

## Original Research

### Assessment of the Quality of Medical Examination of Secondary School Teachers and Expanding its Capabilities

Akrom Abdukhalilovich Ergashev

Tashkent Pediatric Medical Institute, Independent researcher of the Department of Public Health and Healthcare

#### ABSTRACT:

In order to conduct medical examinations, quality control and increase the potential of the decreed contingent of 339 teachers of secondary schools in the Kibray district of Tashkent region, teachers of secondary schools were interviewed for access to medical examination. As a result of the study, we found out that the introduction of an electronic medical examination system and the use of this system will lead to a detailed analysis of a number of issues, such as the timing of medical examinations, expert opinions and recommendations.

**Key words:** decreed contingent, medical examination, electronic medical examination, social questionnaire.

Received: October 24, 2020

Accepted: November 28, 2020

**Corresponding Author:** Akrom Abdukhalilovich Ergashev, Tashkent Pediatric Medical Institute, Independent researcher of the Department of Public Health and Healthcare.

**This article may be cited as:** Ergashev AA. Assessment of the Quality of Medical Examination of Secondary School Teachers and Expanding Its Capabilities. J Adv Med Dent Sci Res 2020;8(12):121-126.

#### INTRODUCTION

At the initiative of the President of the Republic of Uzbekistan, special attention is paid to the radical reform of the system of school and preschool education in our country. In particular, at the current stage of economic development in the country, much attention is paid to solving problems related to forecasting and preventing the health of the working population, the negative impact of production factors on human health, including social protection. This is due to the solution of the tasks set in the "Strategy of actions for five priority areas of development of Uzbekistan for 2017-2021", approved by Resolution No. 4947 [1].

A promising direction for the development of national legislation in Uzbekistan is its improvement on the basis of international documents adopted, first of all, by the World Health Organization (WHO) and the International Labor Organization (ILO).

The World Health Organization (WHO) has approved the global OSH action plan 2008–2017. [2], which evaluates and monitors health risks associated with working conditions, the development of diseases in basic and hazardous occupations, as well as the development of human resources, provides primary prevention of occupational risk factors. Labor

resources are a key factor in the formation and development of the state economy.

Labor resources are that part of the working-age population that can engage in socially useful activities due to their physical development, education and professional level.

Today, the number of teachers of general secondary education in the Republic of Uzbekistan in the 2019-2020 academic year has reached 481,604 people, which is 8.28% more than in the 2018-2019 academic year.

At the same time, there are 148,695 male teachers in the school education system in the 2019-2020 academic year (131,253 in the 2018-2019 academic year) and 332,909 female teachers (311,151 in the 2018-2019 academic year).

In particular, out of 481,604 teachers, 2.7% are teachers of the highest category, 11.4% are teachers of the first category and 26% are teachers of the second category. The remaining 46.4% of teachers do not have a category. The number of teachers with secondary specialized education is 64,524 people (13.5%). They also have no category [3].

As of the 2019-2020 academic year, there are 9,942 secondary schools in the country with 6,119,440 students.

**Tab. 1 Number of secondary general education schools and students**

Name of regions	2017-2018 academic year		2018-2019 academic year		2019-2020 academic year	
	Schools	Students	Schools	Students	Schools	Students
Across the republic	9 628	5 248 484	9 691	5 821 861	9 942	6 119 440
Republic of Karakalpakstan	705	294 136	706	325 943	725	344 042
Andijan region	739	484 815	741	531 167	764	555 448
Bukhara region	527	252 189	529	311 431	533	323 844
Jizzak region	542	223 947	542	246 764	548	256 634
Kashkadarya region	1 111	542 600	1 117	600 499	1 144	627 328
Navoi region	354	153 979	356	170 515	364	178 060
Namangan region	682	424 892	685	472 495	705	499 667
Samarkand region	1 209	611 399	1 216	682 019	1 245	719 684
Syrdarya region	296	133 861	301	148 123	309	155 981
Surkhandarya region	852	421 249	882	471 463	921	493 155
Tashkent region	869	429 915	869	478 334	889	509 741
Fergana region	913	560 039	916	625 014	942	660 780
Khorezm region	522	308 118	522	339 646	540	349 944
Tashkent city	301	368 665	303	409 703	307	436 048
Educational Institutions of the Ministry of Education	6	8 680	6	8 745	6	9 084

Today, teachers are not only carriers of specialized knowledge in accordance with their professional and social roles, but are also the supreme example of behavioral habits and attitudes towards health. However, modern research shows that the indicators of physical and mental health of teachers decrease with increasing length of service [4, 5, 6].

The professional health of a teacher is the basis for the effective work of a modern school, and its strategic problem, its importance and relevance have been noted by many researchers [7, 8, 9]. Some authors consider this within the framework of the general concept of protecting the health of the nation, since the health of the younger generation largely depends on the teacher [10, 11].

The analysis shows that according to the results of clinical examinations of patients with occupational diseases, the newly diagnosed occupational disease of workers in the Republic of Uzbekistan is 0.045 cases per 10 thousand employees, which is 188 times less than in the United States, 50 times in Azerbaijan, 34 times in Japan and 14 times in Russia.

One of the main reasons for this is the low level of detection of persons with occupational diseases and ineffective use of laboratory diagnostic equipment, the lack of information, registration and analysis of hazardous and harmful production factors affecting the health of workers, and the awareness of doctors participating in medical examinations. due to the lack of workflow [12]. Working in a regime of constant responsibility for children, unlimited working hours, high intensity of interpersonal relationships, the emergence of constant unpredictable situations with children negatively affect the teacher's health and lead to a number of occupational diseases [8,13].

The main social mechanism for ensuring the health of teachers is adherence to the regulatory framework in the field of health care. It is necessary to streamline the system of preventive measures for the health of teachers, to form the attitude and responsibility of teachers to the health of teachers, which in turn should be used as one of the main mechanisms for increasing the effectiveness of the educational process and the quality of work in general.

In addition, the obligations of the employer are determined by law, including Article 214 of the Labor Code of the Republic of Uzbekistan, which requires the employer to organize regular medical examinations of employees [14].

Medical examinations are organized in accordance with the Regulation "On the procedure for medical examination of employees", registered by the Ministry of Justice of the Republic of Uzbekistan on August 29, 2012, registration number 2387, by Order of the Minister of Health of the Republic of Uzbekistan dated July 10, 2012 No. 200 [15].

A teacher is a person who influences the development of a child, makes a great contribution to the realization of his or her intellectual, physical and spiritual potential, and also controls and corrects him or her.

Thus, the International Union for Health Education and Health Promotion (IUHPE) has identified it as the preferred tool for health and health protection today, in addition to hygiene education and raising the medical culture of the population [16].

The main quality indicators are measured in different ways, one of the methods of obtaining information is the means of feedback from consumers (polls, hot

lines, reviews of Internet resources, a book of complaints and suggestions, etc.) [17]. The purpose of our study is to study the availability of medical examinations of the decreed contingent of the Kibray district of the Tashkent region and the quality of medical examinations through questionnaires.

**MATERIALS AND METHODS**

Analysis of the current state of the organization of medical examinations of the contingent of workers of secondary schools in the Kibray district of the Tashkent region, including using the methods of sociological research.

We grouped the decreed contingent of the population and conducted a sociological survey of a total of 339

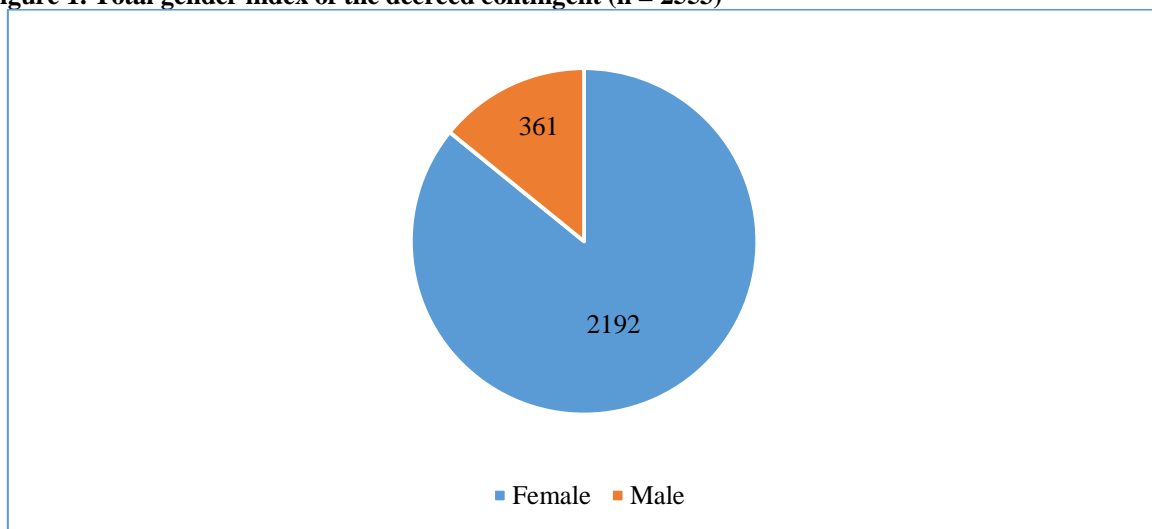
employees of secondary schools in order to identify shortcomings in the concept of medical examination, medical culture, and satisfaction with hygiene training.

Sociological research was carried out on the basis of opinion polls. Subjective and direct feedback, with each of which the respondent was asked to agree, disagree, or reject.

**RESULTS**

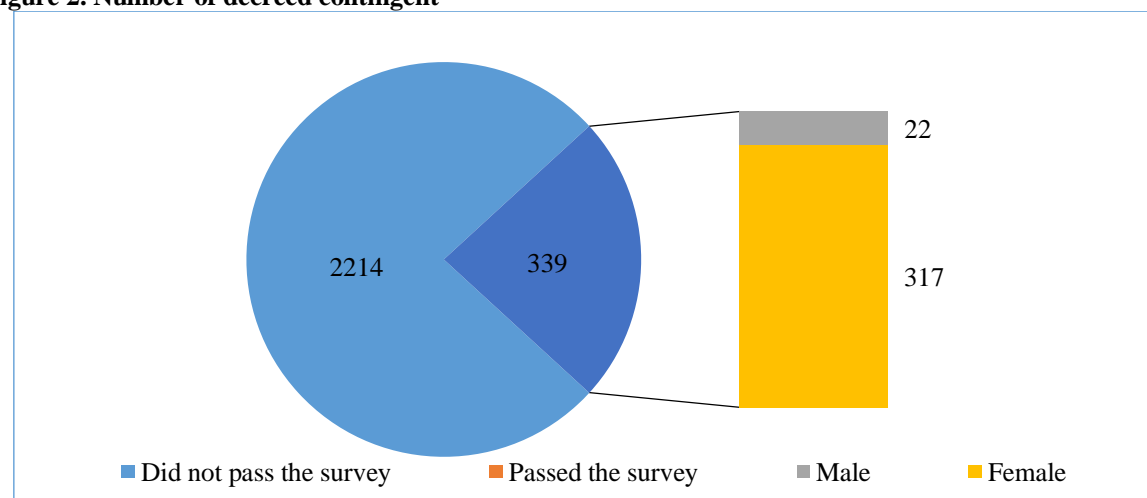
Statistical data on the number of school teachers show that there are 50 secondary schools in the Kibray district of the Tashkent region, of which 2,553 are full-time employees, of which 2,192 (85.86%) are women and 361 (14.14%) are all men.

**Figure 1. Total gender index of the decreed contingent (n = 2553)**



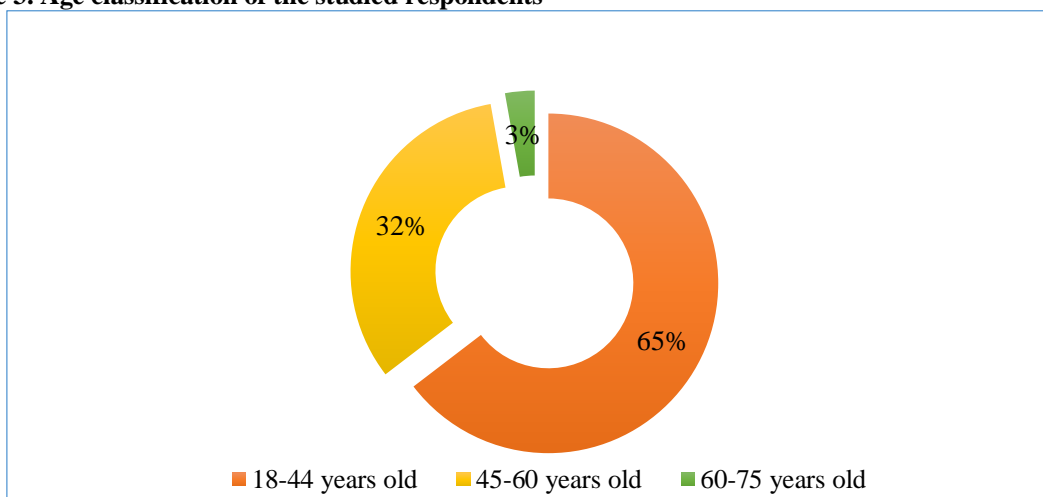
The total number of employees of general education institutions of secondary education who filled out the questionnaire was 339 people, of which 22 were men (6.4%) and 317 were women, or 93.5% were women. In total, 339 out of 2553 employees of general educational institutions of secondary education were interviewed, which is 13.2%.

**Figure 2. Number of decreed contingent**



The classification of respondents by age was as follows: 208 people aged 18-44 years (61.3%), 122 people aged 45-60 years (35.9%) and 9 people aged 60-75 years (2.6 years). Total: 339 people.

**Figure 3. Age classification of the studied respondents**



339 respondents were informed about the results of medical examinations, the conclusion of the medical commission, including the recommended treatment, but based on the nature of the identified diseases, referral to a hospital or sanatorium-resort treatment, as well as staff. 246 (72.5%) were informed by the medical commission that no treatment for referral for prophylaxis was prescribed.

The medical commission also found that 38 (11.2%) respondents did not attract sufficiently high and narrow specialists.

At the same time, 68 (20.0%) employees of educational institutions do not have information about being hired by an employer for easier health reasons or not having dangerous and harmful production consequences.

Of the 191 educators (56.3%) who did not receive a medical examination for breast cancer in women, 140 (41.2%) reported that one of the main reasons was that they could not afford to have mammograms every year.

Only 300 (88.4%) employees knew the time of the repeated medical examination by the employees of educational institutions, of which 16 (4.7%) were fined by the district SES for untimely passing of the medical examination. 334 (98.5%) employees of educational institutions reacted positively to the provision of a personal medical card in electronic form and the results of a medical examination in electronic form with a reminder of the time of a medical examination via SMS, which in turn creates additional convenience.

№	Questions	Answers		Didn't answer
		"Yes"	"No"	
1	Has your employer told you that you must have a medical examination according to the schedule?	335	2	2
2	Do you have information about the results of medical examinations, the conclusion of the medical commission, including the recommended treatment and rehabilitation procedures?	325	12	2
3	Are you referred for inpatient or spa treatment?	91	246	2
4	Do you think that a sufficient number of narrow specialists are involved in the medical commission?	299	38	2
5	Does the employer have to organize a periodic medical examination of a number of employees at the conclusion of an employment contract (first, and then (during work)?	317	20	2
6	Do you have information about the transfer by the employer to an easier job because of your health or to a job that does not have hazardous and harmful industrial consequences?	269	68	2
7	Have you had a medical examination for breast cancer, which is more common in women?	145	191	3
8	Do you have the option to have a mammography every year?	196	140	3
9	Have you been fined by the SES for missing the period of medical examination in your personal medical record?	16	321	2
10	Are you getting a medical examination just because of the "stamp" on your medical record?	25	312	2
11	Do you know when to re-pass the medical examination?	300	37	2
12	Will it be convenient for you if your personal medical history and medical examination results are provided in electronic form, and the time of the medical examination was reminded by SMS?	334	3	2

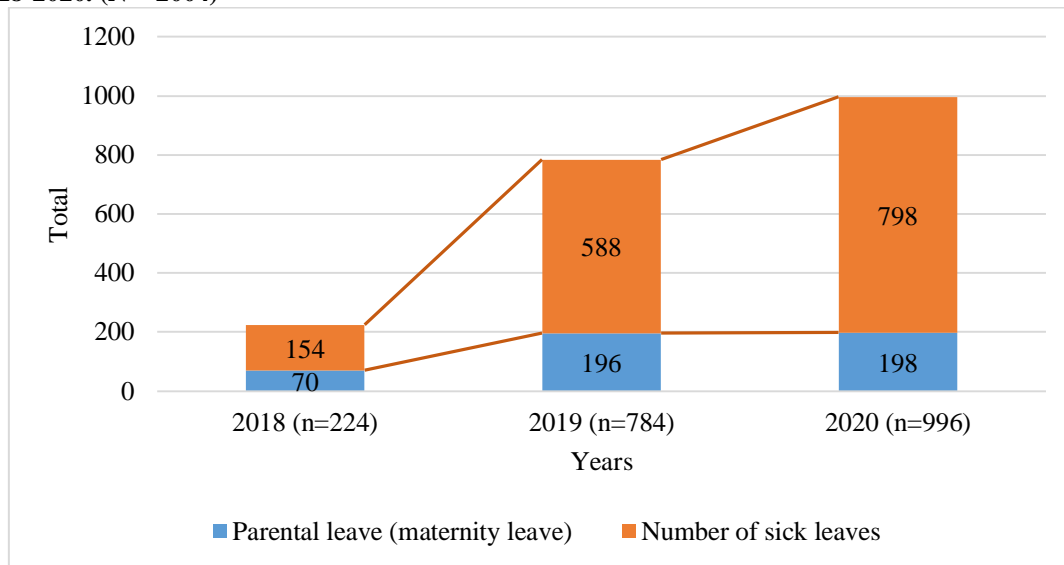
According to the data of the Kibray District Department of Public Education of the Tashkent Regional Board of Public Education, in 2018/2020, in the Kibray District of the Tashkent Region, teachers issued sick leave certificates and maternity leave for 2004.

In 2018, 224 medical documents were issued, of which 154 were hospital documents and 70 were issued for childcare (maternity leave).

In 2019, 784 medical documents were issued, of which 588 sick leave certificates and 196 documents for child care (maternity leave).

In 2020, 996 medical documents were issued, of which 798 sick leave (maternity leave) for 198 children.

**Figure 4. Information about employees with sick leave and childcare (maternity leave) in 2018-2020. (N = 2004)**



## CONCLUSION

We consider it necessary to improve the quality of medical examinations in secondary schools of the Kibray district of the Tashkent region, to recommend the following organizational and preventive measures based on the results of studying the health status of teachers:

Develop a comprehensive interdepartmental program for the protection and promotion of the health of teachers based on the coordination of the activities of medical and educational institutions and organizations, which includes three interrelated sections: information, health protection and further research.

Development of measures to attract professors and high-level specialists of the nearest medical universities to the organization of medical examinations of teachers;

Ensuring the organization and implementation of measures for the introduction of medical examinations, especially for women, the expansion of specialized examinations (mammology);

Early detection of diseases and prevention of their transition to a chronic form by organizing high-quality medical examinations and laboratory and instrumental examinations;

Introduction of electronic medicine in the "decreed contingent". This system is designed to maintain accurate statistics on a number of issues, for example, when and in what specialty an employee undergoes a

timely medical examination, expert opinion and recommendation, demand and need, and organizes work accordingly.

## ACKNOWLEDGEMENTS

We are grateful to the staff members of Tashkent Pediatric Medical Institute for the cooperation and support in our research. The participants kindly gave full written permission for this report.

## CONSENT

Written informed consent was obtained from all participants of the research for publication of this paper and any accompanying information related to this study.

## CONFLICT OF INTEREST

The authors declare that they have no competing interests.

## FUNDING

No funding sources to declare.

## REFERENCES

1. <https://lex.uz/docs/3107036>
2. World Health Organization. Global Plan of Action for Workers' Health 2008-2017. WHO; 2007. Electronic resource: [http://who.int/occupational\\_health/WHO\\_health\\_assembly\\_ru\\_web.pdf](http://who.int/occupational_health/WHO_health_assembly_ru_web.pdf) (access date 01.12.2017).

3. <https://www.uzedu.uz/uz/halk-talimi-rakamlarda-umumtalim-muassasalarida-ukituvchilar-soni>.
4. The state of health of teachers based on the results of self-assessment and additional clinical examination / E.N. Ilkaeva, R.M. Takaev, E.G. Stepanov, R.M. Fasikov, G.S. Stepanova // Public health and habitat. - 2009. - No. 1. - P. 25–28.
5. Kazin E.M. Fundamentals of individual human health: Introduction to general and applied valeology / E.M. Kazin, N.G. Blinova, N.A. Litvinov. - M.: VLADOS, 2000. -- 192 p.
6. How do the outcomes of occupational diseases proceed in modern Russia / S.A. Stepanov, V.A. Pilishenko, N.Yu. Glushkova et al. // Public health and habitat. - 2009. - No. 4. - P. 10-12.
7. Vishnevsky V.A. Theory and technology of building an intraschool health improvement system in specific conditions of the natural and social environment. - Surgut: SurGU, 2005. -- 224 p.
8. Goncharova, N.V. Formation of a culture of professional health of a future teacher: dis. ... Cand. ped. Sciences: 13.00.08. - Volgograd, 2005. -- 202 p.
9. Mitina L.M. Emotional flexibility of a teacher: psychological content, diagnostics, correction / L.M. Mitina, E.A. Asmakovets. - M.: Flinta, 2001. -- 192 p.
10. Bardakhchyan A.V. Hygienic assessment of the health status of teachers and its impact on the health of students of secondary educational institutions: dis. ... Cand. honey. Sciences: 14.00.07. - Rostov-on-Don, 2007. -- 174 p.
11. Kokaeva I.Yu. The role of the teacher in preserving and strengthening the health of primary schoolchildren // Health of the population and the environment. - 2004. - No. 9 (138). - S. 8-10.
12. Adilov U.Kh. Issues of methodology for assessing and managing professional risks of workers employed in adverse working conditions // Universum: Medicine and Pharmacology: electron. scientific. zhurn. 2018. No. 1 (46). URL: <http://7universum.com/ru/med/archive/item/5446> (date accessed: June 25, 2020).
13. Ilchenko Yu.G. Hygienic assessment of the health status of teachers of educational institutions: diss. Cand. medical sciences: 14.00.07. - Rostov n / a. - 2006. -- 183 p.
14. <https://www.lex.uz/docs/142859>
15. <https://lex.uz/docs/2046010>
16. Public Health Panorama, 5 (2-3), 210-214. <https://apps.who.int/iris/handle/10665/327075>.
17. Analysis of the factors determining the quality of medical care: the use of sociological surveys of doctors / N.O. Matitsyn, N.N. Bogachanskaya, I.V. Slyusar, E.A. Averchenko, A.I. Baranov, A.A. Kazakova // Sociology of Medicine. 2014 No. 2. P. 37-42.