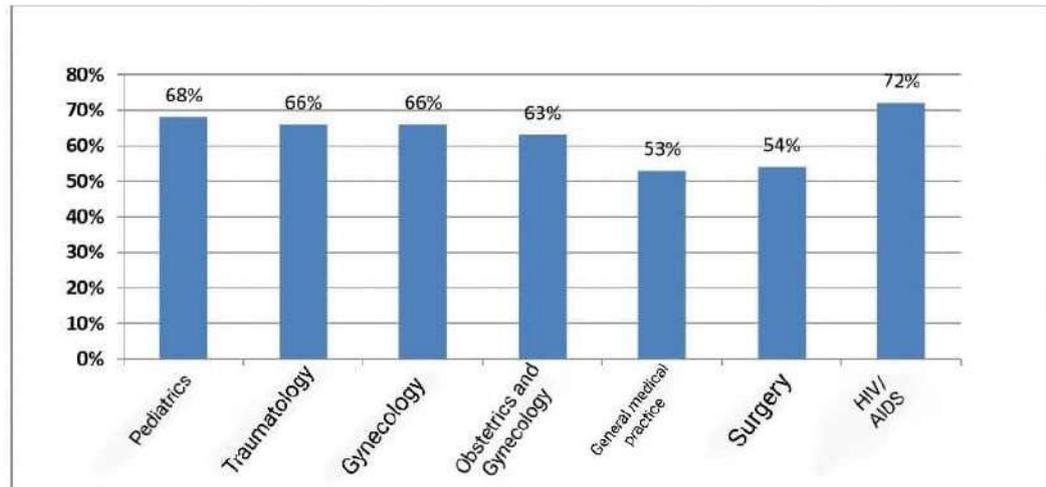


Figure 3. 5. Satisfaction of 4th-6th year students with 7-module academic programs (2018 assessment)

Figure 3. 5. Satisfaction of 4th-6th year students with 7-module academic programs (2018 assessment)

Module " Rheumatic diseases": Overall satisfaction with the quality of this module was – (Figure 3.6). The greatest satisfaction was noted by the criterion of interconnectedness of disciplines in the module (83%); 79% note that the knowledge acquired earlier in 1-3 courses helped them in mastering this module; 78% of students agree that the theoretical knowledge of the module they received will help them in further practical activities. The lowest percentage of satisfaction was noted for organizing independent work (50%), providing advice and providing methodological and educational literature on the module's disciplines (55%).

Module " Infectious diseases»: Overall satisfaction with the quality of this module was – (Figure 3.6). High satisfaction was noted by the criterion of interconnectedness of

disciplines in the module (83%); in 79%, students note that the knowledge acquired earlier in 1-3 courses helped them to master this module; 78% of students agree that the theoretical knowledge of the module obtained by them will help them in further practical activities. Low satisfaction was noted in the organization of independent work (44%) and providing advice. As well as in the paragraph on satisfaction with the provision of methodological and educational literature in the disciplines of the module – 59%.

Module "Internal diseases" (BVB): Overall satisfaction with the quality of this module was 69% (Figure 3.6). High satisfaction was noted by the criteria of interconnectedness of disciplines in the module (84%), knowledge acquired earlier in 1-3 courses helped them to master this module (81%). 79% of students agree that their theoretical knowledge of the module will help them in their future practical activities. The lowest percentage of satisfaction was noted in terms of providing methodological and educational literature in the module disciplines (54%), organizing independent work and providing advice (61%).

Module "Diseases of the genitourinary system" (BMPS): Overall satisfaction with the quality of this module was 69% (Figure 3.6). The highest satisfaction (84%) was noted in the paragraph on the interconnectedness of disciplines in the module. In 81% of cases, students note that the knowledge acquired earlier in 1-3 courses helped them to master this module. 79% of students agree that their theoretical knowledge of the module will help them in their future practical activities. The lowest percentage of satisfaction was noted by students in the paragraph on satisfaction with the provision of methodological and educational literature in the disciplines of the module – 52%, and in the paragraph on the organization of independent work (SRS) and providing advice-56%

Module "Diseases of the respiratory system" (BOS): General satisfaction with the quality of this module was 67% (Fig. 3.6). The greatest satisfaction of students noted that the knowledge gained early on 1-3 courses helped them in the development of this module (79%) and that the goals and objectives of this module was explained in the beginning (73%). The lowest percentage of satisfaction was noted by students in the organization of independent work (52%), providing advice and providing methodological and educational literature on the disciplines of the module.

BSS Heart and Vascular Diseases Module: Overall satisfaction with the quality of this module was 70% (Figure 3.6). The greatest satisfaction of students was marked by the fact that the knowledge acquired earlier in 1-3 courses helped them to master this module (75%) and that the goals and objectives of this module were explained at the beginning (70%). The lowest percentage of satisfaction was noted for organizing independent work (54%), providing advice and providing methodological and educational literature on the module's disciplines (58%).

Module "Diseases of the gastrointestinal tract": Overall satisfaction with the quality of this module was 64% (Figure 3.6). High satisfaction was noted by the criterion of interconnectedness of disciplines in the module (84%). In 74% of cases, students note that the knowledge acquired earlier in 1-3 courses helped them to master this module. 74% of students agree that the theoretical knowledge they have gained in the module will help them in their future practical activities. Low satisfaction was noted for providing methodological and educational literature in the module's disciplines (44%), organizing independent work and providing advice (45%).

Module "Diseases of the blood and hematopoietic organs" (BCOC): Overall satisfaction with the quality of this module was 69% (Figure 3.6). High satisfaction of students was noted by the interconnectedness of disciplines in the module (82%), as well as by the fact that the knowledge acquired earlier in 1-3 courses helped them to master this module (81%). 78% of students agree that their theoretical knowledge of the module will help them in their future practical activities. Low satisfaction of students was noted in providing methodological and educational literature in the module disciplines (47%), organizing independent work (SRS), as well as low satisfaction in providing advisory assistance (54%).

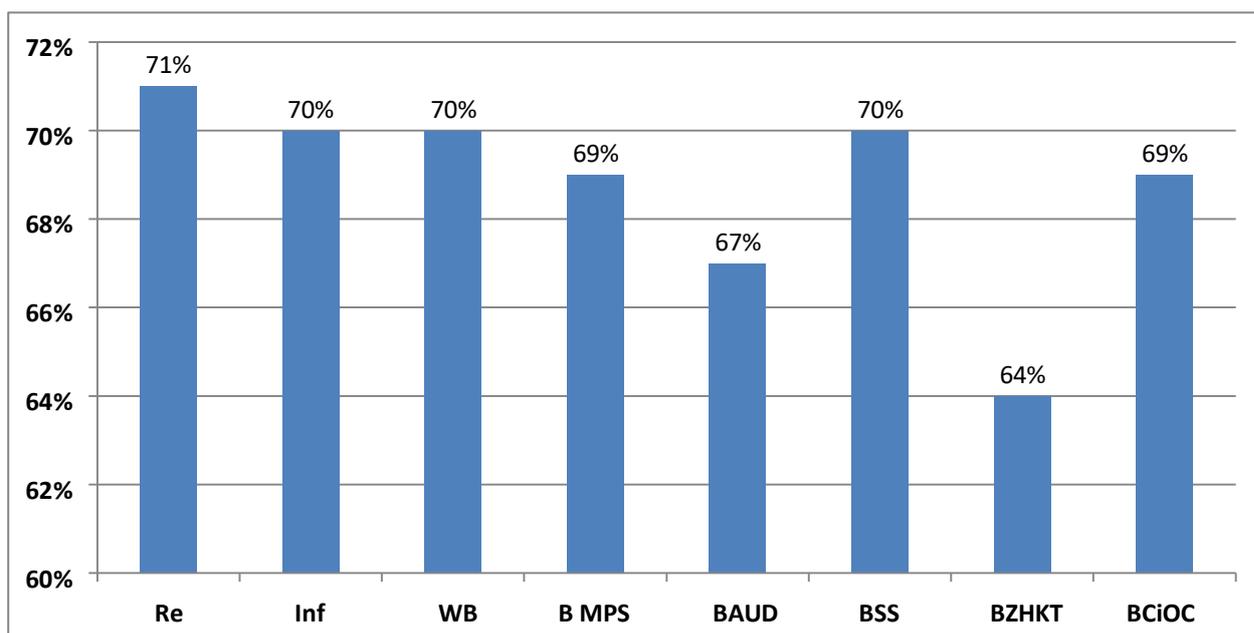


Figure 3. 6. Satisfaction of 4th-6th year students with 8-module academic programs (2018 assessment)

Table 3.1. SWOT analysis of physical education students ' satisfaction with the quality of modules

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. The overall satisfaction of students of the Faculty of "Medical Business" with the quality of the modules conducted was 68%, which is estimated as average satisfaction. 2. High satisfaction of students in the module " From molecule to cell " was noted (80%); 3. Students are highly satisfied with the interconnectedness of disciplines in the module, slightly lower with the fact that the knowledge gained in 1-3 courses helps them in mastering subsequent modules and that theoretical knowledge will help them in further practice. 4. Overall, there is an increase in student satisfaction with the organization and curriculum of modules compared to the assessment conducted in 2015. 	<ol style="list-style-type: none"> 1. The lowest satisfaction of students is noted in the blocks "General Medical Practice" (ORP) (53%)," Surgery "(54%) and" Obstetrics and Gynecology " (63%), conducted in 4-6 courses of study. 2. There is low satisfaction (despite an increase in indicators compared to 2015) with the availability of educational and methodological literature, the organization of independent work of students and providing advice, as well as the objectivity of test control of knowledge. 3. There was no survey of satisfaction with the quality of educational programs and the organization of the educational process among teaching staff and stakeholders.
Features	Threats (risks)
<ol style="list-style-type: none"> 1. Introduction of computer testing (to improve the objectivity) of students ' knowledge in all disciplines. Creating a bank of test questions. 2. Development of methodological guidelines for the organization of SRS, strengthening control over the provision of advisory assistance to students by teaching staff. 3. Conducting trainings for teaching staff on interactive and innovative teaching methods. 4. Purchase of educational literature; 	<ol style="list-style-type: none"> 1. Human factor (opposition of conservative teachers). 2. Lack of qualified IT specialists to handle computer testing; 3. Insufficient funds for the purchase; 4. Late holding of tenders for the purchase of goods and services due to shortcomings in the tender system of procurement; 5. Copyright infringement.
<ol style="list-style-type: none"> 5. Introduction of the use of electronic library textbooks. 	

3.2. Assessment of students ' satisfaction with the quality of academic programs of disciplines

Assessment of students ' satisfaction with the quality of implemented educational programs was carried out according to the following criteria::

1. Explanation of the purpose and purpose of the discipline at the beginning of the course.
2. Logical and consistent division of the discipline into thematic sections.
3. Compliance of lectures and practical tasks with the set goals in the discipline.
4. Clarity of the discipline content.
5. Help of the obtained theoretical knowledge in practice.
6. Providing methodological and educational literature on the discipline.
7. Organization of independent work, consulting services.
8. Objectivity of the final test exam in the discipline.
9. Quality of training of specialists in the discipline.

In general, according to the results of the assessment, a high degree of student satisfaction with the quality of the curriculum of disciplines is noted - 81% (Figure 3.7).

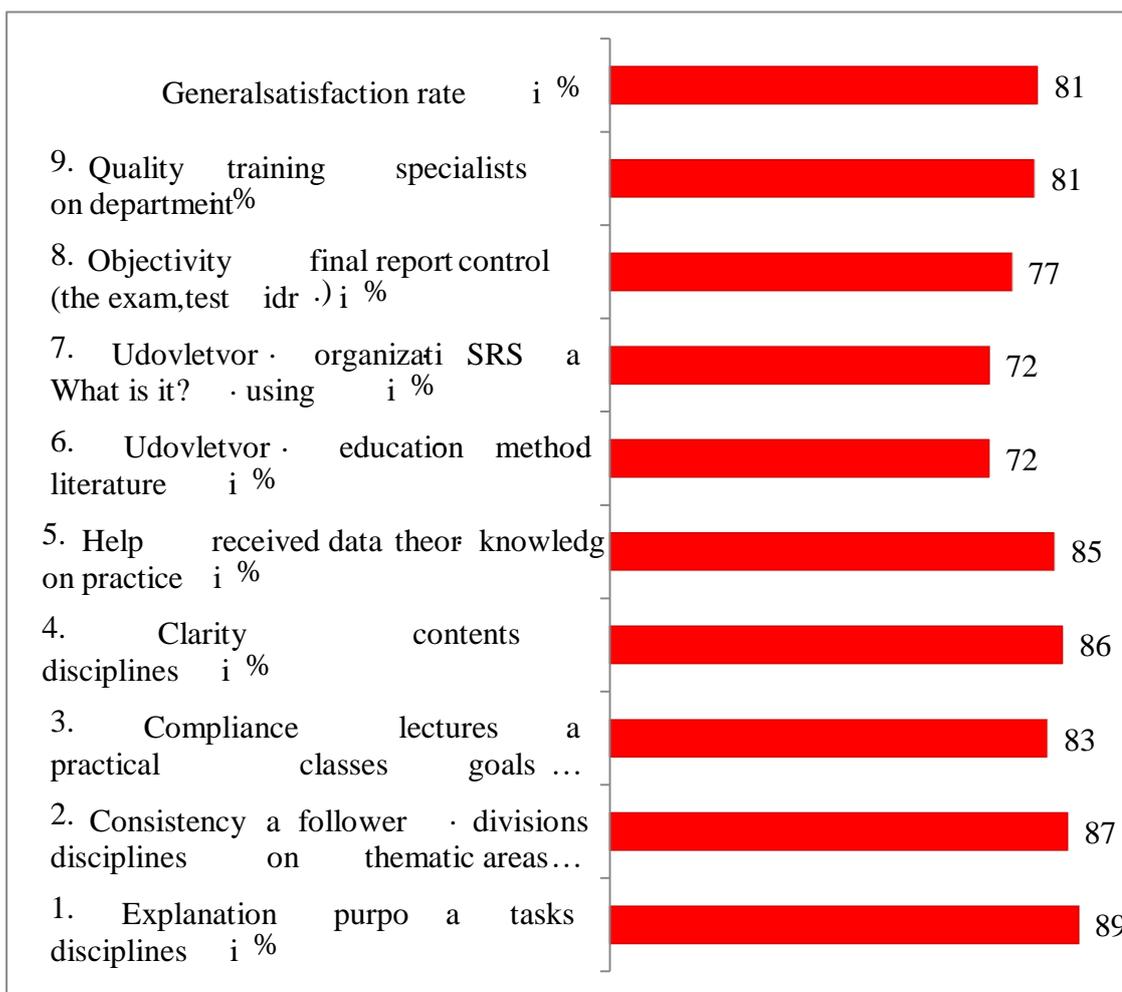


Figure 3.7. Overall satisfaction of KSMA students with the quality of the implemented educational programs on the questionnaire questions

At the same time, high student satisfaction was noted for 6 criteria: explanation of the goals and objectives of training (89%); logical and consistent division of disciplines into thematic sections (87%); clarity of the content of the discipline (86%); compliance of lectures and practical classes with the goals of the discipline (83%); help of theoretical knowledge in practice (85%); quality of training of specialists at the department (81%) (Figure 3.7).

According to the other three criteria, the average satisfaction was noted: the objectivity of the final control of knowledge (77%), the organization of independent work of students (72%) and the availability of educational and methodological literature (72%).

Based on the results of assessing the degree of satisfaction with the quality of the implemented curricula of disciplines, the departments were ranked (from 1st to 20th place) and the rating of departments was determined on three levels (Table 3.2.):

- high rating – departments набравшие with 84-90% student satisfaction;
- average rating – departments with 77-83% student satisfaction;
- low rating – departments that scored 69-77% of student satisfaction.

Table 3.2. Rating of departments by the level of overall student satisfaction

the quality of educational programs implemented at the departments				
№	Name of the department	Udovl. in %	Rank	Rating
1	Physical education	90	1	High rating
2	Therapeutic dentistry	90	1	
3	Family medicine	89	2	
4	Propaedeutics of children's diseases	89	2	
5	Psychiatry, psychotherapy and narcology	89	2	
6	Faculty of Surgery	89	2	
7	Pharmacy Management and Economics, drug technology	87	3	
8	Hygienic disciplines	87	3	
9	Microbiology, Virology and Immunology	87	3	
10	Phthisiology	86	4	
11	Pathologic Physiology	86	4	
12	Surgical Dentistry and CHLH	86	4	
13	Pharmacognosy and drug chemistry	86	4	
14	Normal and topographical anatomy	86	4	
15	Dermatovenereology	86	4	
16	Pediatric Surgery	86	4	

17	Fundamental and Clinical Physiology	85	5		
18	Russian language	85	5		
19	Foreign and Latin languages	85	5		
20	Medical Biology	85	5		
21	Nursing	85	5		
22	General hygiene	85	5		
23	Orthopedic dentistry	84	6		
24	Propaedeutic surgery	83	7		Average
25	Hospital pediatrics with neonatology course	83	7		
26	Neurology with a course in medical genetics	83	7		

27	Ophthalmology	83	7	
28	Faculty of Pediatrics	83	7	
29	Children's infectious diseases	83	7	
30	Physics, mathematics, Computer science and technology	83	7	
31	Infectious diseases	83	7	
32	Biochemistry with a course in general and bioorganic chemistry	82	8	
33	Propaedeutics of internal diseases with a course of endocrinology	81	9	
34	Kyrgyz language	81	9	
35	Pediatric dentistry	81	9	
36	Oncology	81	9	
37	Clinical rehabilitation and physical therapy	81	9	
38	Faculty of Therapy	80	10	

39	Basic and clinical pharmacology	80	10	
40	Otorhinolaryngology	79	11	
41	Radiation diagnostics and therapy	79	11	
42	Histology, Cytology and Embryology	78	12	
43	Forensic medicine and Law	78	12	
44	Urology and andrology	78	12	
45	Obstetrics and Gynecology No. 1	77	13	
46	Hospital therapy, occupational pathology with a course of hematology	76	14	

54	Hospital surgery with a course of operative surgery	71	18	
55	Military medical training and EM	70	19	
56	Anaesthesiology and intensive care	70	19	
57	General and clinical epidemiology	69	20	
	Average satisfaction with KGMA	81%		
	Minimum	69%		
	Max	90%		
47	Pathological Anatomy	76	14	
48	Philosophy and Social Sciences	76	14	
49	Traumatology, orthopedics and EC	76	14	
50	Public health and public health	<i>services</i> 74	15	
51	Neurosurgery Pre-graduate. and post-graduate Neurosurgery	73	16	

52	General surgery with a course in kombustiology	72	17	Low rating
53	Obstetrics and Gynecology No. 2	72	17	

23 departments were included in the high-rating group, 22 in the group with an average rating, and 12 departments in the group with a low rating.

It should be noted that the departments that rated themselves highly during the self-assessment, in the opinion of students, were found to have the lowest satisfaction scores.

Table 3.3. SWOT analysis of student satisfaction with the quality of educational programs

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. High student satisfaction rate. 2. According to all 9 assessment criteria, student satisfaction is at least 70%. 3. High satisfaction (more than 80%) according to 6 criteria out of 9: explanation of the goals and objectives of training, consistency and consistency of the division of disciplines, clarity of content, compliance of lectures and practical classes with the goals of the discipline, the use of theoretical knowledge in practice, the quality of training of specialists at the department. 	<ol style="list-style-type: none"> 1. Average satisfaction with 3 criteria is noted: provision of educational and methodical literature, organization of independent work of students and objectivity of the final control of knowledge. 2. There was no survey of satisfaction with the quality of educational programs and the organization of the educational process among teaching staff and stakeholders.
Features	Threats (risks)
<ol style="list-style-type: none"> 1. Introduction of computer testing (to improve the objectivity) of students' knowledge in all disciplines. Creating a bank of test questions. 2. Implementation of the OCE for assessing practical knowledge on 	<ol style="list-style-type: none"> 1. Lack of qualified IT specialists to handle computer testing; 2. Insufficient funds for the purchase; 3. Late holding of tenders for the purchase of goods and services due to shortcomings in the tender
<ol style="list-style-type: none"> of clinical disciplines. 3. Conducting a satisfaction survey among Teaching staff, KSMA structural divisions, and stakeholders. 4. Purchase of educational literature; 5. Introduction of the use of electronic library textbooks. 	<ol style="list-style-type: none"> procurement system; 4. Copyright infringement.

3.3. Assessment of the quality of the organization of industrial practice at the Faculty of Medicine

The organization and conduct of industrial practice of KSMA students is carried out in accordance with the approved "Regulations on industrial practice of KSMA students" and "Regulations on industrial practice when students practice in foreign clinics".

In order to monitor students 'practical training, KSMA has developed and implemented a "Diary of practical training "(for each type of practice in different faculties) and a "Journal of Practical Skills Development "(developed for physical therapy and vocational schools), which records grades of practical skills development by students of 1-5 courses.

The diary is filled in by students during the internship and checked by the head of the practice. At the end of the internship, the student completely fills out all the reporting sections of the diary and journal, the direct supervisor of the internship checks and signs them, and gives the student a work description with a five-point rating of the work. The diary must be signed by the direct supervisor of the practice on each page. Work in auxiliary units, for example, in the central sterilization department, offices (X-ray, functional diagnostics, physiotherapy, etc.) is certified by the signature of the doctor or secondary medical staff of the corresponding department and office. At the end of the internship, the report and characteristics of the student are signed by the direct supervisor of the internship.

Students who, for a valid reason, are taking internships outside the academy's training bases must submit a report on their work experience, signed by the direct head of the practice and certified with the seal of the medical institution. Without the signature and seal of the medical institution, the practice is considered invalid.

At the end of the internship, all students are certified for mastering clinical skills at the Center for Clinical Skills Development and Knowledge Assessment (CRKNiOZ). Certification is carried out by a specially created commission from among the heads of production practices and specialists of the CRKNiOZ.

A student who has received an unsatisfactory assessment based on the results of certification has the opportunity to re-pass the certification (1 time).

Students who missed a production internship for a disrespectful reason (missed 50% or more of the production internship days) they are sent again for a paid course of industrial practice during the fall semester during extracurricular hours. Those who have not completed an industrial internship are subject to deduction based on academic failure.

Table 3.4. Main types of industrial practice of KSMA students

Course	Type of practice	Clinical databases
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1	"Care for therapeutic patients"; "Care for surgical patients"; "Assistant of junior medical staff"; Volunteer practice at the Mercy Foundation;	Clinical Skills Development Center, National research projects- Research Centers, National Hospital, Regional, city and district health organizations of the Kyrgyz Republic. In total, there are 56 bases in Bishkek and 28 in the regions.
2	"Nurse's assistant";	
3	"Assistant paramedic of emergency and emergency medical care";	
4	"Assistant hospital doctor";	
5	"Assistant GP doctor»	

With the introduction of decentralisation of practical training for students and clinical residents, the clinical bases have been expanded across the country's regions. Table 3.5 shows the data on the practical training of students of the Faculty of Medicine in 2012 enrollment.

As can be seen from the table, 567 out of 572 students (99.1%) completed internships in Bishkek in the 1st year of the first semester, of which only 5 students completed internships in the regions (0.9%). At the end of the second semester in the 1st year, all 563 students (100%) completed their practical training at clinical bases in Bishkek.

Table 3.5. data on practical training by students of the Faculty of Medicine in 2012.

Place of internship	1year 1 sem (2012-13)	1year 2 sem (2012-13)	2nd year (2013-14)	3rd year (2014-15)	4th year (2015-16)	5th year (2016-17)
Total students	572	563	633	559	527	500
Bishkek	567	563	631	559	410	269
Osh	-	-	-	-	19	36
Naryn	1	-	-	-	12	23
J-Abad	2	-	-	-	20	42
Batken	-	-	-	-	21	39
Talas	-	-	-	-	15	10
Issyk-Kul	2	-	-	-	17	50
Chui	-	-	2	-	13	31
Abroad	-	-	-	-	2	
Failed	9	-	19	4	4	13

In the 2nd year, internships are also localized in the capital – 631 students (99.6%) and only 2 students completed internships in the regions (0.3%).

In the 3rd year, all students completed internships in Bishkek – 559 people (100%).

In the 4th year, due to the decentralization of clinical databases, 410 out of 527 students remained in Bishkek (77.7%), while 22.2% completed internships in the regions and 0.4% - abroad. Compared to previous years, there has been a sharp increase in the percentage of students taking internships in the regions.

A noticeable increase in decentralization is also observed in the next 5th year, where out of 500 students, 231 (46.2%) passed in the regions.

A total of 13 students who were expelled did not complete their internship courses (due to academic debt) during the study period. It should be noted that most of them failed in the 2nd year-19 people (3%) and in the 1st year-9 (1.6%).

Thus, industrial practice with decentralization has actually been implemented at the Faculty of Medicine since the 2015-16 academic year, i.e. from the 4th year of study.

Results of assessment of satisfaction of students of 5-6 courses of physical therapy with the quality of industrial practice

In October-November 2017, an assessment of student satisfaction with the quality of summer industrial practice was carried out among students of the 5th (who completed the internship "assistant to a hospital doctor") and the 6th year of the Faculty of Medicine (who completed the internship "assistant to a GP doctor").

The assessment was carried out using a blank questionnaire. The questionnaire included questions on evaluating the following satisfaction criteria::

- Overall satisfaction with the internship; Satisfaction with the process of organizing a production practice;
- Satisfaction with the support of medical staff at the places where the AP is completed;
- Satisfaction with living conditions;
- Satisfaction with the help of field practice managers;
- Satisfaction with the acquisition of practical skills during the internship.

A total of 765 students took part in the survey: 363 (74.5%) 6th-year students and 402 (66.9%) 5th-year students of the Faculty of Medicine.

Among the respondents, 216 (59.5%) 6th-year students and 221 (54.9%) 5th-year students completed summer practical training in Bishkek.

In the regions, 147 (40.5%) 6th-year students and 181 (45.1%) completed summer industrial internships.

Overall student satisfaction with the quality of industrial practice "assistant hospital doctor" in the 5th year was 51.5%, "assistant GP doctor" in the 6th year was 69.4%, which can be estimated as-average satisfaction. Almost all indicators are in the

range of average satisfaction, with the exception of the satisfaction of 5th-year students with the help of a supervisor – low (47.4%) and living conditions – high (81.8%).

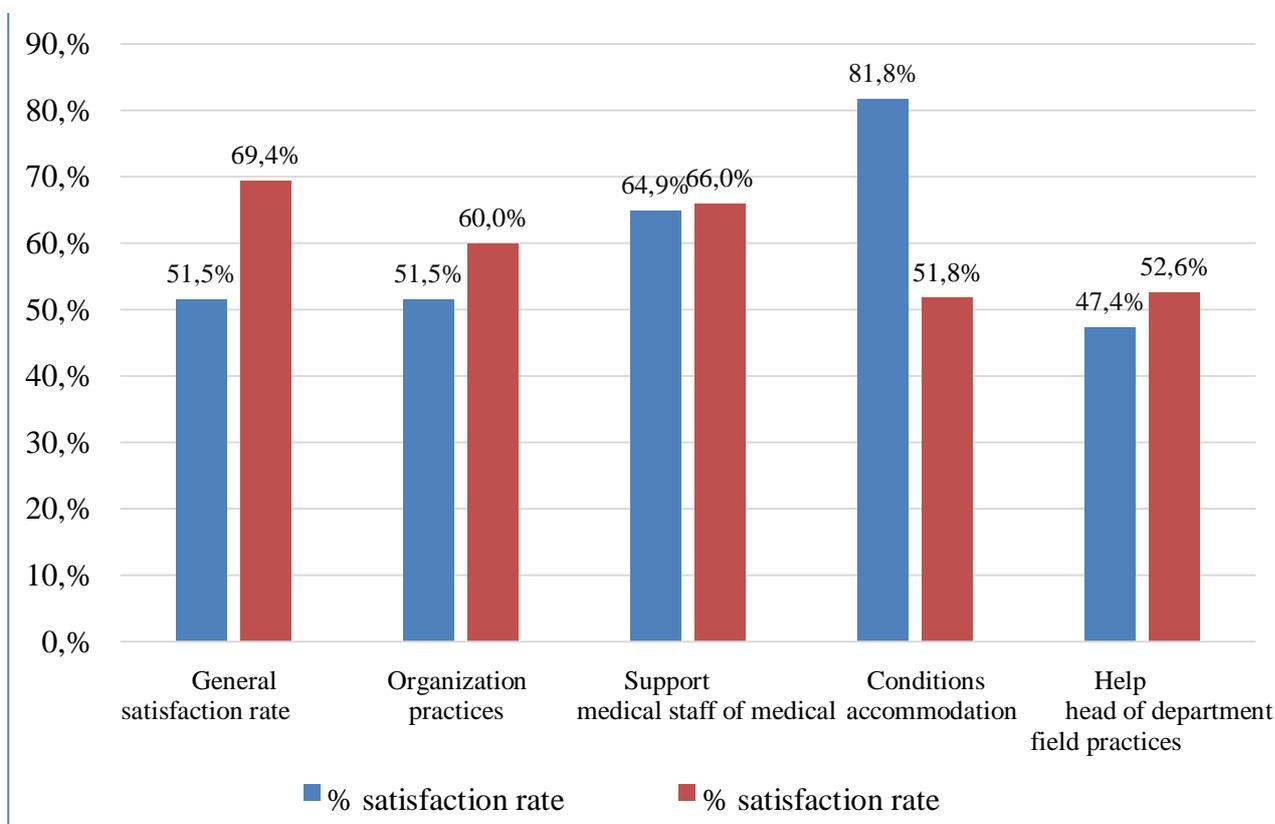


Figure 3.8. Satisfaction of 5th-6th year students of the Faculty of Medicine with the quality of industrial practice

Below are the results of the analysis in the context of satisfaction, depending on the place of practical training.

Indicators of satisfaction of 6th-year students who completed internships in the regions and in Bishkek were the same (Fig.3. 9). At the same time, the satisfaction of students of the 5th year who took place in the regions was high (80%), and among students who took place in Bishkek was extremely low (28%).

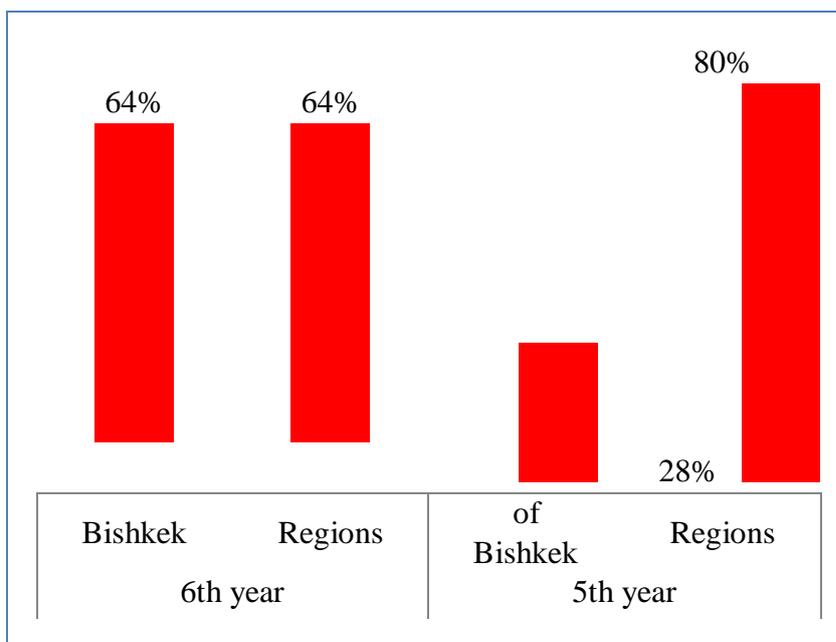


Figure 3.9. Satisfaction of students of 5-6 courses of the Faculty of Medicine with practical training

Students' satisfaction with the process of organizing an industrial internship was much higher among students who completed internships in the regions, compared to students who completed internships in Bishkek (Fig.3.10).

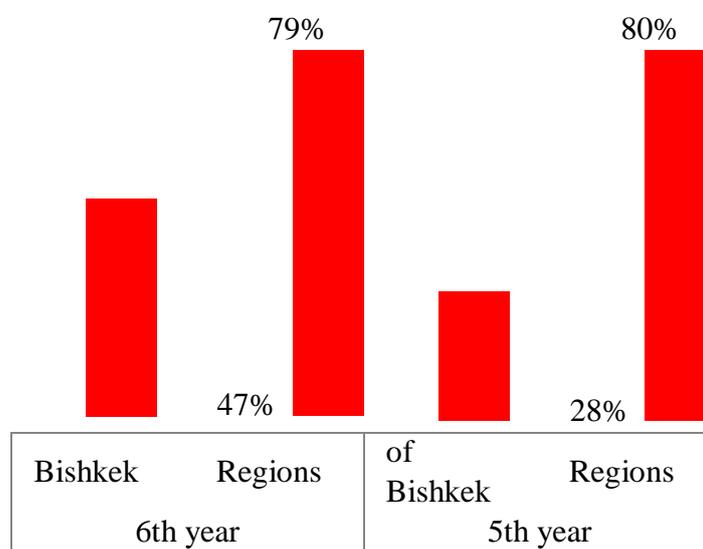


Figure 3.10. Satisfaction with the process of organizing a production practice

Students' satisfaction with the attitude and support of medical staff in the institutions where they were interned was high in the regions (89% and 80%) and average in Bishkek (51% and 53%) (Figure 3.11).

89%

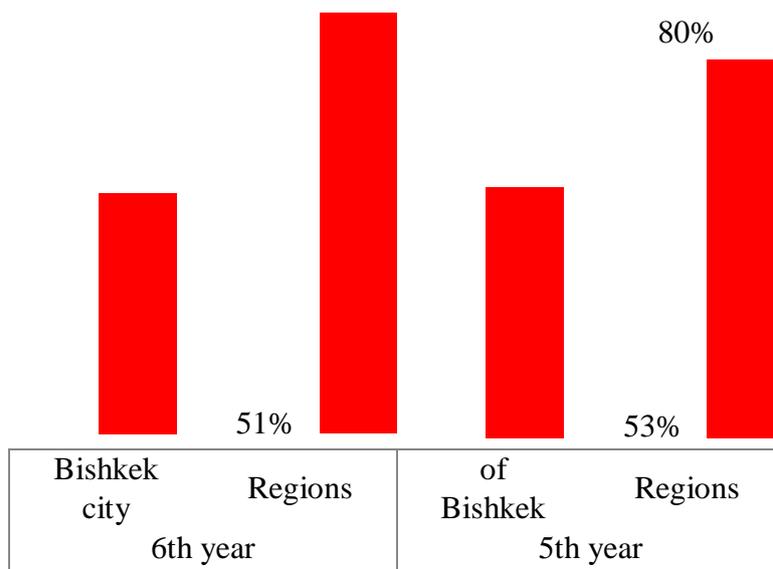


Figure 3.11. Satisfaction with the support of medical personnel in places of practical training

Students' satisfaction with living conditions in the places where they completed internships was also high among students who completed internships in the regions, average among 5th-year students who completed internships in Bishkek, and extremely low among 6th-year students who completed internships in Bishkek (Figure 3.12).

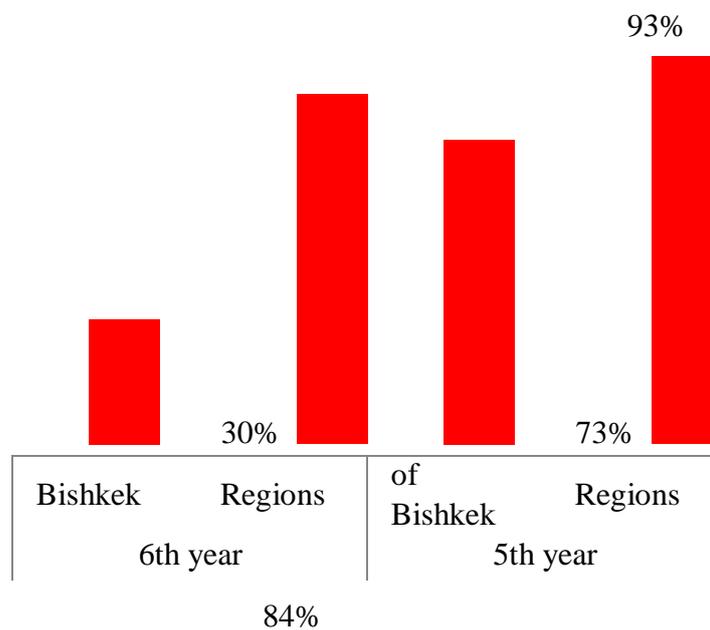


Figure 3.12. Satisfaction of students of the 5th-6th year of physical therapy with living conditions during the internship

Satisfaction of 6th-year students with the help of supervisors was also higher among students who completed internships in the regions (73%- average satisfaction) compared to Bishkek (39% - low satisfaction). Among the 5th year students, satisfaction with the help of field managers was the same (47% and 48%, respectively), and is assessed as a low degree of satisfaction (Figure 3.13).

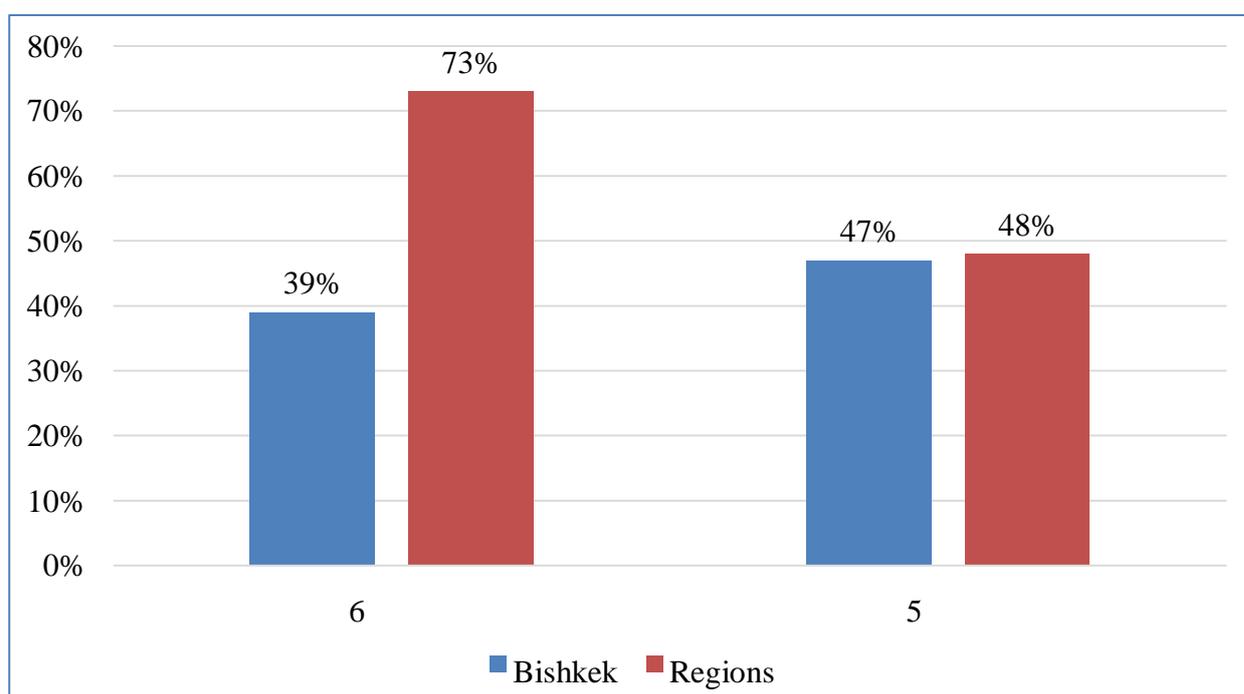


Figure 3.13. Satisfaction of students of the 5th-6th year of physical therapy with the help of local managers

High satisfaction of 6th-year students with the degree of mastering practical skills in various blocks (specialties) of industrial practice was noted in "pediatrics" (93.9%) and "therapy" (93.7%). Despite the fact that the satisfaction rates of 6th year students in the "surgery" (57.6%) and "obstetrics and gynecology" (54.8%) blocks are higher than 50%, which can be estimated as – average satisfaction, measures are required to improve the quality of industrial practice in these blocks. At the same time, it should be noted that the satisfaction of 6th-year students who completed internships in Bishkek was higher in comparison with those in the regions in the "surgery" and "obstetrics and gynecology" blocks, and lower in the "pediatrics" and "therapy" blocks (Fig.

3.14).

Satisfaction of 5th-year physical therapy students in all practice blocks was high and ranged from 94% to 98.2% (Figure 3.15). At the same time, there were no significant differences between the satisfaction of students who completed internships in Bishkek and in the regions, the difference ranged from 0.3% to 3.3%.

It was not possible to determine the reason for dissatisfaction with the development of practical skills, since the questionnaire did not contain relevant questions.

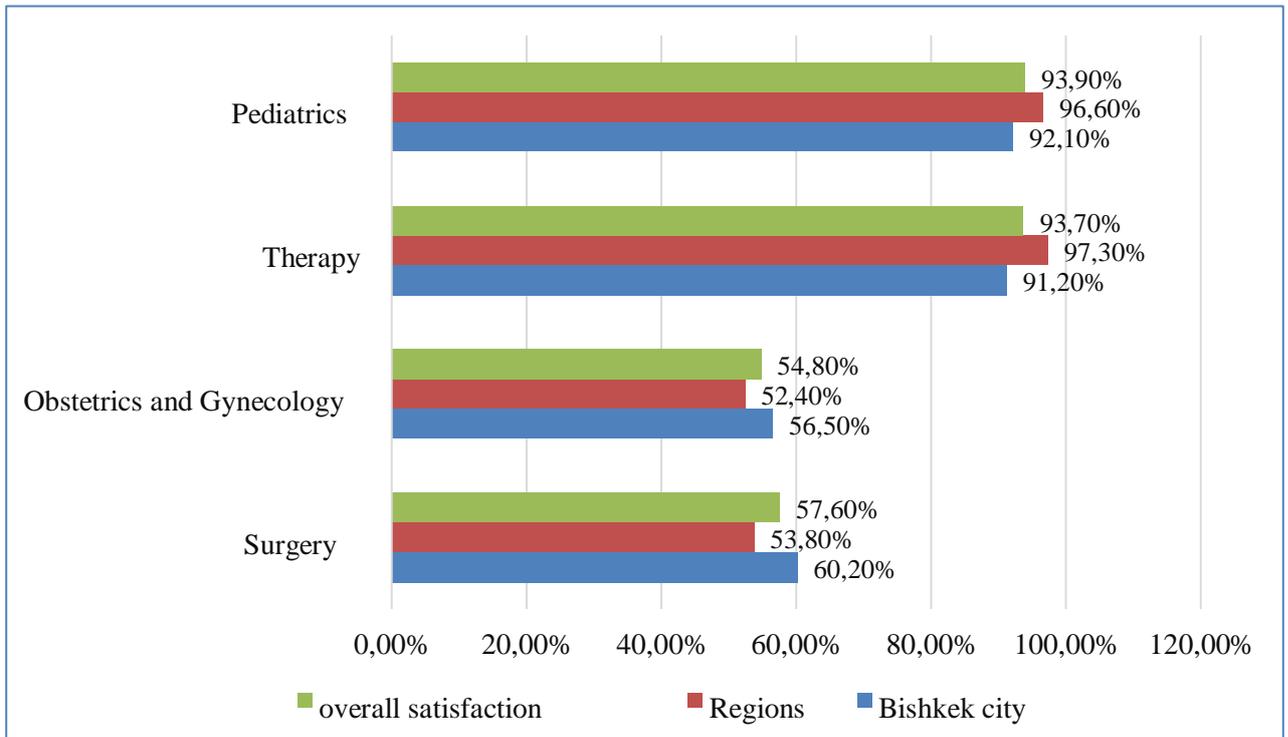


Fig. 3. 14. Satisfaction of students of the 6th year of physical therapy with summer practice in the following specialties

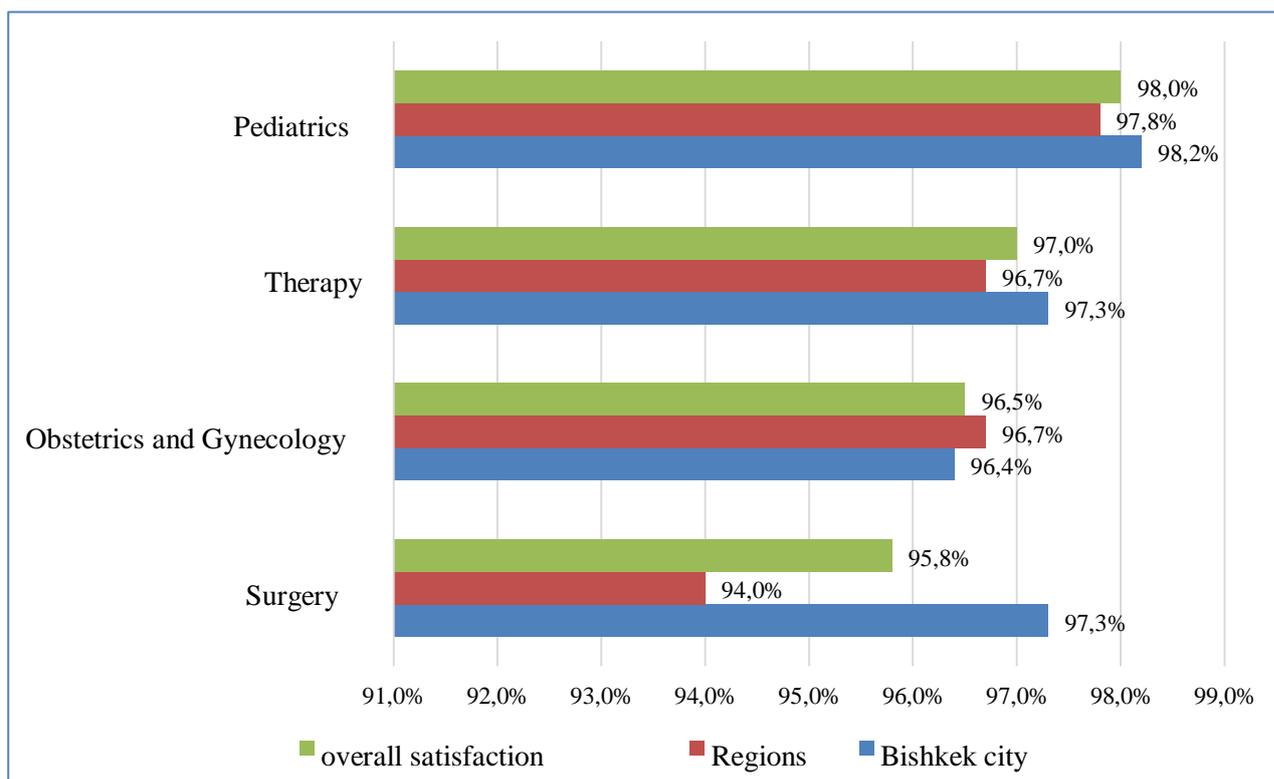


Figure 3.15. Satisfaction of students of the 5th year of physical therapy with summer practice in the following specialties

Table 3.5. SWOT analysis of the quality of production practices in KSMA

Strengths	Weaknesses
1. High satisfaction	1. low total Extremely
number of 6th-year students with the degree of mastering practical skills in the block "pediatrics" (93.9%) and "therapy" (93.7%)	satisfaction and satisfaction with the organization of the internship of 5th-year students who completed their internship in Bishkek (28%);
2. High satisfaction of 5th year students with the degree of mastering practical skills in all blocks of the internship program	2. The satisfaction of 6th-year students in the "surgery" (57.6%) and "obstetrics and gynecology" (54.8%) blocks is critical and close to a low degree of satisfaction.
3. Students' satisfaction with the process of organizing an internship, medical staff support, and living conditions in the regions was higher than in Bishkek.	3. Satisfaction of 6th-year students in the "surgery" and "obstetrics and gynecology" blocks was slightly lower in the regions.
Features	Threats (risks)

<ol style="list-style-type: none"> 1. Training of practice managers; 2. Explanatory work among medical staff in Bishkek, 3. Revision of production practice programs in accordance with the competence catalog; 4. Revision of the Questionnaire questions; 5. Wider use of simulation training methods in Bishkek 	<ol style="list-style-type: none"> 1. Reduced interest of clinical databases in the regions; 2. Conservatism on the part of practice managers;
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CHAPTER 4. SATISFACTION OF GRADUATE STUDENTS OF THE FACULTY OF MEDICINE WITH THE QUALITY OF TRAINING AT KSMA

In 2012, as part of a pilot project, the introduction of new training programs focused on a modular-integrated approach began. In 2018, the first batch of students (2012) enrolled in the pilot curriculum completed their studies. In this regard, in order to assess the quality of students' training in new academic programs focused on a modular integrated approach, a survey of students was conducted on their satisfaction with the quality of training in accordance with the graduate's competencies.

The method of collecting primary information is a survey using a questionnaire. For the survey of students of the 6th year of the faculty in the specialty "Medical science", a questionnaire of graduate satisfaction with the quality of the educational process at KSMA was developed, containing 23 questions, including 14 closed questions and 9 open questions to which students answered in free form (*Appendix 8*). Closed questions related to the degree of preparation of graduates in accordance with the catalog of competencies of graduates in the specialty "Medical Science", and open questions mainly concerned the future plans of graduates and their proposals for improving the quality of training in KSMA.

The method of filling out the questionnaire is an individual form of student answers to the questionnaire questions in electronic format in computer classes (venue-Testing Center).

In order to get acquainted with the specifics of working with the questionnaire in each student stream surveyed, a preliminary short briefing was conducted by the responsible person from the software and system support department.

The assessment was made using a scale Likert (a question with a suggestion to indicate the degree of agreement or disagreement with a particular statement) for five possible answers:

1. Totally disagree
2. I don't agree
3. I doubt
4. I agree
5. I totally agree

In the summary assessment, the degree of satisfaction of graduate students of more than 80% was assessed as high, in the range from 50% to 80% – as average, less than 50% - as low. **Survey results**

Overall satisfaction of graduate students in their specialty "Medical business" quality of training of specialists at the faculty is average (65%).

High satisfaction of graduate students was noted according to the following criteria of student readiness: the availability of practice on the basis of CSM and HSV (97.3%), the ability to work independently on a computer (87.2%), the ability to conduct a survey, examination and examination of the patient, the choice of appropriate research methods (85.5%) and the ability to identify problems and attract the appropriate specialist to solve them (82.3%)

(Table 4.1).

Tab.4.1. Satisfaction of graduate students in the specialty "Medical science" with the quality of training of specialists at the faculty

Item number	Criterion (question)	Percentage of customer satisfaction	Satisfaction level
1.	Ability and willingness to communicate with patients and colleagues in Kyrgyz and Russian	74%	average
2.	Ability to work independently on a computer	87.2%	high
3.	Knowledge and ability to find sources of medical information necessary for work	68.6%	average
4.	Ability to analyze medical information based on the principles of evidence-based medicine	56.8%	average
5.	Readiness for organizational and managerial work with small groups (families, groups)	68.5%	average

6.	Ability to identify problems and attract the appropriate specialist to solve them	82.3%	high
7.	Knowledge of regulatory legal acts, rules of medical ethics and morals	67.7%	average
8.	Knowledge and ability to analyze clinical syndromes, substantiate diagnosis, treatment, prevention, taking into account their age and gender groups	65.2%	average
9.	Ability to conduct a survey, examination and examination of the patient, the choice of appropriate research methods	85.5%	high
10.	Readiness to make a diagnosis based on the results of the examination	75.2%	average
11.	Ability and readiness to perform therapeutic measures for the most common diseases and conditions	69.5%	average
12.	Ability to apply modern methods of collecting and analyzing information on population health indicators	45.5%	effective
13.	Have you ever had an internship at the CSM or GSV?	97.3%	high
14.	The quality of training of specialists at the faculty	is 65%	average

Satisfaction with the ability to analyze medical information based on the principles of evidence-based medicine is slightly lower than the average (56.8%) and low satisfaction with the ability to use modern methods of collecting and analyzing information on public health indicators (45.5%).

It should be noted here that when answering the question – "What disciplines/modules/topics, in your opinion, can be reduced or offered as an elective course", students mentioned such subjects as computer science, epidemiology, evidence-based medicine, statistics (see below). Obviously, students do not understand that it is these subjects that form competence in the ability to analyze information based on the principles of evidence-based medicine and the use of methods for collecting and analyzing information about health indicators. Departments leading these subjects should pay attention and strengthen their work in this regard.

For the rest of the criteria, the average satisfaction of students was noted, ranging from 65% to 75.2%.

When interviewing graduate students "What is the ratio of theoretical knowledge gained to practical experience?", 66% believe that training is mainly theoretical in nature

with a theory / practice ratio of 70% to 30%. About 15% believe that the ratio of theory and practice is 50% to 50%, and 19% believe that their training was dominated by the acquisition of practical skills based on theoretical knowledge.

When asked "**List the clinical bases where you were trained in the 6th year and indicate whether your work with patients was supervised.**" Students indicated mainly clinical bases located in Moscow.

Bishkek: welfare has been established, Ncsrt, clinical hospital No. 1, national hospital, NHC, RNIB, Bishkek maternity hospital No. 2, MTS KSMA, CSM № 1, 2, 4, 6, 7, 12, 13, 15, 18, 19. Despite the fact that there is evidence that 5 course about half of the students (46.2 per cent) have been the practice in the regions (see section 4.3.). In most cases, the graduates indicated that the supervision of the internship was, but it was insufficient.

When answering the question "**What subjects/modules/topics do you think can be shortened or offered as an elective course?**" students noted the following subjects:

1. physics, medical biophysics, higher mathematics, computer science, (medical biophysics as an elective course);
2. epidemiology, statistics (reduce statistics);
3. Economy;
4. bibliography
5. philosophy;
6. public health
7. Physical Culture
8. Kyrgyz and Russian languages
9. evidence-based medicine

When answering the question "**What disciplines/modules/topics do you think need more in-depth study?**" the students noted mainly clinical subjects such as surgery, therapy, internal diseases, pediatrics, gynecology, radiation diagnostics, anesthesiology and resuscitation, functional diagnostics. From the theoretical disciplines, the following disciplines were indicated: normal anatomy, pathological anatomy, normal physiology, pathological physiology, pharmacology, biochemistry.

Analysis of the answers to questions about the future showed that **95.8% of graduates intend to continue their studies in residency.**

To the question "**In what specialty do graduates intend to complete their residency?**" the overwhelming majority of respondents (86%) would like to enter a residency program in a narrow specialty, 10% would choose a GP residency, and 4% of students chose the "other" category.

When answering the question "**What clinical subjects would students like to pursue postgraduate training in?**" students noted the following specialties:

- from therapeutic areas: therapy, internal diseases, cardiology, cardiorheumatology, endocrinology, neurology
- surgical profile: surgery, neurosurgery, traumatology, general surgery, cardiac surgery, microsurgery, vascular surgery, plastic surgery
- obstetrics and gynecology,
- GP,
- ENT,
- oncology,
- gastroenterology
- ophthalmology,
- urology,
- anaesthesiology and resuscitation,
- pediatrics,
- proctology,
- functional diagnostics, □ pediatrics.

It should be noted that 2 students gave answers "according to the European system" and "abroad", i.e. by the end of the 6th year, students could not decide on the choice of specialty, the main motivating factor for them is an internship abroad.

In the answers to the question " Where would students like to complete their residency?» 79% of the students who entered the answer indicated healthcare organizations located in Bishkek, the rest indicated abroad (Russia, Europe), and only 1 student indicated Osh State University . But not a single student indicated a healthcare organization in the regions.

Table 4.2. SWOT analysis of graduates ' satisfaction with the quality of training at KSMA

Strengths	Weaknesses
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<ol style="list-style-type: none"> 1. High satisfaction of graduates with the availability of practical training on the basis of CSM and GSV during their studies (97.3%), 2. High satisfaction of graduates with the ability to work independently on a computer (87.2%), 3. High satisfaction of graduates with the preparation of the ability to conduct a survey, examination and examination of the patient, the choice of appropriate research methods (85.5%) 4. High satisfaction of graduates with training ability to identify problems and attract the appropriate specialist to solve them (82.3%) 5. 95.8% of graduates intend to continue their training in residency 6. 66% of students believe that the theory / practice ratio is 70% to 30%. 	<ol style="list-style-type: none"> 1. Below the average level of satisfaction with the ability to analyze medical information based on the principles of evidence-based medicine (56.8%) is noted 2. Low satisfaction with the ability to apply modern methods of collecting and analyzing information on public health indicators (45.5%) 3. There is no understanding among students of what form competence in the ability to analyze information and apply methods for collecting and analyzing information on health indicators 4. Insufficient supervision of internships 5. The vast majority of graduates (86%) would like to enter a residency program in a narrow specialty, and only 10% would choose a GP residency 6. None of the graduates surveyed indicated the region for completing their residency
Features	Threats (risks)
<ol style="list-style-type: none"> 1. Advanced training of teaching staff in methods of collecting and analyzing statistical data, evidence-based medicine. Revision of programs, development of UMS in these areas; 2. Implementation of monitoring and evaluation of the quality of practical training; 3. Development of a plan 	<ol style="list-style-type: none"> 1. insufficient funding from the state completing residency in the regions 2. unstable socio-economic situation 3. changing demographic situation
<p>measures/interventions to increase the understanding, importance and prestige of GP residency;</p> <ol style="list-style-type: none"> 4. Conducting explanatory work among students about the advantages of completing a residency in the regions. 	

CHAPTER 5. ANALYSIS OF ACADEMIC PERFORMANCE OF STUDENTS OF THE FACULTY OF "MEDICAL SCIENCE"

In order to assess the effectiveness of the implementation of the general education program in the specialty "Medical Science", introduced since 2012, an analysis of changes in the number of students and academic performance over the past 6 years was carried out.

The object of the study was students of the faculties of "Medical business" No. 1 and No. 2, studying both on a budget and under a contract.

The sources of information were monthly reports of the student personnel department on student movement.

3.1. Analysis of changes in the number of Medical Business faculty students in 2012.

In total, 517 students were enrolled in the 1st year in 2012, including 143 on budget and 374 under contract. In 2018, 448 completed their studies and received a diploma (including those restored and transferred from other universities), of which 126-under the budget and 322-under the contract. Thus, the percentage of students who completed their studies was 86.7%, and the percentage of those who were expelled was 13.3%. Budget training.

Всего студентов **1 course** As of September 2012, there were 143 1st-year students of the faculties of "Medical Science" No. 1 and No. 2, including students who were reinstated for the first year after academic leave. According to the results of the first winter and summer examination sessions, 1 student was expelled, 1 person left the academy at his own request. So, 141 students (98.6%) complete the 1st year and are transferred to the 2nd year, **1.4% are expelled.**

Total students **2 course** At the beginning of 2013, there were 146 students of the 2nd year of the faculties of "Medical Science" No. 1 and No. 2, together with the restored students and those transferred from other universities. At the end of the session, 6 students were expelled, 2 students went on academic leave and 1 of their own accord. Of those who started classes at the beginning of the academic year, 137 (93.8%) completed the course, **and 6% were expelled.** Five students transferred from other universities, and the number of students at the end of the year was 137 people.

Due to transfer to other universities, **3 course** 135 students started their studies in September 2014 for the 3rd year. According to the results of the sessions, by the end of the academic year, 9 people (6.6%) were expelled for academic debt, 1 student left at their own request, and 3 students went on academic leave. Of those who started classes at the beginning of the academic year, 122 (90.4%) completed the course, **and 9.6% were**

expelled. One student was reinstated and 125 people completed the 3rd year at the end of the year.

At the beginning of the academic year in September 2015, **the 4th year** in full started training – 125 people. During the course, 4 students were expelled for academic failure, 5 left at their own request, 1 student went on academic leave, and were transferred to another university. Of those who started classes at the beginning of the academic year, 114 (91.2%) completed the course, **and 8.8% were expelled.** One student was reinstated and at the end of the year 122 students completed the 4th year.

In the **5th** year, 122 students started their studies, and according to the results of the sessions, 2 students were expelled for academic debt. Of those who started classes at the beginning of the academic year, 120 (98.4%) completed the course, **1.6% were expelled.** However, 6 students were reinstated for this course, and at the end of the year 126 students completed the 5th course.

It should be noted that all 126 students (100%) who entered the **6th year**, successfully completed their studies by the end of the academic year.

Contract training.

In total, **374 1st-year students** (2012) of the faculties of "Medical Science" No. 1 and No. 2 were enrolled in contract training; at the beginning of the academic year, 5 people left for other universities and 1 student at their own request. So, the total number of students at the end of September was 368 students on the course. According to the results of the first winter and summer examination sessions, 3 students were expelled at their own request, 7 students were expelled for academic failure, and 2 students were expelled due to illness. So, 356 students (95.2%) complete the 1st year and are transferred to the 2nd year, **4.8% are expelled.**

In September 2013 at **In the 2nd** year, 76 students were transferred from other universities, and 432 students started classes. During the academic year, 5 students were expelled at their own request, and 44 students were expelled for academic failure. Thus, 383 students (88.7%) were transferred to the 3rd year, **11.3%** (49 students) were expelled.

In the **3rd year** (2014), 391 students started their studies: 10 people were reinstated, 2 people were transferred, 1 person died, 2 were expelled at their own request, and 1 was expelled for academic failure. After the winter session, 1 student was reinstated. During the academic year, 4 students were expelled at their own request, and 32 were expelled for academic failure. Of those who started classes at the beginning of the academic year, 358 (91.5%) completed the course, **8.4% were expelled**, and 359 students were transferred to the 4th year.

For **the 4th** year, 10 students were reinstated, 2-transferred to other universities, 367 students started classes. During the academic year, 1 student was expelled at his own

request, and 15 students were expelled for academic failure. As a result, 351 students (95.6%) graduated and were transferred to the 5th year, **while 4.4% were expelled.**

At the beginning **of the 5th year**, 2 students left at their own request, 1 due to illness, 1 due to family reasons, 348 students start studying. During the academic year, 1 student was expelled at their own request, 21 students were expelled for academic failure, and 2 students were expelled due to transfer to another university. Thus, 330 students (94.8%) finish the academic year and are transferred to the 6th year, **and 5.2% are expelled.**

Due to the recovery of 1 student, **6 course** 331 students started their studies in the 6th year. During the academic year, 2 students were expelled at their own request, 2 for family reasons, and 6 for academic failure. 1 student was reinstated. 322 students (97.3%) received a diploma of graduation from the Academy, and 2.7% were expelled.

Among the reasons for deductions, the largest share falls on deductions based on academic failure. So in the 1st year, 1.5% were deducted for academic failure, 1% - at their own request, and 1% were transferred to other universities (all transferred from the contract form of study). In the 2nd year, 8.6% were expelled for academic failure, 1% - at their own request, and 0.3% took academic leave (all with a budget form of study). In the 3rd year, 7.8% were expelled for academic failure, 0.9% - at their own request, 0.6% took academic leave (all with a budget form of study). In the 4th year, 3.8% were expelled for academic failure, 1.2% - at their own request, 0.2% took academic leave (all with a budget form of study). In the 5th year, 4.9% were expelled for academic failure, 0.2% - at their own request, 0.4% were transferred to another university (all with a contract form of study).

It should be noted that the largest percentage of expulsions was observed in the 2nd-3rd year (12% and 10.1%, respectively), the dominant reason for expulsions was academic failure (Figure 5.1).

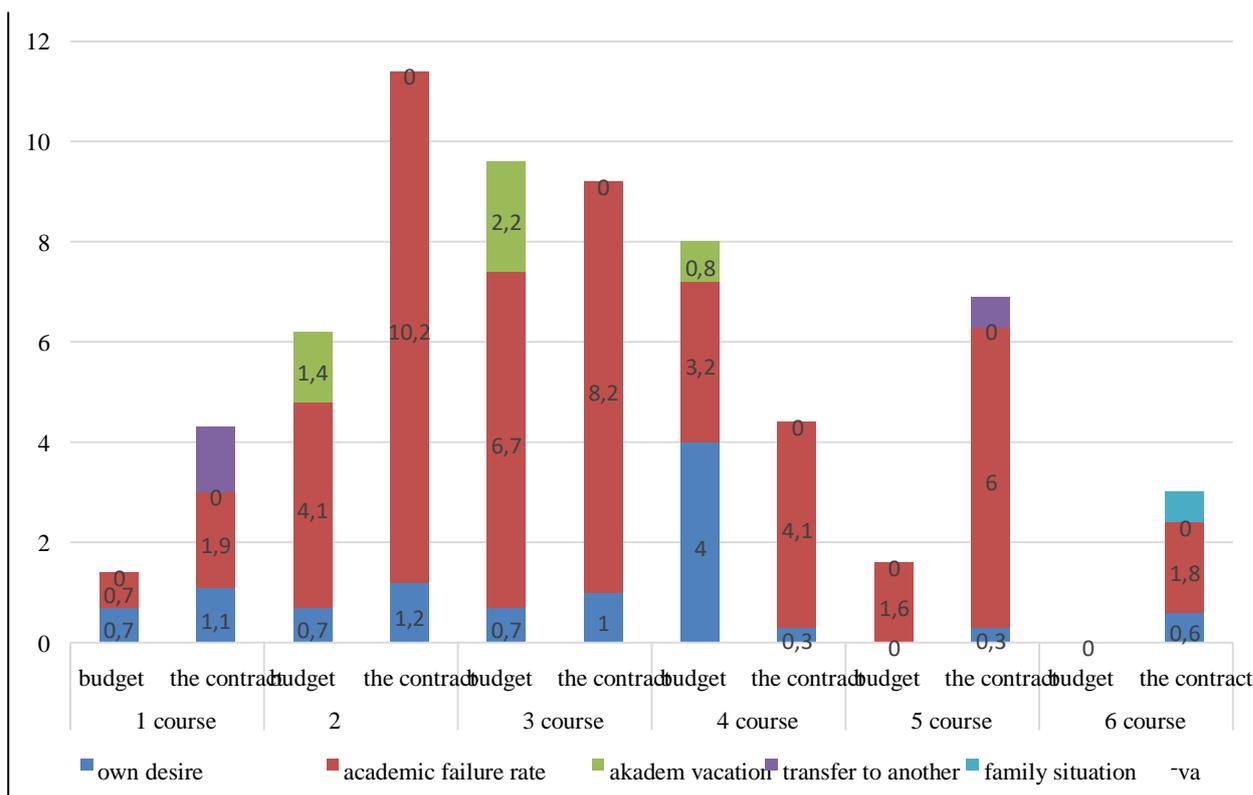


Figure 5.1. Percentage of exchange rate deductions by reason of deduction

In the state-funded form of education, academic leave was the second reason for deduction, with the exception of 4 years of study, where the dominant reason was voluntary deduction. On the contract form of study, there is no registration of academic leave, but there is a deduction due to leaving for another university, which is not observed on the budget form of study.

In total, 27 students left at their own request during the training period, mainly among students of 1-4 courses. At the same time, it should be noted that among students studying on a contract basis, the percentage of deductions for this reason drops sharply after 3 years of study, while among students studying on a budget basis, on the contrary, the highest percentage of deductions for this reason is observed in the 4th year of study.

Special attention should be paid to transfers of students from other universities to KSMU. Most of the students were transferred in the 2nd year, which can be explained by the fact that students who could not enter the academy due to threshold points apply for transfer in the 2nd year due to the high prestige of KSMA.

As for the reasons for the deterioration of academic performance among students of 2-3 courses, professional and cognitive motives cease to control the students' academic work, as a result of which their academic activity and success are noticeably reduced during this period, the so-called "disappointment syndrome" is formed, etc.

In this regard, preventive measures were proposed to preserve the student population:

1. Pre-university career guidance work in schools, which helps identify students who are capable of learning, responsible and purposeful, and orient them towards admission to a medical university.

2. Inclusion in the learning process of interactive forms of learning (public defense of coursework and projects, round tables, brainstorming sessions), which allow students to actively interact with the teacher and help each other.

3. Organization of meetings with employers in junior years to show interesting aspects of their future specialty and increase motivation to study.

4. Effective motivation of teachers to perform high-quality educational work, improve their pedagogical skills.

3.2. Analysis of the results of computer testing of knowledge of students of the faculties of "Medical science" in 2018

Since 2013, KSMA has introduced the assessment of students' knowledge by computer testing. The assessment is carried out in the Center for Clinical Skills Development and Knowledge Assessment (CRKNiOZ), designed for 75 seats.

Currently, the method of computer testing is used to assess students' knowledge in 9 modules (according to the Medical Science curriculum) and 4 disciplines, i.e. in 13 exams out of 30 exams (excluding final exams), which is 43%. The main part of exams conducted by computer testing falls on the 1st, 2nd, and 3rd courses.

Table 5.1 shows the percentage of academic achievement based on the results of computer testing of students' knowledge of the faculties of "Medical Science".

Table 5.1. Percentage of academic performance of students of "LD" faculties based on the results of computer testing of knowledge (winter session 2017-2018)

Name of the module or subject	% of academic performance			
	LD 1	LD 2	LD IG	Average
Module "From molecule to cell"	93	96	92	94
Cell-to-organ module	87	97	93	92
MVS module	99	100	98	99
Endocrine System module	98	99	98	99
Reproductive System module	96	97	98	97
Nervous System module	85	91	80	85
Module "Cardiovascular system"	92	92	94	93
Musculoskeletal System module	94	97	88	93
Module "Hematopoietic system"	100	98	93	97

Biochemistry	84	83	85	84
Histology	85	83	100	89
Basic pharmacology	89	81	86	85
Clinical pharmacology	97	99	No data	available 98

The maximum percentage of academic achievement (99%) based on the results of computer testing of knowledge is observed in the modules "Endocrine" and "Urinary" systems. The minimum results are marked by discipline Biochemistry (84%) and the Nervous System module (85%).

Table 5.2. Results of the examination session at the Faculty of LD 1 for the 2017-2018 academic year

Training courses	Names of items or modules	Quality indicator* Average knowledge -72.94%
1 course	From molecule to cell*	83,20%
	From cell to organ*	82.60%
2nd course	Pathological physiology	69.60%
	Pathological anatomy	86.90%
	Histology*	85.90%
	Biochemistry*	72.10%
	Normal anatomy	80.60%
	Microbiology	72.80%
3rd year	Reproductive system*	86.20%
	Urinary system*	86.20%
	Nervous system*	66.90%
	Endocrine system*	82.60%
	Hematopoietic system*	69.60%
	Musculoskeletal system*	53.20%
	Cardiovascular system*	59.60%
	Basic Pharmacology*	51.10%
	Surgery	86.50%
Course 4	Ophthalmology	61.20%
	VTMZ	88.90%
	A and D	63.60%
	Nervous diseases	59.90%
	ENT diseases	60.60%
	Dermatovenerology	69.40%
5 course	Psychiatry and narcology	43.60%
	Clinical Pharmacology*	79.20%
	Obstetrics and Gynecology	79.50%

Hospital pediatrics	82.10%
Hospital treatment	61.60%
Hospital surgery	86.90%
Infectious diseases	76,20%

Note: * - indicates exams that are conducted using computer testing.

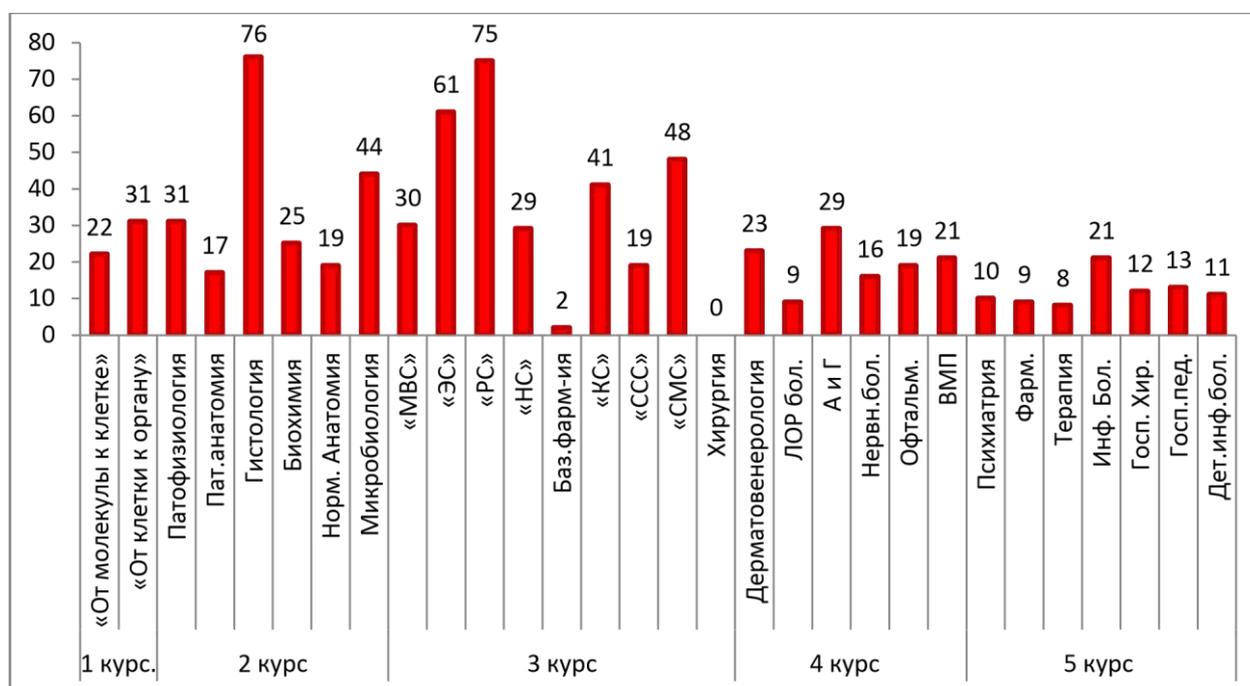


Figure 5.2. The number of students of the Faculty of GENERAL MEDICINE-1 who were exempted from exams with an "excellent" grade in the 2017-2018 academic year

As can be seen from the figure, the largest number of students exempted from exams falls on the 1st, 2nd, and 3rd courses, while the maximum number of exempted students accounted for "Histology" and the module "Respiratory System", while there were no exempted students in "Surgery" at all. There is a big difference between the number of students released, which may depend both on the complexity of the discipline and on the imperfection of the averaging modular rating system of assessment in comparison with the cumulative one. **Table 5.3. Results of State exams at the Faculty of "GM 1" in the 2017-2018 academic year**

Course	The exam	Allowed	Certified	Not certified
II	History of Kyrgyzstan	223	222	1
VI	Polyclinic therapy	254	251	3
	Obshch. hygiene and epidemiology	254	254	0
	Obstetrics and Gynecology	254	254	0
	General surgery	254	254	0

Total	1239	1235	4
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As can be seen from the table, the number of unapproved students from the number allowed to pass the state certification was insignificant and amounted to 0.3%.

3.3. Analysis of the reasons for expelling students of the Faculty of "Medical Business No. 1, 2" for the 2017-2018 academic year

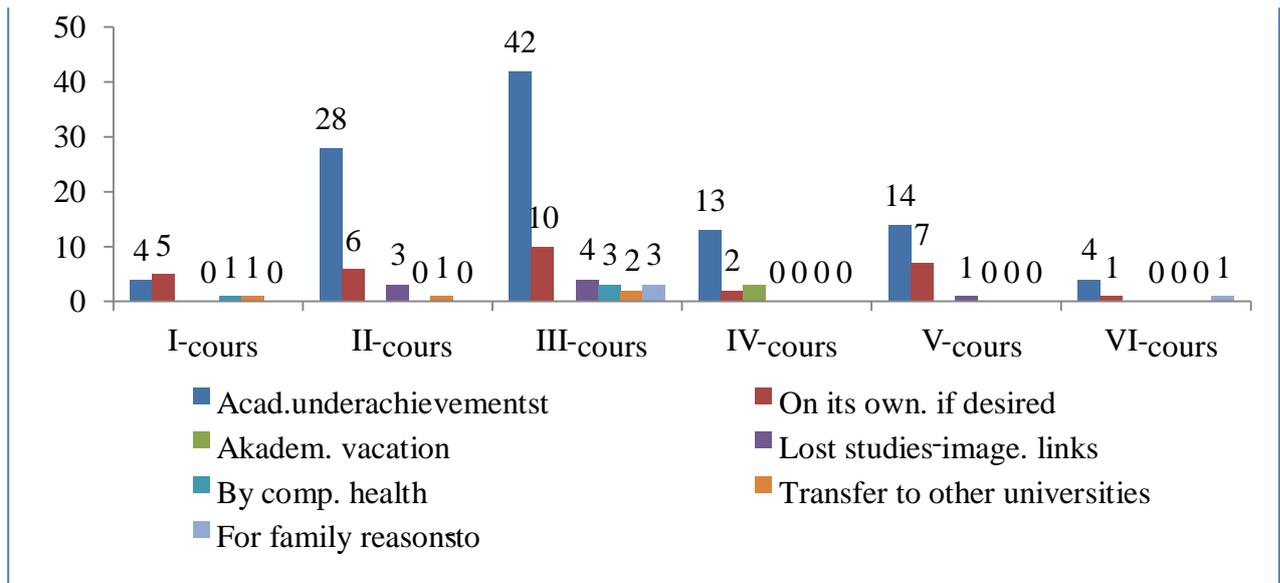


Figure 5.3. Reasons for expelling students of the Faculty of "Medical Science" for the 2017-2018 academic year in the context of training courses

As can be seen from the figure, the total number of expulsions for the 2017-2018 academic year was 159 students, while the largest number of expulsions falls on the 2nd and 3rd courses of study, which indicates that students experience difficulties during this period of study. The main reason for student expulsions is academic failure.

The main reason for students' expulsions in the 2017-2018 academic year was their academic failure (Fig.??). In the second place among the reasons for expulsions are voluntary expulsions.

At the same time, at the Faculty of Medical Science No. 1,2, the total number of students at the end of the academic year was 2,959 students, and the total number of students expelled from this faculty was 159, which is 5% of the total number.

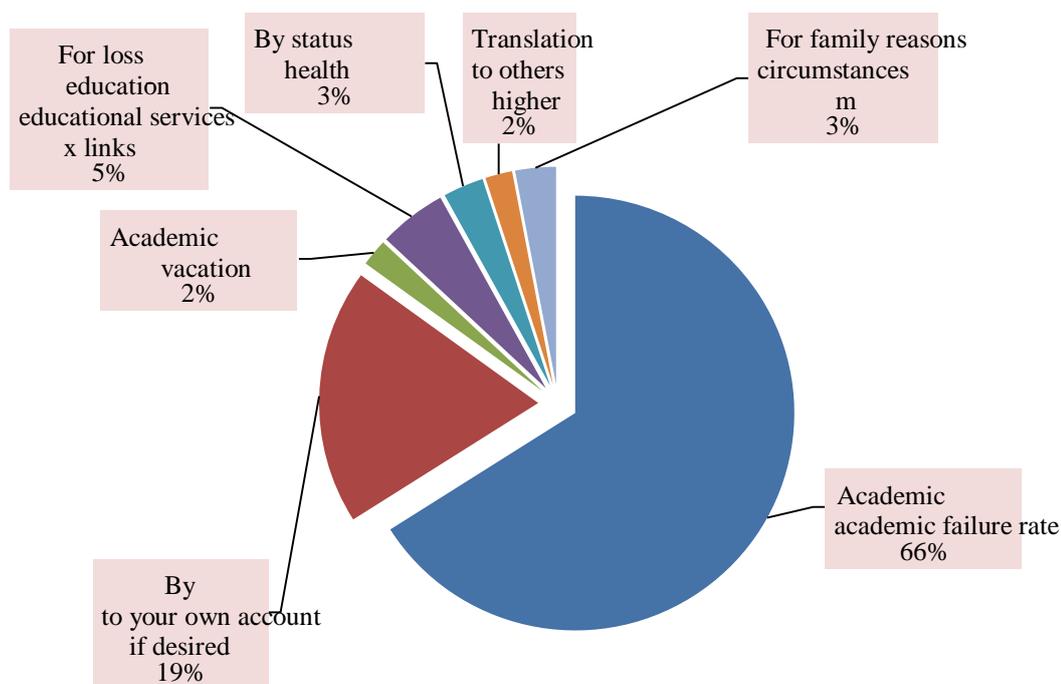


Figure 5.4. Specific weight of reasons for deductions at the Faculty of LD1 in the 2017-2018 academic year

Table 5.4. SWOT analysis of academic performance of students of faculties in the specialty " Medical science»

Strengths	Weaknesses
1. Availability of a Clinical Skills Development and knowledge testing center; 2. Using computer-based testing to assess students 'and residents' knowledge;	1. Limited capacity of the RKNiTZ Center (75 seats in total); 2. Not all subjects are subject to computer-based knowledge testing. 3. Limited database of test tasks and no annual update of the database.
Features	Threats (risks)

<ol style="list-style-type: none"> 1. Expansion of the Clinical Skills Development and Knowledge Testing Center to 300 seats; 2. Expanding the database of test questions; 3. Development and creation of conditions for conducting the unified state exam 4. Involvement of professional associations in the development of test tasks and the formation of a test bank; 	<ol style="list-style-type: none"> 1. lack of funding; 2. Complexity of the tender procurement procedure; 3. Inertia of teaching staff and associations in the development of test tasks;
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CONCLUSION

As a result of the analysis of the data of the conducted assessments in 2018 and reporting data on certain types of KSMA activities, the following can be stated.

On educational process management:

In accordance with the requirements of the educational quality management system, KSMA has developed a process model, defined the main and auxiliary management processes, assigned responsible persons and structural divisions, and has a documented quality management system: Regulations on the Council for the Quality of Education of KSMA, Regulations on the Department of Quality Management of Education, Methodological guidelines for monitoring and evaluating the quality of the educational process in KSMA, etc. There is a KSMA Development Strategy until 2020 and a plan for its implementation. However, it should be noted that the Policy and goals in the field of quality of education are not defined. However, AVN modules are not fully implemented, which does not allow you to fully launch electronic office management;

The KSMA has official mechanisms for managing educational program programs, including clearly defined procedures for the development and approval of educational programs in specialties.

Monitoring and periodic evaluation of educational programs is carried out with the involvement of interested parties (employers, students, teaching staff and KSMA management) and experts. However, the assessment of satisfaction of parents and employers was not carried out.

The educational program has clearly formulated criteria for assessing the level of knowledge, skills and abilities of the student. Since 2012, KSMA has implemented computer testing for the objective assessment of students' knowledge and the OCE method for assessing clinical skills.

The educational program provides for practical training in healthcare organizations starting from the 2nd year of study.

To monitor and periodically evaluate their academic programs, KSMA uses the following methods as an intra-university control: certification of current student performance, final certification, certification of all types of practices, checking the state of methodological support for the educational process, collecting and analyzing customer satisfaction, and internal audits.

A system for collecting and analyzing feedback from students, faculty, and employers has been implemented. The process of conducting surveys is automated, and a module has been created on the AVN educational portal "Questionnaire survey". The

survey of students is conducted both using the resources of the Center for Clinical Skills Development and Knowledge Assessment (CRKNiOZ) and online.

On KSMA infrastructure:

KSMA has a sufficient classroom fund to organize a high-quality educational process. All departments are provided with telephone and Internet connection. To conduct distance learning sessions with students in the regions, a Distance Learning Department is equipped and operates, and "Doodle" and "Moodle" software are installed. Contracts were signed with healthcare organizations as clinical bases for practical training of students and residents of KSMA. Clinical bases for KSMA are both national-level healthcare organizations and healthcare organizations in Bishkek, as well as regional healthcare organizations. In total, KSMA has 148 clinical bases, including 72 hospitals in Bishkek and 76 in the regions. However, despite this, the lack of its own multidisciplinary university clinic and the growing autonomy of healthcare organizations creates a shortage of places for practical training in Bishkek, due to the presence of other universities.

By human resources potential:

KSMA has a high personnel potential: 62 full-time doctors of sciences, 228 candidates of Sciences, 5 academicians and 2 corresponding members of the National Academy of Sciences of the Kyrgyz Republic, 40 full-time professors, 124 full-time associate professors. The share of full-time teachers with an academic degree and / or academic title in the total number of students is 45.5%. There are 10 students per full-time teacher. For professional development of the teaching staff, there is a Center specially organized for this purpose, which organizes professional development courses in the framework of continuing education on a planned basis. In addition, within the framework of academic mobility of teaching staff, training is conducted at various courses, seminars, trainings, as well as professional congresses, congresses, symposiums abroad and within the framework of various international projects. However, due to the introduction of new licensing requirements, the percentage of teachers with an academic degree and / or academic title to the total number of students at the postgraduate level (residency) is lower than the license requirement of 90%.

To monitor and evaluate the quality of teaching and the professional qualities of teachers, KSMA has implemented a system of point-rating assessment, including self-assessment of teaching staff and assessment of student satisfaction "teaching staff through the eyes of students". According to the results of the self-assessment, it was noted that the employees of the departments do not rate themselves very highly, so more than 60% of the employees of the departments rated themselves at a low rating. At the same time, it should be noted that the departments that rated themselves highly during the self-assessment, in

the opinion of students, were found to have the lowest satisfaction scores. In addition, employees of clinical departments note the prevalence of medical and diagnostic work and providing advice to health organizations over educational, methodological, scientific and educational work. Obviously, it is necessary to review the system of assessments (number of points) for the blocks of teaching staff activities and introduce restrictions in the electronic system for entering medical and diagnostic work and providing advice to health organizations in accordance with the load on the teacher.

According to the results of the survey, the overall high satisfaction of students with the quality of teaching at KSMA was noted (84.1%), while the greatest satisfaction was noted by the clarity and accessibility of the presentation of the material by teachers (90.3%) and the ability to ask questions to the teacher (89.1%), the lowest by the availability of teachers for extracurricular consultations on the course (79.5%) and the use of interactive teaching methods.

Software satisfaction of students of the Faculty of Medicine with the quality of modules:

In general, students of the Faculty of "Medical Science" show average satisfaction with the quality of the modules conducted (68%). Students note the greatest satisfaction values based on the clarity of the module's goals and objectives, the relationship between the module's disciplines, and the comprehensibility of the disciplines.

It should be noted that students' satisfaction with the organization and curriculum of modules has increased in comparison with the data of the assessment conducted in 2015, mainly due to an increase in satisfaction with the availability of educational and methodological literature and the organization of independent work of the student in individual modules. However, despite this, it is by these criteria that the lowest satisfaction rates are noted (less than 50%).

Thus, low indicators of student satisfaction in terms of availability of educational and methodical literature are noted in the following modules and blocks: Endocrine system, Nervous system, Musculoskeletal system, Reproductive system, General medical Practice, Surgery, Rheumatic diseases, Infectious diseases, Internal Diseases, Genitourinary system, Respiratory diseases, Heart and vascular diseases, Gastrointestinal tract diseases, Blood and circulatory system diseases.

Low indicators of student satisfaction in the organization of independent work are noted in the following modules and blocks: Introduction to clinical practice, Urinary system, Cardiovascular system, Reproductive system, Pediatrics, Traumatology and orthopedics, Gynecology, Obstetrics and Gynecology, ORP, Surgery, Rheumatic diseases, Infectious diseases, Internal diseases, Genitourinary system, Respiratory diseases, Heart

and vascular diseases, Diseases of the gastrointestinal tract, Diseases of the blood and circulatory system.

Low indicators of student satisfaction in providing consulting and methodological assistance are noted in the following modules and blocks: Pediatrics, Traumatology and Orthopedics, Gynecology, Obstetrics and Gynecology, ORP, Surgery, Rheumatic diseases, Infectious diseases, Internal Diseases, Genitourinary system, Respiratory diseases, Heart and vascular diseases, Diseases of the gastrointestinal tract, Diseases of the blood and circulatory system.

Low indicators of student satisfaction in terms of the objectivity of the test control of knowledge are noted for the following modules and blocks: Endocrine system, Urinary system, Cardiovascular system, Reproductive system.

Low indicators of student satisfaction with the quality of teaching in the module are noted in the module-Reproductive system.

Students report the greatest satisfaction in the modules conducted in the first 2 courses of study: "From molecule to cell "(80%)," Man, Society, health "(79%), and" From cell to organ " (78%).

Students report the least satisfaction in the blocks " General Medical Practice "(53%)," Surgery "(54%) and" Obstetrics and Gynecology "(63%), which are conducted in 4-6 courses of study and are one of the main disciplines that form the competencies of a graduate of the Faculty of "Medical Science".

By satisfaction with academic programs of disciplines:

In contrast to the modules, students show a high degree of satisfaction (81%) with the quality of the organization of the educational process in the disciplines.

Out of 9 criteria, 6 criteria showed high student satisfaction (more than 80%): explanation of the goals and objectives of training (89%); logical and consistent division of disciplines into thematic sections (87%); clarity of the content of the discipline (86%); compliance of lectures and practical classes with the goals of the discipline (83%); help of theoretical knowledge in practice (85%); quality of training of specialists at the department (81%). According to the other three criteria, the average satisfaction was noted: the objectivity of the final control of knowledge (77%), the organization of independent work of students (72%) and the availability of educational and methodological literature (72%).

According to students, the lowest rating in terms of satisfaction with the quality of disciplines (69-76%) was scored by the following departments (in order of decreasing % satisfaction): Hospital therapy, Occupational pathology with a course in hematology, Pathological Anatomy, Philosophy and Social Sciences, Traumatology, Orthopedics and EC, Public Health and Public health, Neurosurgery of pre-graduate and postgraduate education, General Surgery with a course in kombustiology, Obstetrics and Gynecology

No. 2, Hospital surgery with a course in operative surgery, Military medical training and EM, Anesthesiology and intensive care, General and clinical Epidemiology.

On the organization of industrial practice at the Faculty of Medicine:

When analyzing retrospective data on the practical training of students of the Faculty of Medicine in 2012, it was found that the decentralization of practice (practical training in the regions) was actually implemented from the 2015-16 academic year. So, in the 2015-2016 academic year, 22.2% of 4th-year students, and in the 2016-2017 academic year, 46.2% of 5th-year students already completed internships in the regions.

When analyzing the data of an anonymous survey (autumn 2017) on satisfaction with the industrial summer practice of the 2016-2017 academic year among students of the 5th and 6th year of the Faculty of Medicine, it was found that students defined satisfaction with the quality of industrial practice as average: in the 5th year of the practice "assistant to a hospital doctor" - 51.5%, in the 6th year of the practice "assistant to a GP doctor" – 69.4%.

Students of the 5th year noted high satisfaction with living conditions (81.8%), average satisfaction with the support of health care personnel (64.9%) and the organization of practice (51.5%), and insufficient assistance from local managers (<url>).

Students of the 6th year noted average satisfaction in all indicators, while the highest satisfaction values were for the support of health care personnel (66%), the organization of practice (60%), and the lowest for the help of local managers (52.6%) and living conditions (51.8%).

In the regions, 45.1% of students completed the "hospital doctor's assistant" summer internship (5th year) and 40.5% of students completed the "hospital doctor's assistant" internship (6th year).

Indicators of satisfaction among the students practice in the regions as "assistant of physician and physician assistant GSV" was higher among the students practice in Bishkek by the following criteria: on the organization of practice, the support of the medical staff health organization, which hosted the practice and living conditions; at the care of the head on the ground was higher in the region only practice "physician assistant GSV".

Indicators of satisfaction of students of the 6th year with the practice of "assistant to the GPW doctor" who completed internships both in the regions and in Bishkek were the same. At the same time, the satisfaction of 5th-year students with the practice of "hospital doctor's assistant" held in the regions was high (80%), and among students held in Bishkek it was extremely low (28%). Perhaps due to the overloading of health care organizations in Bishkek with students and residents of several universities (MVSM, KRSU, MUK, etc.), access to practical skills for KSMU students at these bases in Bishkek is limited.

When assessing satisfaction with the development of practical skills in the framework of the practice "assistant to the GP doctor" in the areas (specialties), 6th year students noted high satisfaction in "pediatrics" (93.9%) and "therapy" (93.7%) and average in the blocks "surgery" (57.6%) and "obstetrics and gynecology" (54.8%). At the same time, it should be noted that the satisfaction of 6th-year students who completed internships in Bishkek was higher in comparison with those in the regions in the "surgery" and "obstetrics and gynecology" blocks, and lower in the "pediatrics" and "therapy" blocks.

When assessing satisfaction with the development of practical skills in the framework of the practice "hospital doctor's assistant" in the areas (specialties), 5th year students noted high satisfaction in all blocks of practice (ranging from 94% to 98.2%). At the same time, there were no significant differences between the satisfaction of students who completed internships in Bishkek or in the regions.

It was not possible to determine the reason for dissatisfaction with the development of practical skills, since the questionnaire did not contain relevant questions. The questionnaire needs to be finalized.

By satisfaction of students-graduates of the Faculty of " General Medicine»

As a result of the analysis of data on the assessment of graduates ' satisfaction with the quality of training in accordance with the competencies in the specialty "Medical Science", it was found that in general, students show an average degree of satisfaction with the quality of training specialists at the faculty (65%).

A high degree of satisfaction, the students are on such criteria as having practices on the basis of the UCM and GSV (97.3 percent), ability to work independently on the computer (87,2%), ability to conduct the survey, inspection and examination of the patient, selection of appropriate research methods (85,5%) and ability to identify problems and to attract an appropriate professional for their solution (82,3%).

Students noted average satisfaction in terms of readiness to make a diagnosis based on survey results (75.2%), ability and readiness to communicate with patients and colleagues in Kyrgyz and Russian (74%), ability and readiness to perform medical measures for the most common diseases and conditions (69.5%), knowledge and ability to find sources of medical information necessary for work (68.6%), readiness for organizational and managerial work with small teams (68.5%), knowledge of regulatory legal acts, rules of medical ethics and morals (67.7%), knowledge and ability to analyze clinical syndromes, substantiate diagnosis, treatment, and prevention, taking into account their age and gender groups (65.2%),

Students note insufficient satisfaction in terms of their ability to analyze medical information based on the principles of evidence-based medicine (56.8%) and low satisfaction in terms of their ability to use modern methods of collecting and analyzing

information on population health indicators (45.5%). It should be noted that students themselves do not know and do not understand what subjects form the last two competencies. So, when answering the question "What disciplines/modules/topics do you think can be shortened or offered as an elective course", students mentioned such subjects as computer science, epidemiology, evidence-based medicine, statistics. Departments leading these subjects should pay attention and strengthen their work in this regard.

For the first time, a survey of graduates' opinions on the ratio of theoretical knowledge obtained to practical experience was conducted: 66% of graduates believe that this ratio is 70/30; 15% believe that the ratio is 50/50; 19% believe that their training was dominated by obtaining practical skills over theoretical knowledge of 30/70.

About 96% of graduates indicated that they intend to continue their residency studies, while 86% indicated that they want to study in narrow specialties and 10% indicated GP (4% indicated "other"). The overwhelming majority (79%) of students want to complete their residency in Bishkek, the rest – abroad, and only 1 student (0.3%) chose Osh State University.

By academic performance of medical faculty students

When analyzing the change in the number of students of the Faculty of Medicine in 2012 enrollment, it was determined that the percentage of students who completed their studies in 2018 was 86.7%, the percentage of expulsions was 13.3%. The main reason for dropping out was academic failure, with the highest percentage of dropouts observed in the 2nd-3rd year.

When analyzing the change in the number of students of the entire medical faculty in the 2017-2018 academic year, it was found that a total of 159 students were expelled (5% of the total number of medical students), the main share falls on students of 2-3 years of study, the main dominant reason was academic failure.

Since 2013, KSMA has introduced the assessment of students' knowledge by computer testing, which is used to assess students' knowledge in 9 modules and 4 disciplines, i.e. in 13 exams out of 30 exams (excluding final exams), which is 43%. The main part of exams conducted by computer testing falls on the 1st, 2nd, and 3rd courses.

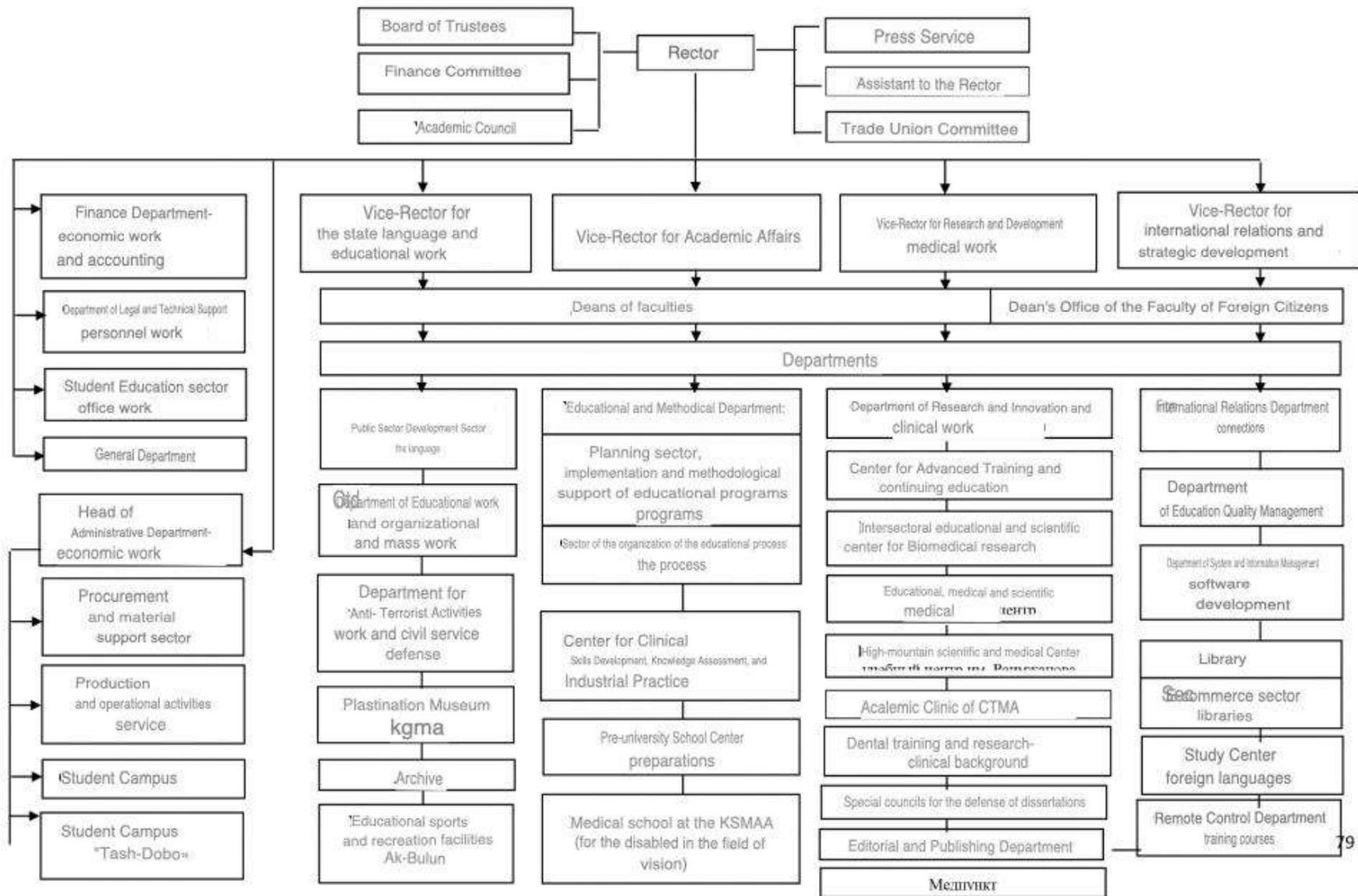
It should be noted that unfortunately not all subjects are covered by this method of knowledge assessment. Perhaps one of the reasons for this is the limited capacity of the Clinical Skills Development and Knowledge Assessment Center (with only 75 seats).

The maximum percentage of academic achievement (99%) based on the results of computer testing of knowledge is observed in the modules "Endocrine" and "Urinary" systems. Minimal results were recorded in the discipline "Biochemistry" (84%) and the module "Nervous System" (85%).

The largest number of students exempted from exams falls on the 1st, 2nd, and 3rd courses, while the maximum number of exempted students accounted for “Histology” and the module “Respiratory System”, while there were no exempted students in “Surgery” at all. There is a big difference between the number of students released, which may depend both on the complexity of the discipline and on the imperfection of the averaging modular rating system of assessment in comparison with the cumulative one.

APPLICATIONS

Organizational structure of KSMA I. K. Akhunbaev Appendix 1



KSMA clinical databases

№	Clinical base	Year of signing and ending
1.	National Hospital	2015-2020
2.	National Center of Cardiology and Therapy named after Academician M. Mirrakhimov	2017-2022
3.	National Surgical Center	2016-2021
4.	National Cancer Center	2015-2020
5.	National Center for Maternal and Child	Health 2017-2022
6.	Kyrgyz Scientific Center of Hematology	
7.	National Phthiology Center	2013-2018
8.	Kyrgyz Research Institute of Balneology and Rehabilitation Treatment	2015-2020
9.	Republican Clinical Infectious	Diseases Hospital 2016-2021
10.	Republican Center for Mental Health	2016-2021
11.	Republican Diagnostic Center	
12.	Republican Pathoanatomical Bureau	
13.	Republican Bureau of Forensic Medical Examination	
14.	Republican Blood Center	
15.	Republican Center of Narcology	
16.	Republican Health Promotion Center	
17.	Republican Center for Quarantine and Especially Dangerous Infections	
18.	Republican Center for Immunoprophylaxis	
19.	Republican Center	of Dermatovenereology 2016-2021
20.	Republican Association "AIDS"	
21.	Kyrgyz Scientific Center for Human Reproduction	2015-2020
22.	Scientific and Production Association "Preventive Medicine"	
23.	Central Control and Analytical Laboratory of the Department of Drug Supply and Medical Equipment	
24.	Bishkek City Endocrinological Dispensary	
25.	Bishkek City Gynecological Hospital	
26.	Bishkek City Health Promotion Center	
27.	Bishkek City Maternity Hospital No. 1	
28.	City Maternity Hospital No. 2 Bishkek	2016-2021
29.	Bishkek City Perinatal Center	2013-2018
30.	Bishkek City Clinical Hospital No. 1	2016-2021
31.	Bishkek City Clinical Hospital No. 6	2015-2020
32.	Bishkek City Clinical Children's Emergency Hospital	
33.	Scientific Research Center of Traumatology and Orthopedics Bishkek	2016-2021
34.	Bishkek City Ambulance and Emergency Medical Care Station	2015-2020
35.	City Tuberculosis Control Center Bishkek	2017-2022
36.	Family Medicine Center No. 1 Bishkek.	
37.	Family Medicine Center No. 2, Bishkek.	2016-2021

38.	Family Medicine Center No. 3, Bishkek.	2014-2019
39.	Family Medicine Center No. 4, Bishkek.	2014-2019
40.	Family Medicine Center No. 5, Bishkek.	
41.	Family Medicine Center No. 6, Bishkek.	2014-2019
42.	Family Medicine Center No. 7, Bishkek.	2014-2019
43.	Family Medicine Center No. 8, Bishkek.	2014-2019
44.	Family Medicine Center No. 9, Bishkek.	2012-2017
45.	Family Medicine Center No. 10, MoscowBishkek.	2016-2021
46.	Family Medicine Center No. 11, MoscowBishkek.	2017-2022
47.	Family Medicine Center No. 13, Bishkek.	2017-2022
48.	Family Medicine Center No. 15, Bishkek.	2016-2021
49.	Family Medicine Center No. 16, Bishkek.	2017-2022
50.	Family Medicine Center No. 17, MoscowBishkek.	2017-2022

51.	Family Medicine Center No. 18, Bishkek.	2013 -2019
52.	Family Medicine Center No. 19, MoscowBishkek	2017-2022
53.	Gossanepidnadzor City Center Bishkek	2017-2018
54.	Dental Clinic No. 2 Bishkek	2017-2022
55.	Dental clinic No. 3 Bishkek	
56.	Dental clinic No. 4 Bishkek	2017-2022
57.	Dental clinic No. 5 Bishkek	
58.	Dental clinic No. 6 Bishkek	
59.	Builders ' polyclinic in Bishkek	
60.	Polyclinic of students	2017-2018
61.	Specialized Children's Home in Bishkek	
62.	KSMiPK	
63.	Bishkek Medical School	
64.	Gynecological Hospital of Bishkek	
65.	Road Hospital of the Kyrgyz Railway Administration	2015-2020
66.	City Hall Health Department 2016-2021	2016 - 2021
67.	Policlinic of the Ministry of Internal Affairs	2016-2021
68.	Clinical Hospital of the Office of the President and Government of the Kyrgyz	2016 – 2021
Republic 2016-2021 69.	Scientific Research Institute of Heart Surgery and Organ Transplantation	2017-2022
70.	Kafmedtsentr Medical Center	2016-2021 71.
71.	Educational, medical and scientific medical center	
72.	Chui regional center of family Medicine	2016-2021
73.	Chui Regional United Hospital	2017-2022
74.	Chui Regional Center of State Sanitary and Epidemiological	
Supervision 75.	Alameda Center for Disease Prevention and State Sanitary and Epidemiological	2016 – 2021
Surveillance 2016-2021 76.	Ysyk-Ata Regional Center for Family Medicine	2017-2022
77.	Ysyk-Ata TB	2014-2019
78.	M. Ts. "Zdorovyе"	2016-2021
79.	Alai TB	2016-2021
80.	Ak-talinsky CSM	2017-2022

81.	Sokuluksky CSM	2017-2022
82.	Jalal-Abad	2016 - 2021
Public Health Organization 2016-2021 83.	Jalal-Abad Family Medicine Center	2015-2020
84.	Jalal-Abad Regional Tuberculosis Control Center	
85.	Jalal-Abad Regional Center of State Sanitary and Epidemiological	
Supervision 86.	Moscow Territorial Hospital	2016-2021
87.	Zheti – Oguz district	CSC 2015-2020
88.	Chon-Alai CSC	2017-2021
89.	Karasui Regional Center for Family Medicine	2016-2021
90.	Karasui Territorial Hospital	2016-2021
91.	Naryn Regional Center for Family Medicine	2017-2022
92.	At-Bashinskaya Territorial Hospital	2017-2022
93.	Suzak Territorial Hospital	2016-2021
94.	Suzak Regional Center of Family Medicine	
95.	Tokmok Territorial Hospital	2017-2022
96.	Republican Tuberculosis Hospital of Kara-Balta	2017-2022
97.	Oktyabrskaya Territorial Hospital	2017-2022
98.	Kochkor Territorial Hospital	2017-2022
99.	Kochkor Center for Family Medicine	2017-2022
100.	Naryn Regional Joint Hospital	2017-2022
101.	Nookat Territorial Hospital	2016-2021
102.	United Territorial Hospital of Zhayyl district	2016-2021
103.	Ala-Buka Territorial Hospital	2016-2021
104.	Talas Regional Joint Hospital	2015-2020
105.	Talas Regional Center for Family Medicine	2015-2020
106.	Kara-Buura Territorial Hospital	2017-2022
107.	TSOVP of Toguz-Torous district	2015-2020
108.	Batken Regional Center for Family Medicine	2014-2019
109.	Batken Regional Joint Hospital	2014-2019
110.	Issyk-Kul Territorial Hospital	2014-2019
111.	Issyk-Kul Center for Family Medicine	2017-2022
112.	Issyk-Kul Regional Joint Hospital	2017-2022
113.	Aravan Territorial Hospital	
114.	Aravan Center for Family Medicine	
115.	Uzgen Territorial Hospital	
116.	Osh Inter-regional Children's Clinical Hospital	
117.	Osh Regional Narcological dispensary	
118.	Osh Inter-regional Clinical Hospital	2017-2022
119.	Osh Regional Tuberculosis Control Center	
120.	Osh Regional Skin and Venereal clinic	
121.	Osh Regional Mental Health Center	
122.	Osh Regional Dental Clinic	
123.	Osh Regional Center for State Sanitary and Epidemiological	
Surveillance 124.	Osh City Center of State Sanitary and Epidemiological	

Supervision 125.	Osh Inter	-Regional Cancer Center 2016-2021
126.	Osh Regional United Hospital	2014-2019
127.	Osh Territorial City Hospital	
128.	Osh ambulance station	
129.	Osh City Dental Polyclinic No. 1	
130.	Osh City Dental Clinic No. 2	
131.	Denis Sak El Family Medicine Center Osh	
132.	Family Medicine Center "Medicine for You" Osh	
133.	Batken Regional Tuberculosis Control Center	
134.	Batken Regional Center of State Sanitary and Epidemiological	
Surveillance 135.	Aydarken branch of Batken Regional United Hospital	
136.	Aydarken Family Medicine Center	
137.	Kadamzhai Territorial Hospital	2016-2021
138.	Kadamzhai Regional Center of Family Medicine	
139.	Kyzylkiy Territorial Hospital	2017-2022
140.	Kyzylkiy city Center of Family Medicine	
141.	Bazarkorgon Territorial Hospital	
142.	Bazarkorgon District Family Medicine Center	
143.	Nooken Territorial Hospital	
144.	Nooken Regional Family Medicine Center	
145.	Mailuusui Territorial Hospital	
146.	Mailuusui city Center of Family Medicine	
147.	Tashkent Territorial Hospital	
148.	Tashkent City Center for Family Medicine	

Appendix 3

Staff of KSMA departments

№	Department name	Total Teaching staff	Full	-time Candidate of Medical Sciences, Doctor of Medical Sciences	Academic title, position
1.	Obstetrics and Gynecology No. 1	12	12	7 1	Professor – 1 Associate Professor - 2
2.	Obstetrics and Gynecology No. 2	13	Ext. - 4	3 1	Associate Professor -3

3.	Anaesthesiology and resuscitation of pre - and post-graduate training	5		MD - 1	Associate Professor - 1
4.	Basic and Clinical Pharmacology	13	Ext. - 2	5 3	Professor-2 Corresponding members – 1 Corresponding member – 1 Associate Professor - 2
5.	Biochemistry with a course in organic and inorganic chemistry	22	Ext. - 2	Ph. D.-4 Ph. D. – 3 Ph. D. - 2	Corresponding Members – 1 Associate Professor-4 6.
6.	Military medical training and Extreme medicine	6	Ext. - 2	Ph. D. - 1 Ph. D. - 1	
7.	Hospital therapy, occupational pathology with a course of hematology	8	8	6 3	Professor - 1 Associate Professor-1
8.	Histology, Cytology, and Embryology	10	Ext. - 2	3 1	Associate Professor - 3
9.	Hospital pediatrics with neonatology course	18	Ext. - 3	7 2	Professor - 1 Associate Professor-3
10.	Hospital surgery with a course of operative surgery	for 10	years. - 1	5 7	Akademik-1 Professor - 4 Associate Professor - 5
11.	Hygienic disciplines	15	Ext. - 3	3 2	Professor - 1 Associate Professor - 1
12.	Children's infectious diseases	6	6	3 2	Professor - 1
13.	Dermatovenereology	13	Ext. - 4	3 3	Professor - 1
14.	Children's Surgery	5	Ext. - 1	2 1	Professor - 1 Associate Professor - 1
15.	Children's Dentistry	18	Ext. - 3	3 1	Professor - 1 Associate Professor - 3
16.	Computer Science, Physics, Mathematics and Computer Technologies	14	Ext. - 1	Candidate of Technical Sciences - 4	Associate Professor - 1

17.	Infectious diseases	11	Ext. - 2	3 1	Professor - 1 Associate Professor - 2
18.	Foreign and Latin languages	14	14	Ph. D. - 1	Associate Professor - 1
19.	Clinical Rehabilitation and Physiotherapy	9	Ext. - 2	2 1	Professor - 1 Associate Professor - 1

20.	Kyrgyz language	8	8	Ph. D. - 1	Associate Professor - 1
21.	Radiology diagnostics	7	7	Candidate of Medical Sciences n-2	Associate Professor - 1
22.	Medical Biology, Genetics and Parasitology	22	Ext. - 2	3 1	Professor -2 Associate Professor-1
23.	Microbiology, Virology and Immunology	13	Ext. - 1	7 2	Chl. - korr. - 1 Professor -1 Associate Professor - 5
24.	Normal and Topographical Anatomy	13	Ext. - 4	4	Associate Professor - 3
25.	Neurology with a course in medical genetics	13	Ext. - 2	3 1	Akademik-1 Professor -1 Associate Professor-3
26.	Neurosurgery of pre - and post-graduate education	8	Ext. - 2	2 3	Akademik-1 Professor -2 Associate Professor - 3
27.	Public health and public health	services 8	8	2 3	Professor -1 Associate Professor - 1
28.	General and clinical epidemiology	9	9	2 2	Professor - 2 Associate Professor-1
29.	General hygiene	8	8	k. m. n-3	Associate Professor - 1
30.	Oncology	9	Ext. - 1	5 2	Professor – 1 Associate Professor-4
31.	Ophthalmology	8	Ext. - 2	4 1	Professor -1

32.	Otolaryngology	12	12	7 2	Professor -1 Associate Professor-2
33.	Orthopedic Dentistry	13	Ext. - 2	3 3	Professor - 3 Associate Professor-2
34.	Pathological anatomy	9	9	1 1	Professor -1
35.	Pathological physiology	10	Ext. - 2	4 2	Professor -1 Associate Professor -2
36.	Propaedeutics of internal diseases with a course of endocrinology	13	13	2 2	Professor -1 Associate Professor - 2
37.	Propaedeutics of children's diseases	8	Ext. - 1	5 1	Professor – 1 Associate Professor-6
38.	Propaedeutic surgery	12		1 2	Professor -1 Associate Professor-2
39.	Medical Psychology, Psychiatry and Narcology	12	Ext. - 2	sq. m. n-4	Associate Professor - 4
40.	Russian language	7	7	Ph. D. - 2	Associate Professor - 1
41.	Forensic Medicine and Law	8	Ext. - 2	2 1	Professor -1 Associate Professor-2
42.	Family medicine / pre-graduate level	27		5 1	Professor – 1 Associate Professor-5
43.	Family Medicine / postgraduate level				
44.	Nursing	10	10	1 1	Professor -1 Associate Professor-1
45.	Therapeutic Dentistry	19	Ext. - 2	4	Professor -1
				1	Associate Professor - 2
46.	Traumatology, Orthopedics and Extreme Surgery	7	Ext. - 1	2 4	Akademik-1 Professor -2
47.	Urology and Andrology pre - and post-graduate training	12	Ext. - 1	7 3	Professor -2 Associate Professor - 3

48.	Pharmacy Management and economics, drug technology	13	13	1 1	Professor -1 Associate Professor-1
49.	Pharmacognosy and chemistry of medicinal products	13	Ext. - 1	Candidate of Biological Sciences – 2 Candidate of Chemical Sciences - 2	Associate Professor - 2
50.	Faculty Therapy	51	Ext. - 9	7 6	Professor -6 Associate Professor-2
51.	Faculty of Pediatrics	11	Ext. - 2	4 1	Professor – 1 Associate Professor - 2
52.	Faculty of Surgery	11	Ext. - 2	3 3	Professor -2 Associate Professor-3
53.	Philosophy and Social Sciences	10	Ext. - 2	Ph. D. s - 4	Associate Professor-1
54.	Physical education	12	12		
55.	Phthisiology	7	Ext. - 1	Candidate of Medical Sciences - 5	Associate Professor-2
56.	Fundamental and Clinical Physiology	14	Ext. - 1	5 2	Professor -1 Associate Professor-2
57.	years of general surgery with a course	of kombustiology 12 Years.	- 4	3 1	Professor -1 Associate Professor - 1
58.	Surgical dentistry and Maxillofacial surgery	15	Ext. - 2	8 1	Professor - 1 Associate Professor - 2
	TOTAL				

Appendix 4

Questionnaire
"Teaching staff through the eyes of students" (The survey is conducted anonymously).

Dear student, Feedback is very important for studying the quality of teaching and the professional competence of KSMA teachers. In this questionnaire, please indicate the answers that best match your opinion.

1. General information:

- 1.1. Specify your gender Husband. Wife.
 1.2. What kind of student are you? Budget Contract
 1.3. Specify the faculty Drop-down list
 1.4. Specify the course Drop-down list

4. Enter the full name of the teacher

No	Assessment "Teacher through the eyes of a student"	I totally disagree	I don't agree	I doubt it	According to Yong	Fully agree n
1.	Sets out the material clearly, easily, explains complex points and highlights the main points, creates a logical sequence in the presentation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2.	Encourages interest in the discipline by using interactive teaching methods (role-playing games, discussions, round tables, etc.) and technical training tools	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.	Forms a student's system thinking, linking the essence of the subject with other disciplines, determining the place and significance of his subject in the practical activity of a doctor	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4.	During the course classes you were given the opportunity to ask questions to the teacher	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5.	Skillfully manages the audience, monitors its reaction, competently translates the discussion into a constructive channel	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6.	Disposes to a manner of behavior, respectfully treat students, showing kindness and tact	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7.	The teacher was available for extracurricular consultations in the course	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8.	There were cases when the teacher demanded or sought certain services for credit or assessment in exams	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9.	I believe that the quality of teaching the discipline is high	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Thank you so much for your participation!

Appendix 5

students 'satisfaction with the quality of study programs modules of course 1-3" (The survey is conducted anonymously).

Dear student, Feedback is very important for studying the quality of teaching disciplines and modules at the KSMA I. K. Akhunbaev. In this questionnaire, please indicate the answers that best match your opinion.

1. General information:

- 1.1. Specify your gender Husband. Wife.
- 1.2. What kind of student are you? Budget Contract
- 1.3. Specify the faculty Drop-down list
- 1.4. Specify the course Drop-down list

2. Please rate the curriculum of module 1-3 of the course

Select a module Drop-down list

№	Evaluation of the module's curriculum for students in year 1-3	I totally disagree	Don't agree n	I doubt it	According to Yong	Fully agree n
1.	The goals and objectives of the module were explained at the beginning of the module.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2.	All disciplines of the module are interrelated.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.	The content of all disciplines of the module was clear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4.	At the end of the module, I received new theoretical knowledge that will help me in practice.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5.	I am satisfied with the provision of methodological and educational literature on the disciplines of the module.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6.	I am satisfied with the organization of independent work(SRS): they explained and provided advice.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7.	The modulo rating system seemed clear to me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8.	I believe that the final test exam for the module allows you to objectively assess the student's learning outcome.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

9.	I believe that the quality of training of specialists in the module is high	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
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Thank you so much for your participation!

Appendix 6

satisfaction of KSMA students with the quality of academic programs modules of the 4th-6th year" (The survey is conducted anonymously).

Dear student, Feedback is very important for studying the quality of teaching disciplines and modules at the KSMA I. K. Akhunbayev. In this questionnaire, please indicate the answers that best match your opinion.

1. General information:

- 1.1. Specify your gender Husband. Wife.
- 1.2. What kind of student are you? Budget Contract
- 1.3. Specify the faculty Drop-down list
- 1.4. Specify the course Drop-down list

2. Please rate the curriculum of module 4-6 of the course

Select a module Drop-down list

No	Evaluation of the module curriculum for 4th-6th year students	I totally disagree	Don't agree n	I doubt it	According to Yong	Fully agree n
1.	Previously completed modules in 1-3 courses of study helped me to master this module	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2.	The goals and objectives of this module were explained at the beginning of the module.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.	All disciplines of the module are interrelated.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4.	The content of all disciplines of the module was clear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5.	At the end of the module, I received new theoretical knowledge that will help me in practice.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6.	I am satisfied with the provision of methodological and educational literature on the disciplines of the module.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

7.	I am satisfied with the organization of independent work(SRS): they explained and provided advice.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8.	The modulo rating system seemed clear to me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9.	I believe that the final test exam for the module allows you to objectively assess the student's learning outcome.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
10.	I believe that the quality of training of specialists in the module is high	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Thank you so much for your participation!

Appendix 7

satisfaction of KSMA students with the quality of academic programs of disciplines" (The survey is conducted anonymously).

Dear student, Feedback is very important for studying the quality of teaching disciplines and modules at the KSMA I. K. Akhunbaev. In this questionnaire, please indicate the answers that best match your opinion.

1. General information:

- 1.1. Specify your gender Husband. Wife.
 1.2. What kind of student are you? Budget Contract
 1.3. Specify the faculty Drop-down list
 1.4. Specify the course Drop-down list

2. Please rate the curriculum of the discipline

Choose the appropriate discipline:

Drop-down list

№	Evaluation of the discipline's curriculum	I totally disagree	Don't agree n	I doubt it	According to Yong	Fully agree n
1.	The goals and objectives of the discipline were explained at the beginning of the course.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2.	The division of the discipline into thematic sections was logical and consistent	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.	Lectures and practical tasks in the discipline corresponded to the set goals	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4.	The content of the disciplines was clear.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

5.	At the end of the course, I received new theoretical knowledge that will help me in practice.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6.	I am satisfied with the provision of methodological and educational literature on the discipline.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7.	I am satisfied with the organization of independent work(SRS): they explained and provided advice.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8.	I believe that the final test exam in the discipline allows you to objectively assess the student's learning outcome.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9.	I believe that the quality of training of specialists in the discipline is high	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Thank you so much for your participation!

Questionnaire for evaluating the curriculum by KSMA graduates

Dear alumnus,
You are completing your studies at our educational institution. That is why it is important for us to hear your opinion. You can contribute to improving the quality of education at KSMA by filling out the questionnaire below.

Your _____ faculty _____ (specialty):

Check one of the options for answering the question/statement.:

Question	Response option	Explain your reasons (explain why)
1. Are you able and ready for written and oral communication with patients and colleagues in Kyrgyz and Russian?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt it	
2. Are you able to work independently on a computer?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - Doubt	
3. Do you know the sources of medical information necessary for professional work and can find it?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
it 4. Are you able to analyze medical information based on the principles of evidence-based medicine?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
it 5. Are you ready for organizational and managerial work with small teams (groups, families, etc.)?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
6. Are you able to identify the natural science nature of problems that may arise in your professional activity and attract the appropriate specialist to solve them?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
it 7. Have you gained enough knowledge in the field of legal regulations, rules of medical ethics and morals to prevent illegal actions in your work?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
it 8. Have you gained enough knowledge to be able to analyze clinical syndromes, justify methods/principles of diagnosis, treatment, and prevention among the population, taking into account their age and gender groups?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
it 9. Are you able to conduct and interpret a patient survey, physical examination, clinical examination, select appropriate laboratory and instrumental studies, and fill out the patient's medical record?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	

it 10. Are you able and ready to make a diagnosis based on the results of biochemical and clinical studies, taking into account the pathology	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
the organs, systems in general?		
11. Are you able and ready to perform basic treatment activities for the most common diseases and conditions in adults and children?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
it 12. Are you able to apply modern social and hygienic methods of collecting and medico-statistical analysis of information on population health indicators	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I doubt	
13. Please indicate the ratio of your theoretical knowledge and practical experience during the course of the study program? (theory / practice):	<input type="checkbox"/> - 40% by 60% <input type="checkbox"/> - 50% by 50% <input type="checkbox"/> <input type="checkbox"/> - 70% by 30% <input type="checkbox"/> - 90% by 10%	
14. Do you intend to continue your residency training:	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I don't know	
15. If you intend to continue your residency training, then what specialty	<input type="checkbox"/> - GP <input type="checkbox"/> - narrow specialty <input type="checkbox"/> - other	

Please answer the following questions (in free form):

16. Have you ever had an internship at the CSM or GSV?	<input type="checkbox"/> - Yes <input type="checkbox"/> - No <input type="checkbox"/> - I don't know	
17. Please rate the overall quality of professional training at your faculty	<input type="checkbox"/> - good <input type="checkbox"/> - satisfactory <input type="checkbox"/> - poor	

18. What subjects/modules/topics do you think can be shortened or offered as an elective course (specify):
19. What disciplines/modules/topics do you think need more in-depth study? At the same time, specify the ratio of the theoretical and practical part (for example, 50/50 or 40/60)
20. Please list the clinical bases (hospitals, CSM, CSEN) where you were trained in the 6th year and indicate whether your work with patients was supervised.
21. What clinical subjects would you like to pursue postgraduate training in? Explain why.
22. Where would you like your residency training to take place? Explain why.
23. What recommendations would you like to make to improve the educational program and process at KSMA?

Thank you so much for your work!