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ASSESSMENT METHODS BASED ON INFORMATION TECHNOLOGY IN MEDICAL EDUCATION

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Абстракт: В данной статье современные педагогические технологии, внедрение информационных технологий в сфере здравоохранения, повышение качества обслуживания, существенное увеличение работы сотрудников, снижение затрат на оказание услуг пациентам, задачи информационных технологий в сфере здравоохранения. медицины и здравоохранения, в медицинском образовании упоминается об определении особенностей образования на основе компетентностного подхода преподавателей.

Ключевые слова: биологические данные, здравоохранение, ментальная карта, математическая статистика, медицинские данные, программа Excel, статистический ряд, методы оценки.

Resume.

This article includes modern pedagogical technologies, the introduction of information technologies in the healthcare sector, improving the quality of service, a significant increase in employee work, reducing the costs of providing services to patients, and the tasks of information technology in the healthcare sector. medicine and healthcare, in medical education it is mentioned that the characteristics of education are determined based on the competency-based approach of teachers.

Keywords: biological data, healthcare, mental map, mathematical statistics, medical data, Excel program, statistical series, evaluation methods.

The main basis of modern pedagogical technologies depends on the technologies selected by the teacher and the student to achieve a guaranteed result from the set goal in cooperation, that is, during the teaching process, it depends on the technologies selected to achieve a guaranteed result on the goal, i.e. in the process of teaching, if every educational technology used to achieve a guaranteed result according to the goal can organize cooperative activities between the teacher and the student, if students can think independently, work creatively, and be sought during the learning process , if they can analyze, evaluate themselves, the group, and the group can evaluate them, the teacher can create opportunities and conditions for such activities, this teaching is the basis of the process.

The introduction of information technology into the health sector allows to improve the quality of service, significantly increase the work of employees, and reduce the costs of providing services to patients. In our opinion, information technologies in the field of medicine and healthcare help to solve the following tasks:

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1. Keeping records of patients in the clinic.

2. Keeping medical history of patients in the clinic.

3. Remote monitoring of the condition of patients.

4. Saving the results of diagnostic examinations of patients.

5. Transmission of results of diagnostic examinations of patients.

6. Monitoring the correctness of the treatment prescribed by the doctor;

7. Doctor's scientific lecture, conducting the treatment process at a distance.

8. Giving advice to less experienced employees.

9. Remote training for less experienced employees.

The purpose of the subject is to develop methodical recommendations on assessment methods based on information technologies in medical education.

Professor Erkki Aho, the chairman of the National Board of Schools of Finland, which has gained a place in the world due to its educational efficiency, emphasizes the importance of modernizing the educational process in accordance with the needs of the times: "The process of globalization and digital technologies greatly affect the situation in the labor market. has also changed, the problem of social and territorial inequality is threatening with growth, migration is weakening traditional cultural structures... That is why our survival strategy is being developed based on our educational resources and scientific research work.

It is to provide students with in-depth knowledge and skills in the subject of "mathematical statistics", and to provide skills about the theory and methods of processing information about public events.

We have defined 3 tasks in determining the specific characteristics of the education of medical teachers based on the competency approach.

1. To determine the specific characteristics of the education of teachers based on the competency approach in medical education.
2. Improvement of the mechanisms of development of competences in medical education based on harmonization with foreign experiences.
3. To study the current problems in the field of medicine and to determine the tasks for their elimination.

Application of modern pedagogical and information communication technologies in the analysis of the process of statistical processing of the results of medical and biological experiments.

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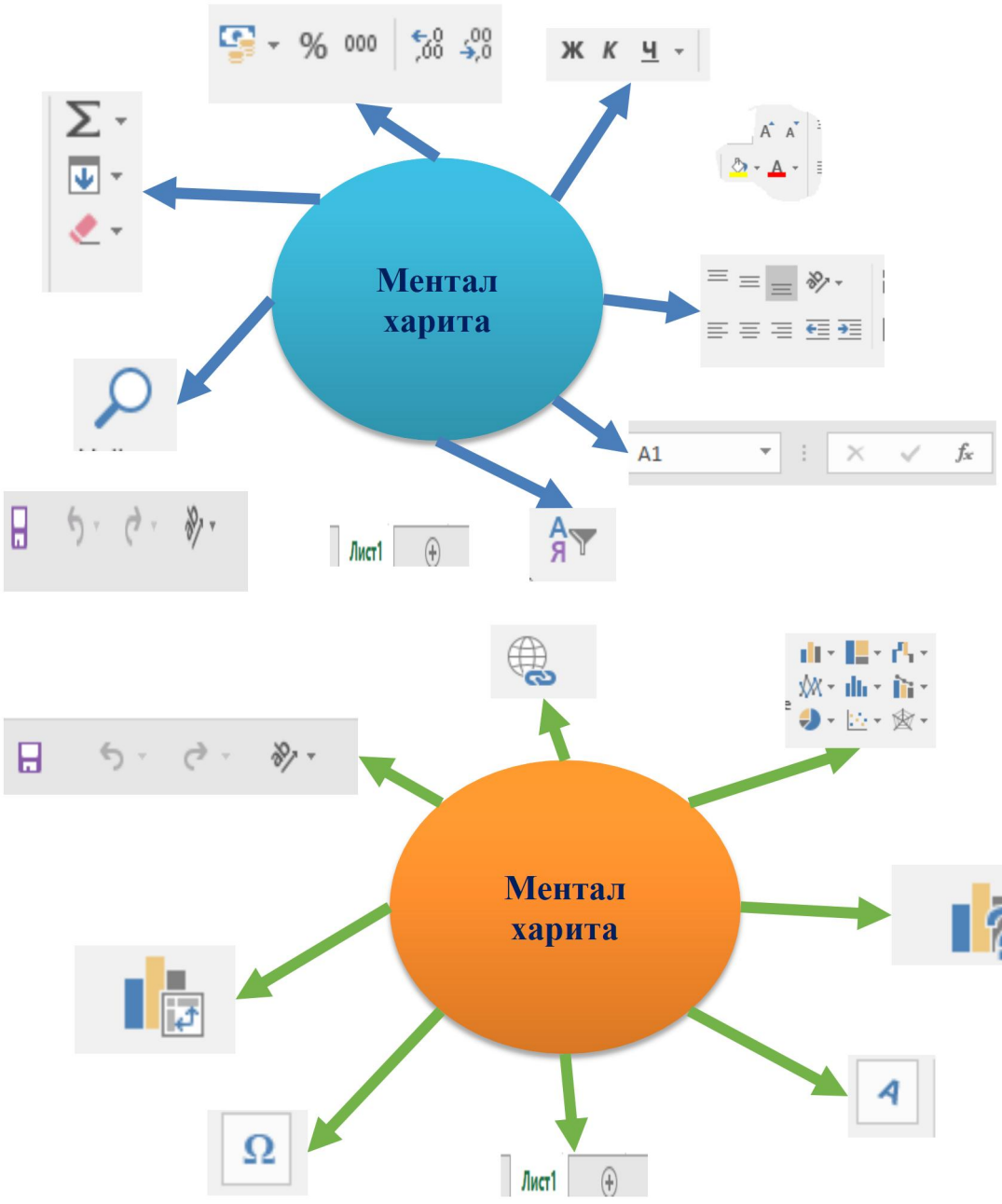
It is said that the results of the experiment are written together with the frequency of occurrence as a statistical series.

$(x_1;n_1),(x_2;n_2),\ldots..,(x_k;n_k)$

A statistical series is usually given in tabular form;

x_1 x_2 x_3 ….. x_i ….. x_k

n_1 n_2 n_3 ….. n_i ….. n_k



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For example, the parameters of the surface tension coefficient of bronchoalveolar lavage fluid of patients with Tuberculosis before treatment and after treatment were determined. We need to evaluate the changes in the given indicators.

t/ n	STK		x_i-M		$(x_i-M)^2$	
	Until treatment	After treatment	Until treatment	After treatment	Until treatment	After treatment
1	61,32	54,25	3,13	-1,62	9,8	2,62
2	58,29	54,31	0,1	-1,56	0,01	2,43
3	57,35	55,65	-0,84	-0,22	0,7	0,05
4	54,21	53,75	-3,98	-2,12	15,84	4,49
5	55,59	54,72	-2,6	-1,15	6,76	1,32
6	56,72	56,35	-1,47	0,48	2,16	0,22
7	59,71	57,82	1,52	1,95	2,31	3,8
8	62,35	60,15	4,16	4,28	17,3	18,32
∑	465,54	447			54,88	33,25

Information technology (IT) in medicine refers to the application of modern technologies in medical practice. These technologies play an important role in increasing the efficiency of medical services, improving diagnostic and treatment processes, as well as in data management and the development of medical research. Below I present the main branches of information technology in medicine and their functions:

Electronic Health Care (e-Health):

Electronic Medical Records (EMC): Electronic storage and management of patient medical information. Telemedicine: Remote care and medical consultations, such as via video conferencing.

Health Information Systems (HIS):

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Data Management Systems: Used to collect, store and analyze data in medical facilities.Laboratory Information Systems (LIS): To manage and record the results of laboratory tests.

Imaging Technologies:

Digital Radiology: X-ray, computed tomography (CT), magnetic resonance imaging (MRI) and other imaging methods. Medical Image Analysis: AI-powered image analysis and diagnostic refinement.

Data Analysis:

Big Data: Identifying common trends and gaining new knowledge by analyzing large volumes of medical data. Machine Learning: Algorithms to help predict patient conditions and plan treatment.

Medical Devices:

Wearable Devices: Devices for collecting and real-time monitoring of transmitted biometric data, such as heart rate monitors. Protecting Medical Information: Data Security: The technologies and protocols needed to ensure the privacy and security of medical data.

Medical Education and Training:

Simulation and Virtual Reality: Using Simulators and VR for Medical Education and Experience.

These technologies open up many opportunities in the healthcare sector and help to provide better services to patients.

In conclusion, in general, in medical education, the teaching process can be conducted in an interesting, information-rich form with the help of assessment methods based on information technologies.

Through information technologies in medicine, students understand the need to fill their knowledge base, apply it in the future, and use computer technologies correctly and effectively.

Students can improve their knowledge, skills and abilities by studying this mathematical statistical evaluation method.

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