

### ОҚЫТУДЫҢ ИННОВАЦИЯЛЫҚ ӘДІСТЕРІ Инновационные методы обучения Innovative teaching methods

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# SATISFACTION OF STUDENTS WITH ADDITIONAL AND INFORMAL EDUCATION ON THE BASIS OF THE NATIONAL SCIENTIFIC CENTER OF PHTHISIOPULMONOLOGY OF THE REPUBLIC OF KAZAKHSTAN

**Resume**: The article describes the main results of a survey to study the satisfaction of students with seminar-trainings carried out on the basis of the National Scienctific Center of Phthisiopulmonology of the Republic of Kazakhstan. The main problems of the organization of distance education are determined. **Key words**: Human resources, seminar, TB, satisfaction

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### УДОВЛЕТВОРЕННОСТЬ СЛУШАТЕЛЕЙ ДОПОЛНИТЕЛЬНЫМ И НЕФОРМАЛЬНЫМ ОБАЗОВАНИЕМ НА БАЗЕ НАЦИОНАЛЬНОГО НАУЧНОГО ЦЕНТРА ФТИЗИОПУЛЬМОНОЛОГИИ РЕСПУБЛИКИ КАЗАХСТАН

**Резюме:** В статье описываются основные результаты анкетирования по изучению удовлетворенности слушателей семинар-тренингами осуществляющимися на базе Национального научного центра фтизиопульмонологии Республики Казахстан (далее - ННЦФ РК). Определены основные проблемы организации дистанционного образования.

Ключевые слова: Кадровые ресурсы, семинар, фтизиатрия, удовлетворенность

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### ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ҰЛТТЫҚ ФТИЗИОПУЛЬМОНОЛОГИЯ ҒЫЛЫМИ ОРТАЛЫҒЫНЫҢ БАЗАСЫНДА ӨТКІЗІЛГЕН ҚОСЫМША ЖӘНЕ БЕЙРЕСМИ ОҚЫТУЛАРҒА СТУДЕНТТЕРДІҢ ҚАНАҒАТТАНУШЫЛЫҒЫ

**Түйін:** Мақалада Қазақстан Республикасы Ұлттық ғылыми фтизиопульмонология орталығы базасында өткізілген семинар-тренингтерге тыңдаушылардың қанағаттанушылығын зерттеу бойынша сауалнаманың негізгі нәтижелері сипатталған. Қашықтықтан оқытуды ұйымдастырудың негізгі мәселелері айқындалған.

Түйінді сөздер: Адами ресурстар, семинар, туберкулез, қанағаттану Introduction: medica

The healthcare workforce is the set of medical workers that are the main driving force in health care, whose goal is to improve the health of the population and provide quality medical care [1]. A key factor in achieving quality medical care is qualified personnel, resulting in continuous professional education at all stages of the professional path [2].

Continuing professional education is achieved through training in formal and non-formal educational programs in health care. One of the principles of the state policy in the field of education in the Republic of Kazakhstan is the "continuity of the educational process", that consists in the organization of formal medical education (all stages of medical education, from undergraduate to PhD studies) and non-formal education (advanced training, seminars, trainings, etc.) [3].

Nowadays, additional and non-formal education are key factors that help to provide the healthcare system with highly qualified personnel through the training of medical personnel in a relatively short time. It is worth to notice, that the integration of the TB services into primary health care increases the need for training of TB doctors and Primary Health Care (hereinafter referred to as PHC) specialists in the prevention, detection, diagnosis and treatment of tuberculosis.

In 2007, in order to meet the needs of the healthcare system in the training of medical personnel in the

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direction of "Phthisiology" and "Pulmonology", on the basis of the National Center for Tuberculosis Problems (today - the National Scientific Center of Phthisiopulmonology of the Republic of Kazakhstan) was established the national training center, which actively continues its activities.

For 9 months of 2022, the National Training Center trained 1851 PHC students, which is more than 10% of the health care personnel involved in providing TB care to the population. In order to ensure the quality of educational activities, the National Training Center conducts a quarterly assessment of student satisfaction with the seminars and conducts corrective work based on the results of the assessment.

**Objetives.** To study the satisfaction of students with seminars provided by National Training Center for 9 months of 2022.

### Materials and methods.

To analyze the satisfaction of students a sociological research method was used. After the training was completed, the participants were presented with a questionnaire in electronic format, that consisted of 7 questions reflecting the quality of the training seminar. The analysis was carried out according to the results of an online survey of 416 students for the period from March to September 2022. Participation in the survey was free. The survey was conducted on the Google Forms platform.

To assess the level of satisfaction the participants were presented with the following evaluation criteria (Table 1):

Table 1 - Evaluation criteria

1	2	3	4	5				
Not satisfied	Rather not satisfied	Difficult to answer	Rather satisfied	Satisfied				
Results.		from	Kostanav region and 9	.5% from East Kazakh				

For 9 months of 2022, the Center trained 1851 students, 1025 (55%) of them in online format and 826 (45%) in offline format. The distribution of students by regions shows that 28% of all students are from Almaty, 13%

from Kostanay region and 9.5% from East Kazakhstan region. Relatively low rates of students was from Mangistau region (1.5%), North Kazakhstan region (2%), Zhambyl region (2%), Atyrau region (2.5%), West Kazakhstan region (2.5%) (Table 2).

N⁰	Region	Physicians	Nurses	Managers	Other personnel	Total by region
1	Almaty city	298 (56%)	166 (31%)	10 (2%)	54 (11%)	528 (28%)
2	Akmola region	51 (76%)	6 (9%)	3 (5%)	7 (10%)	67 (4%)
3	The East Kazakhstan region	135 (74%)	11 (6%)	6 (3%)	30 (17%)	182 (9,5%)
4	Karaganda region	32 (35%)	34 (37%)	13 (14%)	13 (14%)	92 (5%)
5	Pavlodar region	106 (86%)	2 (2%)	2 (2%)	13 (10%)	123 (6,5%)
6	Atyrau region	34 (74%)	2 (4%)	1 (2%)	9 (20%)	46 (2,5%)
7	West-Kazakhstan region	29 (64%)	2 (4%)	4 (8%)	11 (24%)	46 (2,5%)
8	Kostanay region	129 (54%)	93 (39,5%)	1 (0,5)	14 (6%)	237 (13%)
9	Kyzylorda Region	78 (78%)	1 (1%)	5 (5%)	16 (16%)	100 (5%)
10	North-Kazakhstan region	21 (50%)	4 (9,5%)	1 (2,5%)	16 (38%)	42 (2%)
11	Turkestan region	48 (63%)	3 (4%)	3 (4%)	22 (29%)	76 (4,5%)
12	Aktobe region	49 (37%)	4 (3%)	67 (52%)	10 (8%)	130 (7%)
13	Almaty region	37 (54%)	2 (3%)	6 (9%)	23 (34%)	68 (4%)
14	Astana city	30 (52%)	1 (2%)	2 (4%)	24 (42%)	57 (3%)
15	Jambyl Region	17 (57%)	0	3 (10%)	10 (33%)	30 (2%)
16	Mangistau region	15 (56%)	1 (4%)	1 (4%)	10 (37%)	27 (1,5%)
	Overall	1109 (60%)	332 (18%)	128 (7%)	282 (15%)	1851

The analysis of the questioning of the students shows that 91% of the students were female and 9% male. The average age of the students was 39 years (Figure - 1).

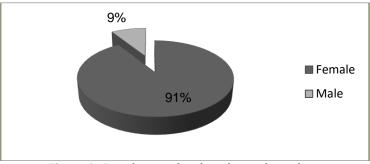


Figure 1 - Distribution of students by gender and age

The distribution of students by specialty showed that for 9 months of 2022, the share of trained general practitioners and pediatricians was 76%, phthisiatricians

5% and nurses 19%. The obtained data show that the training was carried out mainly among PHC employees (Figure 2).

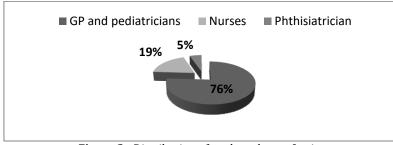


Figure 2 - Distribution of students by profession

The results of the survey on student satisfaction shows that 9% of the students were not satisfied with the organization of the educational process. Basically, the dissatisfaction of the students was in the distance learning format itself, in the inconvenience of working and studying at the same time, in the inconvenience of the time of study (the comments of the respondents are given with the preservation of stylistics) (Figure - 3):

1. I would personally like to be released from work during training. I have admission of patients, calls to home, patronages and because of these I have to walk around with a phone and headphones. It is difficult to concentrate on this study working at polyclinic simultaneously. In this regard, if it is online study, then it is necessary to release from work. But it would be desirable to study with the teacher in the offline format; 2. Draw up a more flexible learning schedule;

3. The training took place during the reception of patients. It was inconvenient to listen a lecture and conduct a reception at the same time.

- 4. To have an offline seminar with release from work;
- 5. On-the-job training has a low level of success;

6. Dissatisfied with the organization of the learning process, since the training takes place online, and we are not released from work (call to home, patronages). Because of this, it is not always possible to listen and actively participate in the learning process, as a result there are problems with attendance and participation in the learning process.

The absolute majority of students express their satisfaction with the professional skills of teachers (98%), which shows the high qualification of the teaching staff of the National Scientific Center of Phthisiopulmonology of the Republic of Kazakhstan.

The satisfaction of students with the theoretical and practical part of the educational process is more than 95%.

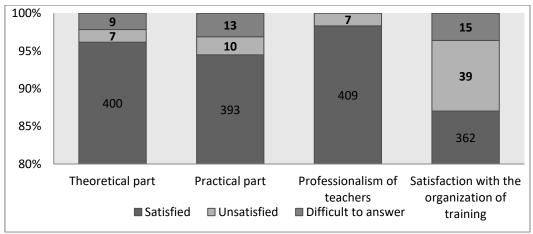


Figure 3 - Satisfaction of students with the learning process

96% of the students was expressed their overall satisfaction with the acquired knowledge and competencies on tuberculosis on the basis of the National Scientific Center of Phthisiopulmonology of the Republic of Kazakhstan (Figure - 4).

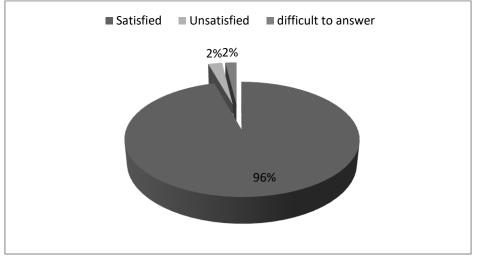


Figure 4 - Overall satisfaction of students with the training

### **Conclusions.**

The results of the survey showed a high satisfaction of the students with training seminars on the basis of the National Scientific Center of Phthisiopulmonology of the Republic of Kazakhstan. However, the organization of the educational process in an online format causes dissatisfaction among some students due to the fact that training time coincided with work time. In this regard, it is necessary to strongly recommend to the healthcare organizations release trainees from work and monitor their participation during training, which in turn will make it possible to improve the quality of education.

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