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MEDICAL AND SOCIAL CHARACTERISTICS AND ANALYSIS OF PROFESSIONAL SKILLS ON PREVENTION THE HOSPITAL-ACQUIRED INFECTIONS OF MEDICAL PERSONNEL OF A MULTIPLE CLINIC IN THE REPUBLIC OF UZBEKISTAN

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✓ ***Resume***

In order to obtain an adequate qualitative assessment of the activity of medical staff on the prevention of hospital-acquired infections, conducted questioning of multidisciplinary clinics, analyzed information about working conditions, attitudes towards the specialty, professional competence on prevention hospital-acquired infections and others.

A characteristic of the medical activity of physicians with self-esteem health status is given; the opinion of medical staff on improving the efficiency and improving the quality of anti-epidemic work was investigates (reasons for identifying hospital-acquired infections in the wards, sanitary and hygienic working conditions, characterization of measures for effective anti-infective protection of medical staff, washing hands, improving training at seminars using innovative technologies).

Key words: HAI - Hospital-acquired infections, questioning, respondents, category, epidemiology department, HIV/AIDS, PPE, routine hand-washing method, professional competence, innovations, master class, punitive sanctions.

МЕДИКО-СОЦИАЛЬНАЯ ХАРАКТЕРИСТИКА И АНАЛИЗ ПРОФЕССИОНАЛЬНЫХ НАВЫКОВ ПО ПРОФИЛАКТИКЕ ВНУТРИБОЛЬНИЧНОЙ ИНФЕКЦИИ ВРАЧЕБНОГО ПЕРСОНАЛА МНОГОПРОФИЛЬНОЙ КЛИНИКИ В РЕСПУБЛИКЕ УЗБЕКИСТАН

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✓ ***Резюме***

Для получения адекватной качественной оценки деятельности врачебного персонала по профилактике ВБИ, проведено анкетирование врачей многопрофильной клиники, проанализированы данные опроса касающиеся условий труда, отношения к специальности, профессиональной компетентности по профилактике ВБИ и другие.

Дана характеристика медицинской активности врачей с самооценкой состояния здоровья; изучено мнение врачебного персонала по повышению эффективности и улучшению качества противоэпидемической работы (причины выявления ВБИ в отделениях, санитарно-гигиенические условия труда, характеристика мер эффективной антиинфекционной защиты медперсонала, мытьё рук, улучшения обучения на семинарах с применением инновационных технологий).

Ключевые слова: ВБИ – внутрибольничная инфекция, анкетирование, СанПиНы, респонденты, категория, эпидотдел, ВИЧ/СПИД, СИЗ, рутинный метод мытья рук, профессиональная компетенция, инновации, мастер-класс, штрафные санкции

O‘ZBEKISTON RESPUBLIKASIDAGI KO‘P TARMOQLI KLINIKALARNING TIBBIYOT XODIMLARIDA SHIFOXONA ICHKI INFEKSIYASI YUQISHINI OLDINI OLISH BO‘YICHA TIBBIY-IJTIMOIY XARAKTERISTIKASI VA TAXLILINING KASBIY KO‘NIKMALARI

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Andijon davlat tibbiyot instituti

✓ ***Rezyume***

Shifoxona ichi infeksiyalarning (ShII) oldini olish bo‘yicha tibbiyot xodimlarining faoliyatini etarli darajada sifatli baholash uchun ko‘p tarmoqli klinikalar shifokorlari o‘rtasida so‘rov o‘tkazildi, ish sharoitlari, mutaxassislikka bo‘lgan munosabat, ShII larning oldini olish bo‘yicha kasbiy vakolatlar va boshqalar tahlil qilindi.

Shifokorlarning o‘z - o‘zini sog‘lig‘ini baholashining tibbiy faoliyatini xususiyatlari berildi; epidemiyaga qarshi ishlarning samaradorligini oshirish va sifatini oshirish bo‘yicha tibbiyot xodimlarining fikri o‘rganildi (bo‘limlarda kasalxonada yuqumli kasalliklarni aniqlash sabablari, sanitariya-gigiena sharoitlari, tibbiyot xodimlarini yuqumli kasalliklardan samarali himoya qilish, qo‘l yuvish, innovatsion texnologiyalardan foydalangan holda seminarlarda o‘qitishni takomillashtirish).

Kalit so‘zlar: ShII - Shifoxona ichi infeksiyasi, anketa, SanPiNs, respondentlar, toifasi, epidemiologik bo‘lim, OIV/OITS, PPE, qo‘lni yuvishning odatiy usuli, kasbiy vakolat, innovatsiyalar, master-klass, jarimalar

Relevance

The sanitary and epidemiological well-being of the population is an integral element of the national security system. One of the most important strategic goals of healthcare worldwide is to ensure the quality of care and create a safe hospital environment. Nosocomial infections (nosocomial infections) are the most important component of this problem due to the global nature of the spread, negative consequences for the health of patients and the economy of the state. The international scale of the problem is evidenced by the creation of a worldwide alliance for patient safety under the auspices of the World Health Organization in 2004 to coordinate the efforts of specialists from all countries.

The problem of nosocomial infections (nosocomial infections) in recent years has become extremely important for all countries of the world. The rapid growth rates of medical institutions, the creation of new types of medical equipment, the use of the latest drugs with immunosuppressive properties, artificial suppression of immunity during organ and tissue transplantation - these, as well as many other factors, increase the threat of the spread of infections among patients and personnel of medical institutions.

Official statistics show that in developed countries, nosocomial infection develops in 5-10% of hospitalized patients and leads to an increase in hospitalization time by an average of 6-8 days (in surgical hospitals - by 12-18 days), mortality and treatment costs ... Nosocomial infections cause significant harm to the health of medical personnel.

The incidence of nosocomial infections, depending on the type of hospital, is as follows: in obstetric institutions - 36.2%, in surgical facilities - 27.1% and in others - 36.8%.

Until recently, due attention was not paid to the issues of sanitary and epidemiological surveillance of nosocomial infections among medical personnel. As a participant in the epidemic process, medical personnel were considered only as a source or factor in the transmission of infection. During the epidemiological investigation, medical workers were indicated as the main violators of the anti-epidemic regime in the institution, and this provision is not without grounds. Meanwhile, according to the WHO definition, nosocomial infections include diseases of medical personnel associated with their professional activities. The medical personnel who carry out the treatment and diagnostic process are the first to encounter pathogens of a wide variety of infectious diseases. Therefore, a comprehensive study of the peculiarities of involving medical workers in the epidemic process, the identification of mechanisms and factors of transmission of infections, the development of adequate preventive and anti-epidemic measures is an extremely important task.

In the context of socio-economic transformations, during the period of intensive development of health care, the activities of medical the personnel of multidisciplinary hospitals must meet the changing requirements for the quality of medical care, the organization of the work of personnel. To a large extent, the quality of inpatient care in this regard depends on medical personnel, an increase in the level of professional competence, motivation of activity, satisfaction with one's work, and work spirit in the team. In certain types of hospitals, nurses are at high risk of contracting various infectious diseases, including hepatitis B and C, and HIV. These are departments of intensive care and purulent surgery, departments of HIV infection, hemodialysis, blood transfusion stations, etc. Correct work organization plays an important role in fulfilling professional obligations.

Purpose of the study: to study the characteristics of the medical activity of doctors with a self-assessment of the state of health. From the opinion of medical personnel on increasing the efficiency and improving the quality of anti-epidemic work to identify nosocomial infections in departments, sanitary and hygienic working conditions, effective anti-infectious protection measures for medical personnel.

Material and methods

We have used social and hygienic research methods that allow us to obtain an adequate qualitative assessment of the activities of medical personnel for the prevention of nosocomial infections. For this purpose, a survey was conducted of 88 doctors in 11 departments of a multidisciplinary clinic, which is 38.3% of doctors, thus, the sample is representative (Table 1). Doctors were asked to answer questions regarding their working conditions, attitude to their specialty, professional competence in the prevention of nosocomial infections, and others. The questionnaire contained 60 questions.

Table 1.

Distribution of examined doctors by age

№	Age	abs.	%
1	25-29 years old	10	11,4
2	30-39 years old	31	35,2
3	40-49 years old	23	26,1
4	50-59 years old	20	22,6
5	60 years and older	4	4,7
	Total	88	100

Table 1 shows that most of the personnel (72.7%) were young and mature, i.e. from 25 to 49 years old, and only 27.3% from 50 to 60 years old and older, there were no significant differences depending on the profile of the department.

The survey was carried out using specially designed questionnaires, including questions related to socio-demographic, production characteristics, professional competence. The questionnaire contained 60 questions and formalized answers.

Statistical analysis of the results was carried out using traditional statistical methods: calculation of relative values, arithmetic mean, mean error, Student's test. Calculations were made using the software package ("Statistica - 6-0" and MS Excel).

Results and its discussion. Studying the effectiveness of organizing the work of doctors, it was also important for us to determine the main motivational factor of work, to find out how they perceive the nature of their work, what are the incentives for their work, whether they get satisfaction from what they have done, whether this leads to the development and self-improvement of work functions.

Gender characteristics of medical personnel: men - 73.9%, women - 26.1% (Fig. 1).

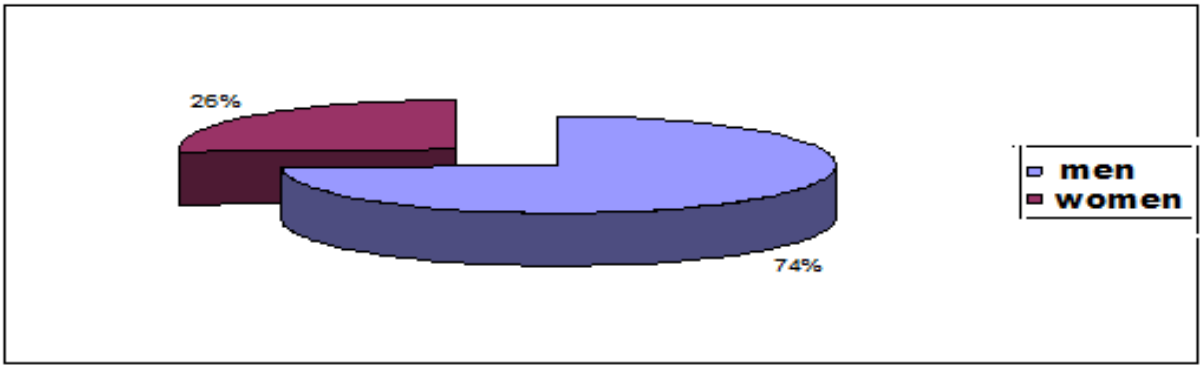

Fig. 1. Gender composition of doctors

At the place of work in the department, doctors are currently grouped by us into 2 groups (Fig. 2): surgeons and therapists.

The first group consisted of surgeons, urologists, proctologists, neurosurgeons, vertebrologists, doctors of the artificial kidney

department, resuscitation specialists, ENT, ophthalmologists. Figure 2 shows that the main mass is made up of surgeons (78%).

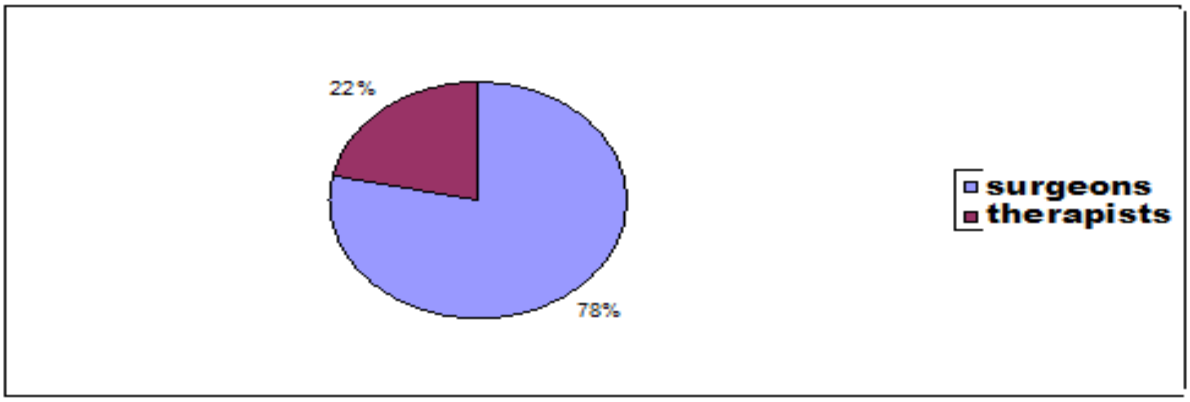

Fig. 2. Professional composition of doctors

By years of graduation from the institute, the surveyed are presented in Figure 3

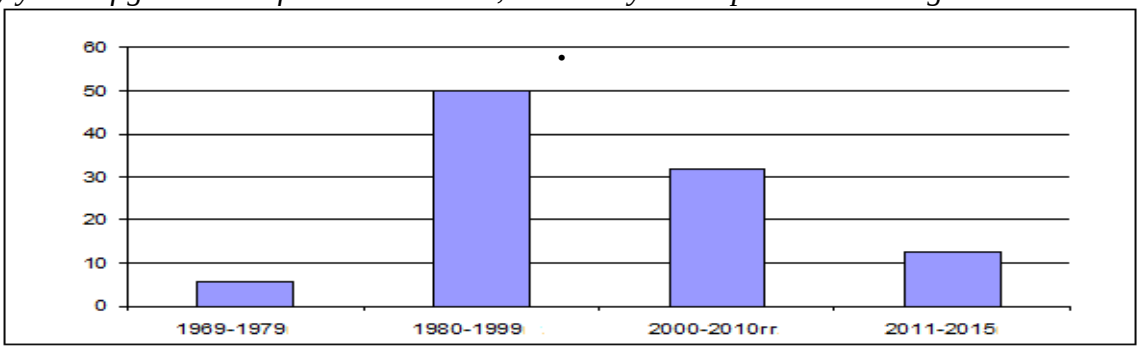

Fig. 3. Distribution of doctors by years of graduation

From the above data, it can be seen that half (50.0%) of the surveyed graduated from the institute in 1980-1999, 31.8% - in 2000-2010, in 2011-2015. -12.5% and 5.7% - in 1969-1979, i.e. 81.8% graduated from the institute in 1980-2010.

The distribution of doctors by specialty is shown in Figure 4.

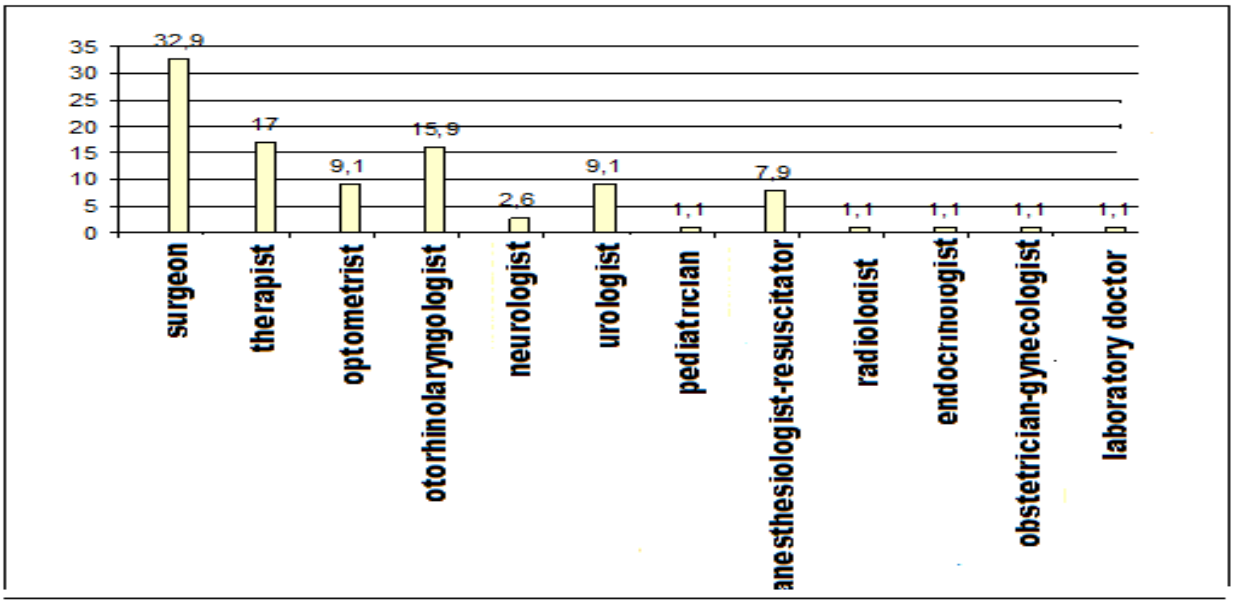

Fig. 4. Distribution of medical personnel by profession

According to general medical work experience, the distribution of respondents is presented in Table 2, from which it can be seen that 12.5% of doctors have work experience of up to 3 years, from 3 to 5 years - 5.7%, from 5 to 10 years - 26.1%, from 10 to 15 years - 6.8% and over 15 years - 48.9%. It can be concluded that in the studied hospital, the length of service of medical personnel is more common over 15 years (48.9%), the difference is significant (P <0.05).

Table 2.

Distribution of respondents by general medical work experience

№	General medical work experience	abs.	%
	Up to 3 years	11	12,5
	from 3 to 5 years	5	5,7
	from 5 to 10 years old	23	26,1
	from 10 to 15 years old	6	6,8
	over 15 years	43	48,9
	Total	88	100,0

The length of service of doctors in this health facility revealed that half of the doctors worked for 15 years or more, 5-9 years - 17.1%, 1-4 years - 15.9%, 10-14 years - 10.2%, up to 1 year -6.8%. This means that the bulk of doctors (60.2%) worked for 10 years or more, the difference is significant (P <0.05).

The qualification category contributes to the professional development and growth of the competence of doctors, which, to a certain extent, affects the quality of medical care.

The distribution of doctors by category is shown in Fig. 5.

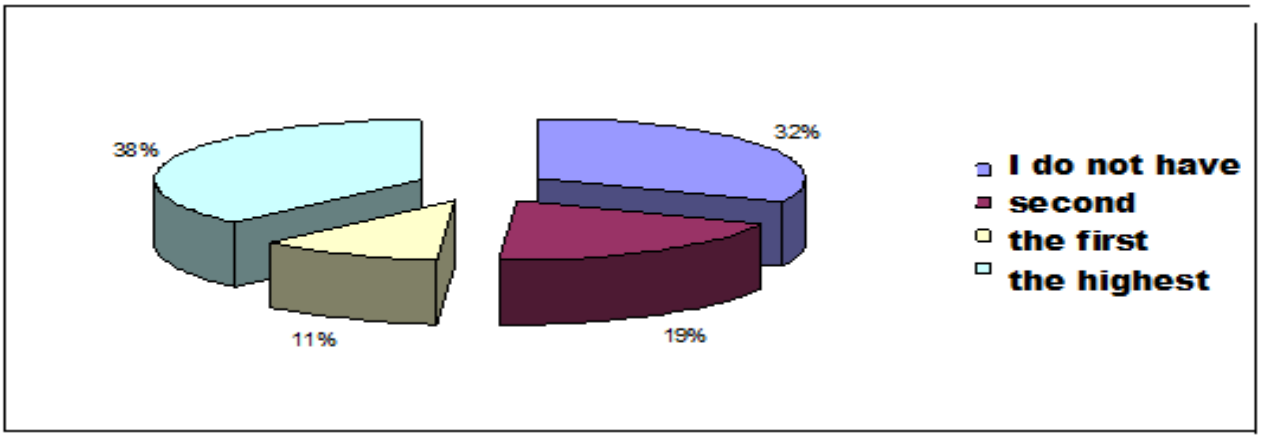

Fig. 5. Distribution of doctors by category

Figure 5 shows that 11.1% have the first, 19.3% - the second, 37.8% - the highest and 31.8% - do not have a category. It can be noted that 68.2% of the personnel have a category, the difference is significant (P <0.05).

To the question: "When was the last time you passed the FPK?" the answers were as follows: this year - 32.9%, 1 year ago - 21.6%, 2 years ago - 22.7%, 3 years ago and more - 13.7%, did not pass - 9.1%. Based on the data, it can be concluded that the bulk of the respondents passed the FPC (90.9%), the difference is significant (P <0.01).

The distribution of medical personnel by work rates revealed that 68.2% of respondents had less than 1 rate, 1 rate for 22.7% and 1.5 rates for 9.1%. 23.9% of doctors have part-time jobs, while the majority (76.1%) do not. More than half (57.1%) work part-time in another institution, and about half (42.9%) - in this institution.

To the question: "Does the current profession correspond to the professional education you

have received?"), the difference is statistically significant (P <0.01).

According to the survey, about half of doctors (46.6%) suffered a cold, 33.0% - flu, 5.7% - sore throat, 3.1% - hepatitis, 3.7% - other infectious diseases and 7.9% - did not hurt anything. This means that the bulk (92.1%) suffered ARVI, the difference is statistically significant (P <0.01).

80.3% of the examined doctors per year suffer from influenza, acute respiratory viral infections, tonsillitis and other diseases from 1 to 3 times, and only 19.7% do not get sick, the difference is significant (P <0.05).

(Fig. 6).

Doctors have low medical activity: more than half (52.9%) do not see a doctor, i.e. self-medicate and carry diseases "on their feet", 36.3% - take sick leave, and only 11.4% note that they did not have such a condition to take the ballot.

To the question: "How do you assess your state of health on a 5-point scale?" the medical staff responded as follows: grade "5" was given - 45.5%, "4" - 37.5%, "3" - 4.5%, "2" - 9.1%, "1" - 3.4 %

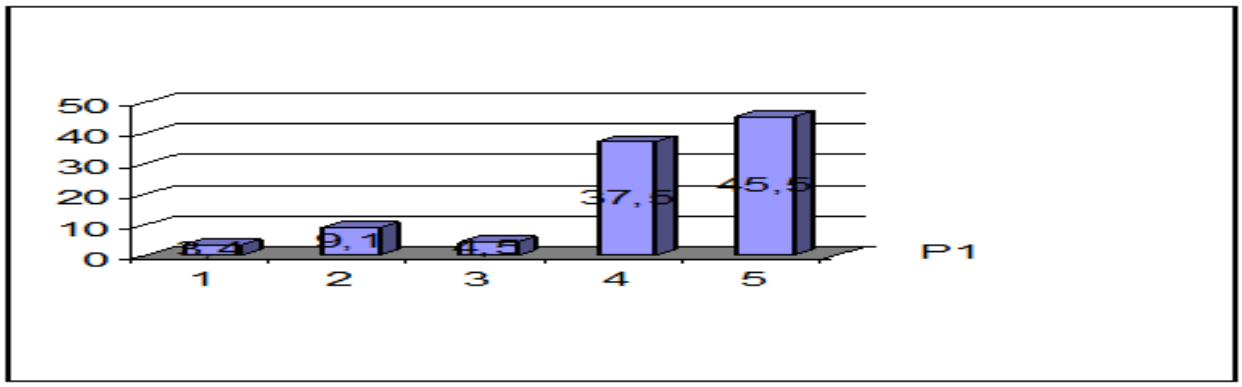

Fig. 6. Assessment of health in points of medical personnel

According to these data, it can be concluded that the assessment of their health "5" and "4" points was given by the bulk of the surveyed (83%), "3" - 4.5% and unsatisfactory ("2" and "1") - 12, 5%, the difference is statistically significant (P <0.05).

The majority of doctors (98.9%) read special medical literature (magazines, newspapers). It should be noted that 96.6% of doctors answered correctly to the question: "What documents cover the issues of nosocomial infection?" those. know government documents on this issue, and only 3.4% did not give the correct answer, the difference is significant (P <0.01).

According to our data, more than half of doctors (62.6%) work in a team, 31.8% - individually and 5.6% - in other forms of work organization (Fig. 7).

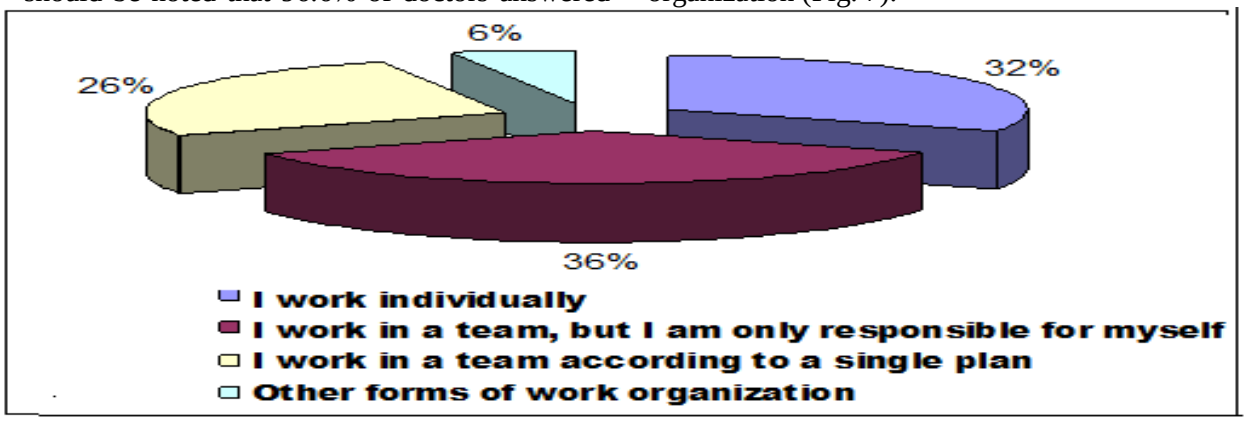

Fig. 7. Characteristics of the organization of work of doctors

To the question: "What do you think is the reason for the detection of infectious diseases in departments?" respondents answered as follows - 31.8% - incomplete collection of the epidemiological anamnesis by the medical staff, 27.3% - several of the listed reasons in aggregate, 20.4% - lack of express methods of laboratory diagnostics, 16.0% - irresponsibility of the

medical staff of the admission department and 4.5 % - does not know.

We have analyzed the performance of functions by medical personnel that are not included in the range of their direct responsibilities (Fig. 8).

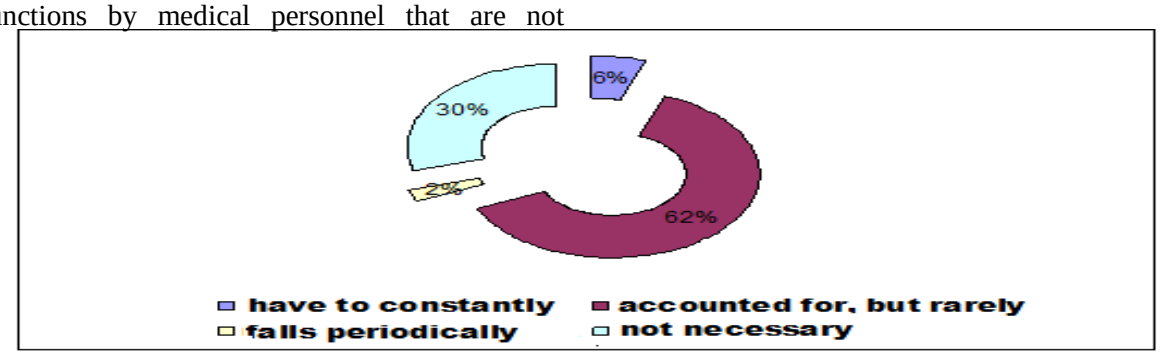

Fig. 8. Analysis of the performance of work not included in the range of direct responsibilities

Figure 8 shows that 62.5% of respondents rarely have to, 5.7% - constantly, 2.3% - periodically perform functions that are not part of their direct responsibilities, and 29.5% - do not have to perform. Based on these data, it can be concluded that the bulk of doctors (70.5%) have to perform additional work, the difference is significant (P <0.05).

To the question: "To what extent are you satisfied with the sanitary and hygienic working conditions (noise, ventilation, lighting, sanitary condition)?" respondents gave the following answers - they are quite satisfied - 47.7%, partially satisfied - 44.4%, found it difficult to answer - 4.5%, not satisfied - 3.4%. It can be concluded that the bulk of the medical staff is satisfied (92.1%), the difference is significant (P <0.01).

All respondents know the tactics if there is a patient with B 20 in the department.

The organization of the labor process in hospitals has a number of features associated with the use of high-tech medical equipment, round-the-clock operation and direct contact with drugs, chemicals, infectious agents.

According to a survey of respondents, the structure of occupational hazards faced by medical personnel in the department is as follows: psycho-emotional overload - 50.0%, several factors together - 19.3%, bacteriological hazards - 12.5%. exposure to chemical (mainly disinfecting) drugs -10.3%, physical overloads - 3.4% and no - 4.5%. Those. doctors in 95.5% of cases face occupational hazards, the difference is significant (P <0.01).

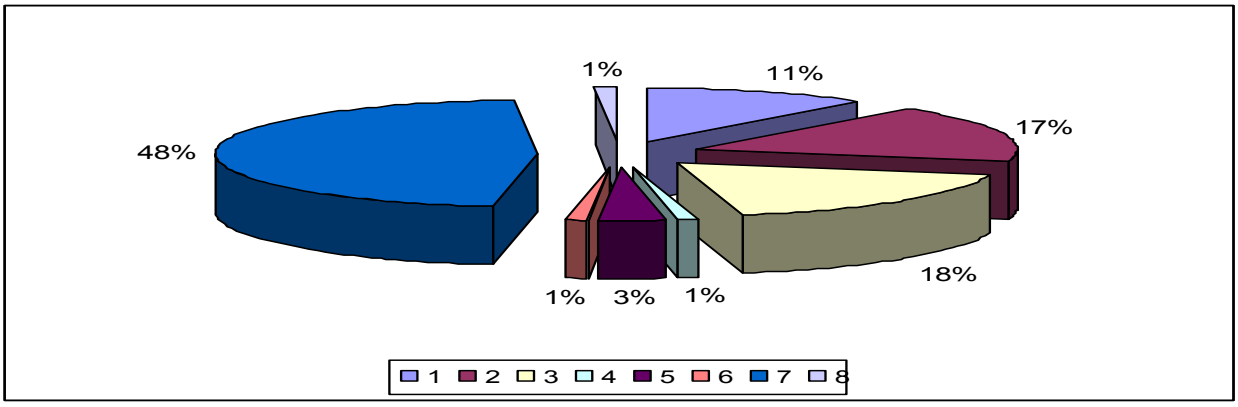

Fig. 9. Opinion of respondents about increasing the efficiency and improving the quality of anti-epidemic work

To the question: "What do you think is the most important for increasing the efficiency and improving the quality of the anti-epidemic work of the medical staff?" (Fig. 9) the respondents answered as follows: an increase in the provision of tools, medicines (18.2%), an improvement in the technical equipment of workplaces, an improvement in working conditions (17.2%), an increase in wages and an improvement in the material situation (11.3%) , strengthening

discipline (3.4%), improving the relationship between medical staff, administration (1.1%), improving the quality of vocational education (1.1%), somewhat together (46.6%), does not know (1.1%) .).

Table 3 shows, according to the opinion of doctors, the factors of increasing the effectiveness of the anti-epidemic work of nursing personnel.

Table 3. Factors of increasing the effectiveness of anti-epidemic work of nursing personnel

№	Factors	abs.	%
	Professional competence	31	35,2
	Organization	24	27,3
	Quality of work	5	5,7
	Several together	28	31,8
	Total	88	100

According to Table 3, doctors indicated that professional competence (35.2%), organization (27.3%), the quality of anti-epidemic work (5.7%) and in 31.8% - several together.

In Table 4, respondents assessed the methods of reducing nosocomial infections, where 54.6% take several methods together, 21.6% - compliance with sanitary standards for cleaning wards, sterility and disposable instruments - 14.8%, hand washing - 6.8%, etc. ...

Table 4: Evaluation by respondents of methods for reducing nosocomial infections

№	Methods for reducing nosocomial infections	abs.	%
1.	Hand washing	3	3,4
2.	Washing the hands of caregivers	3	3,4
3.	Compliance with sanitary standards for cleaning wards	19	21,6
4.	Sterility	8	9,1
5.	Disposable Instruments	5	5,7
6.	Purity	1	1,1
7.	Free visiting of patients	1	1,1
8.	Several together	48	54,6
	Total	88	100

Despite the fact that SanPiNs and orders for the prevention of nosocomial infections are being worked out in departments, only 46.6% of the surveyed doctors have heard of routine hand washing (Fig. 10).

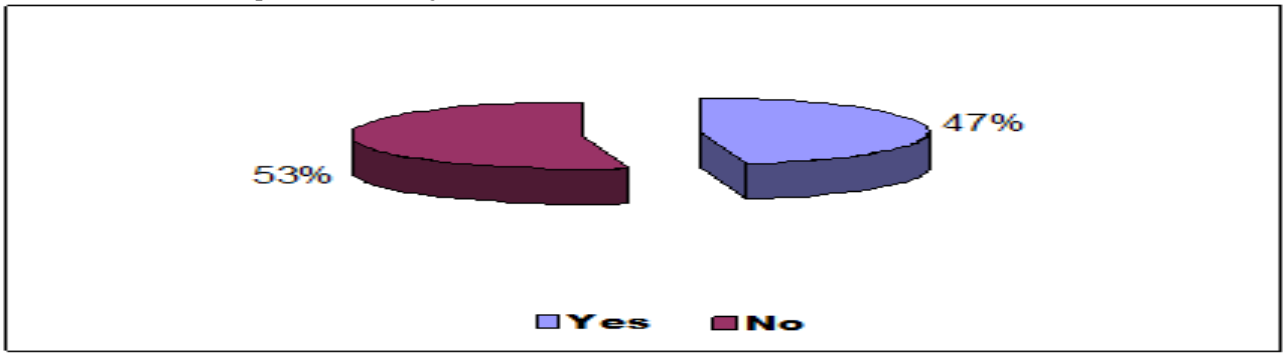

Fig. 10. Characteristics of the respondents' knowledge of routine hand washing

Analysis of the characteristics of measures for the prevention of nosocomial infections, according to the opinion of doctors, revealed that in 36.3% - this is the competence of medical personnel in hospital infection, in 17.8% - PPE, in 9.1% - modern equipment and reagents, in 5.7% - control over patients and their relatives, in 4.5% - improvement of the working conditions of the medical staff, in 29.5% - several together and in 1.1% - do not know.

The characteristics of the number of manipulations performed per day by doctors (injections, installation of systems, catheters, probing, blood sampling, etc.) is shown in Fig. 11.

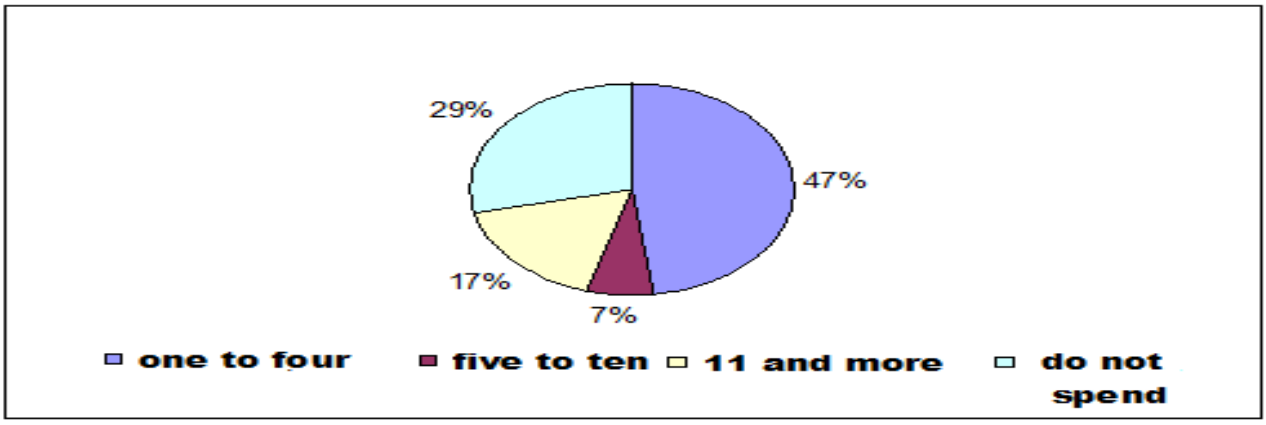

Fig. 11. Characteristics of the number of manipulations per day

According to our data, the majority of doctors (71.5%) perform 1 or more manipulations and only 28.5% do not, the difference is significant (P <0.05).

When analyzing the shortage of material and technical means necessary for high-quality prevention of nosocomial infections, the medical staff gave the following answers: 59.2% - constantly or partially encounter a shortage, 36.3% - do not encounter and 4.5% - found it difficult to answer (Fig. 12).

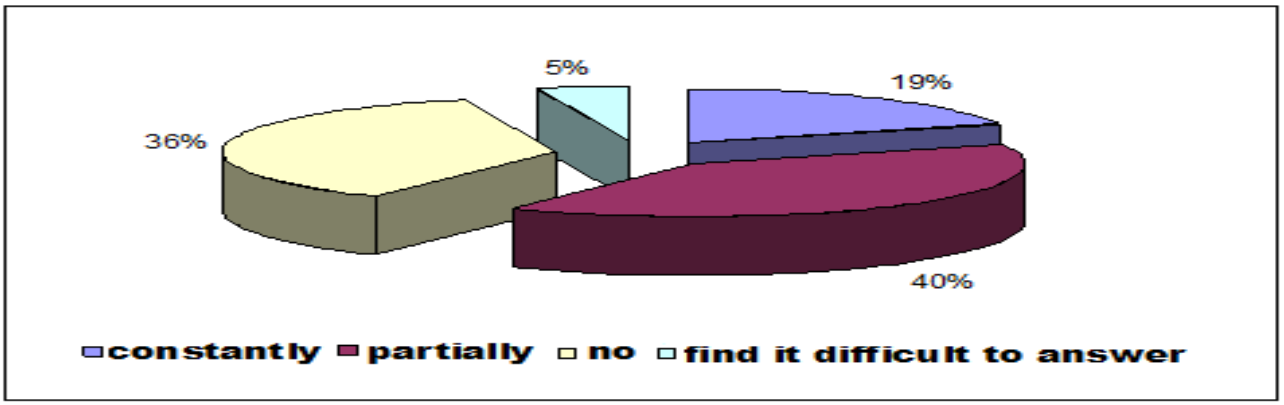

Fig. 12. Analysis of the shortage of material and technical means

Currently, much attention is paid to the quality of medical care, the majority of doctors know this definition (95.5%) and only 4.5% do not know, the difference is significant (P <0.01).

The majority of respondents (72.7%) are satisfied with the existing quality control system for the prevention of nosocomial infections, 14.8% are not satisfied and found it difficult to answer - 12.5%.

10.2% of doctors believe that in order to ensure the quality of prophylaxis of nosocomial infection, the chief physician, deputy and head of the department should take part, 20.5% believe that an epidemiologist is a doctor, 43.2% are an epidemiologist and a senior nurse, 25% - all staff

and 1.1% don't know. Those. most of the doctors interviewed do not know who is responsible for surveillance.

Analysis of measures in a medical accident for the prevention of blood-borne infections (HIV, AIDS, HBV, HCV) showed that

37.2% of doctors believe that it is necessary to use peripheral catheters and a catheter in the central vein, 66.7% - having many years of experience, perform procedures in such a way as to prevent medical accidents, 11% - use many methods and 1.1% - do not know ... This shows that 98.9% of the respondents know these events, the difference is statistically significant (P <0.01).

94.4% of the respondents answered that the head of the department controls the preventive vaccination of the department employees and the use of immunobiological drugs. Characteristics of measures for effective anti-infectious protection of medical personnel are presented in Table 5.

Table 5. Characteristics of measures of effective anti-infectious protection of medical personnel

№	Measures for the effectiveness of anti-infectious protection of medical personnel	Абс.	%
	Improving hospital infection control methods	24	27,3
	Hospital infection monitoring and analysis	6	6,8
	Continuous efforts to improve quality	14	16,0
	Elimination of the shortcomings of the treatment and diagnostic process of the hospital	6	6,8
	Introduction of standards	1	1,1
	Improving the dissemination of information and influence on the attitude of health care workers towards the infection control program	6	6,8
	Many	31	35,2
	Total	88	100

Doctors associate cases of suppuration after treatment in 36.4% with insufficient sterilization of surgical material and instrumentation, in 17.8% - incomplete treatment of the surgical field by the surgeon, in 14.8% - with antibacterial treatment, in 31% - several factors together ...

60.2% of respondents believe that nosocomial infection is influenced by a complex of factors, in 17% of cases - inadequate technique of invasive manipulations: medical and diagnostic procedures, in 7.9% - inadequate asepsis, sterilization, insufficient disinfection, in 7.9% - patients, in 5.9% - insufficient hand treatment and does not know - 1.1%.

82.9% of respondents had a complete understanding of the resistance to antimicrobial and antiseptic drugs of the main pathogens of nosocomial infections, 17.1% did not have a complete understanding (Fig. 13), the difference is significant (P <0.05).

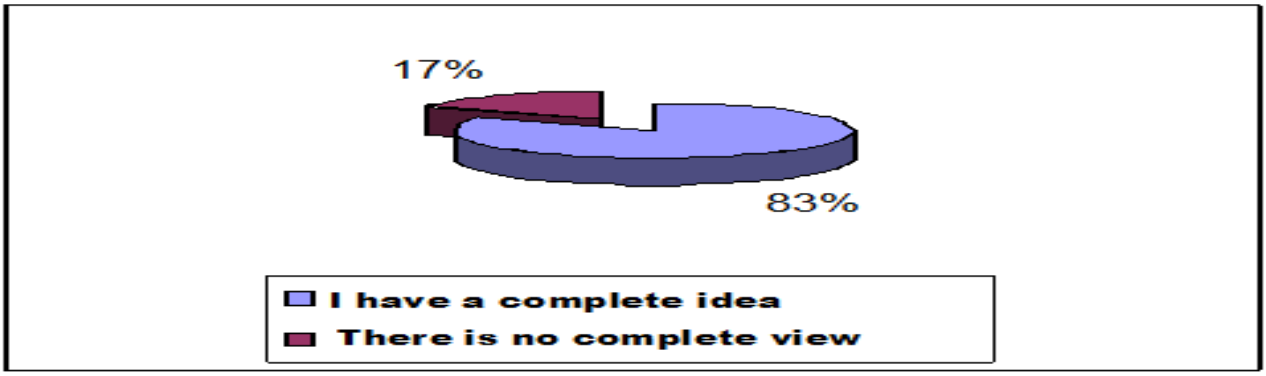

Fig. 13. Knowledge of respondents about drug resistance

According to the research data, for the prevention of nosocomial infections in 85.2% of cases, occupational vaccinations, immunization are carried out, and in 14.8% - they are not always carried out, the difference is significant (P <0.05).

To the question: "What factors negatively affect the quality of prevention of nosocomial infections?" the respondents' answers were as follows: insufficient provision of medical equipment, introduction of new methods of diagnosis and treatment (50.3%), high workload (12.3%), several together (29.5%), lack of material incentives (4.5%), insufficient control over the work of a doctor by the head (3.4%), insufficient qualifications of doctors (1.1%), does not know the reasons (14.8%).

The doctors' knowledge of the duration of hand washing is shown in Fig. 14.

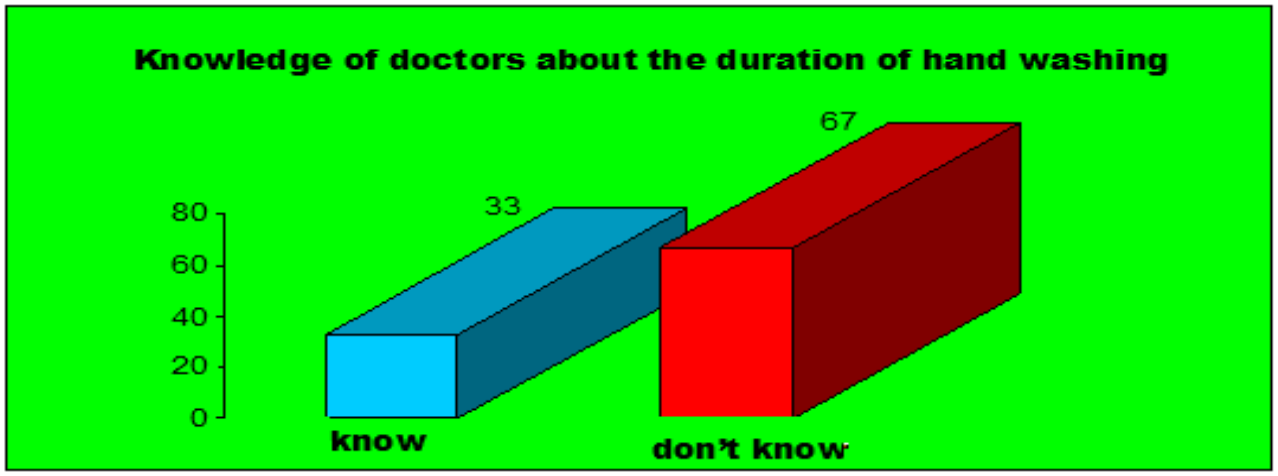

Fig. 14. Knowledge of doctors about the duration of hand washing

Figure 14 shows that only 33% of doctors know the duration of hand washing.

When analyzing the reasons for non-compliance with the recommendations for washing hands by doctors themselves, it was found that 23.8% had a belief that gloves provide complete protection, 12.3% had doubts about the effectiveness of hand washing in preventing infections, 4.5% % - frequent washing irritates the skin of the hands, damages the nails and nail polish, in 2.3% - the feeling that colleagues and managers themselves do not follow the recommendations for washing their hands, lack of time (11.7%), limited access to sinks and plumbing water (1.1%), 29.5% have many reasons, 14.8% have no answer (Fig. 15).

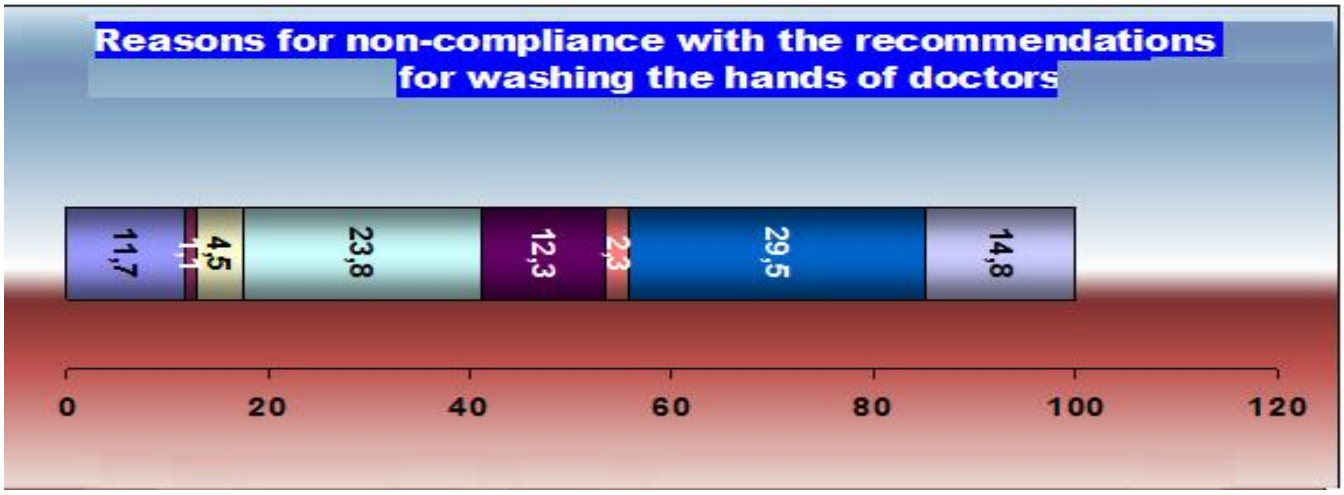

Fig. 15. Reasons for non-compliance with recommendations for washing hands by doctors

92.2% of respondents had no violations of production discipline, 3.4% had a failure to comply with the order of the head, 2.2% - violation of discipline, such a number (1.1% each) - equipment breakdown due to their own fault and unsatisfactory maintenance your workplace. 75% of respondents were not imposed penalties for non-compliance with sanitary norms and rules and 25% were imposed, the difference is significant (P <0.05).

The characteristics of penalties for work are presented in Table 6, from which it can be seen that the bulk of them are reprimands (21.6%).

Table 6.

Characteristics of penalties for doctors

№	Types of penalties	abs.	%
	Rebuke	19	21,6
	Fine	7	8,1
	Transition to a lower position	1	1,1
	Dismissal	2	2,2
	Did not overlap	59	67,0
	Total	88	100

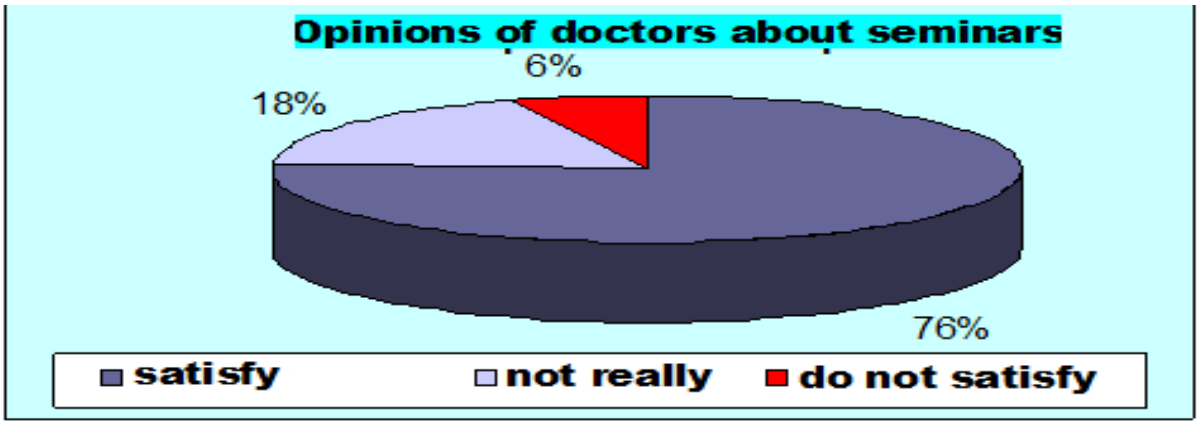

Fig. 16. Characteristics of the respondents learning at the seminars

Рис. 16. Мнения врачей о семинарах

According to fig. 16: 76.1% of respondents are satisfied with the training at seminars on the prevention of nosocomial infections, 18.2% - not quite satisfied and 5.7% - not satisfied, the difference is significant (P <0.05).

Doctors believe that in order to improve training at seminars, it is necessary to use more often presentations (15.9%), educational films (11.4%), the involvement of other specialists (11.4%), master classes (7.9%), various species in the complex (19.3%); 34.1% of respondents are satisfied with the seminars (Fig. 17).

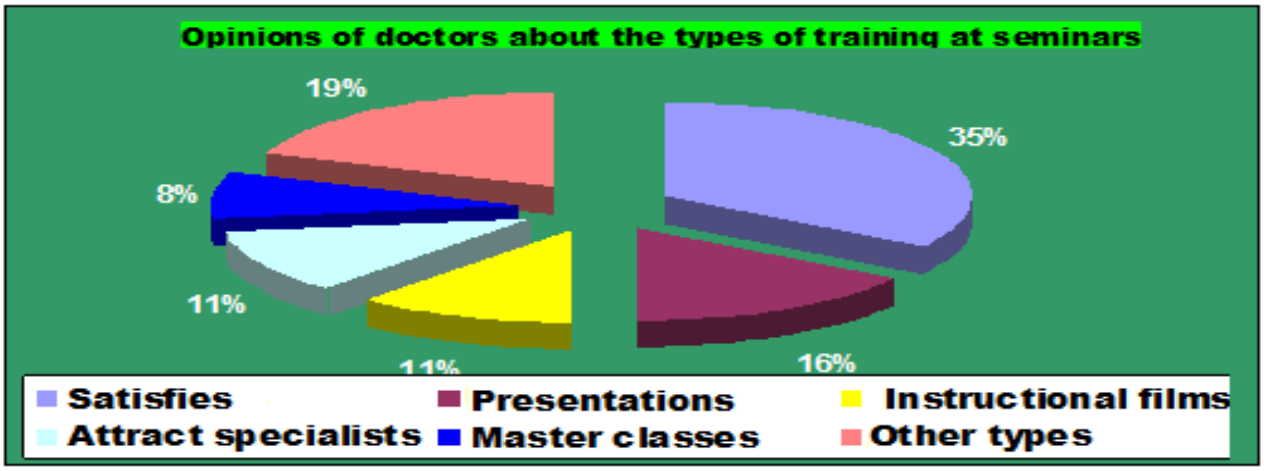

Fig. 17. Opinions of doctors about the types of training at seminars

To improve the activities of the medical and nursing staff, we have introduced a logbook of procedures, a logbook for the cost of disinfecting solutions, quartzing, registration of catheters, sterilization into practice. According to the survey, about 70% of respondents believe that with the introduction of these documents, time has been saved, there is more time left for patients and it is necessary to further reduce the number of medical documents, 9% believe that nothing has changed, more work has been added.

In conclusion, it should be noted that not only significant medical and diagnostic activities are carried out in the healthcare facility, but also a very extensive complex of sanitary-hygienic and anti-epidemic measures aimed at the prevention of nosocomial infections, which are a special specificity of the categories of human diseases associated with the patient receiving one or another type of medical care and resulting from the patient's stay in the hospital.

At the head of all this multifaceted work on the prevention of nosocomial infections in health care facilities is the medical staff - the main organizer, performer and responsible controller, the correctness of whose activity depends on the knowledge and practical skills obtained in the course of training to solve this problem. The conscientious attitude and careful implementation of the requirements of the anti-epidemic regime by medical personnel will prevent occupational morbidity of employees, which will significantly reduce the risk of nosocomial infections and preserve the health of patients.

Thus, the studies carried out and the results obtained helped us to study, analyze and identify weaknesses in the organization of the activities of a multidisciplinary hospital, its epidemiological department in the prevention of nosocomial infections and consider possible ways of its optimization.

Conclusion

1. For the efficiency of the operational and retrospective epidemiological analysis of the incidence of nosocomial infections, the increase in the medical activity of the hospital staff, it is necessary to create a single electronic database in the institution.

2. To optimize the principles of training medical personnel on the safety of nosocomial and traditional infections in different departments of the hospital, use interactive forms of training (training videos, seminar presentations, master classes, Internet conferences, distance and modular training).

LIST OF LITERATURE:

8. Statement of the President of the Republic of Uzbekistan № PP-2487 On the State Program "Year of Healthy Mother and Child", 09.02.2016.
9. «Sanitary rules and norms of collection, storage and utilization of medical and prophylactic measures» SanPiN № 0317-15, Official publication, Tashkent - 2015.
10. Sanitary norms and rules of design, construction and operation of medical and prophylactic institutions, SanPiN № 0292-11, Official publication, Tashkent - 2011.
11. "Prevention of intrauterine infections." Sanitary-epidemiological rules. SanPiN № 0304-12. Tashkent - 2012
12. Asadov D.A., Arapov T.Yu., Boltaev A.A., Sharapova N.D. Prevention of the spread of HIV / AIDS: methods of analyzing the effectiveness of the cost. // Med.j.Uzb. - T., 2009. -№4. - S.36-38.
13. Atabekov N.S., Matkarimov B.D., Rajabov G.X., Nurmatov A.X., Karabaeva D.Sh., Isaeva G.N., Atabekov S.N., Ataxojiev M.S.VICh -infektsiya v Uzbekistane i eyo epidemiologicheskie osobennosti v sovremennyx usloviyax // Med.j.Uzb. - T., 2013. -№5. - S.36-38.
14. Atabekov N.S.Zashchita naseleniya ot zabolevaniya VICh / AIDS v Respublike Uzbekistan.//Organizatsiya i upravlenie zdravooxraneniem. -T., 2015. -№7. - S.42-48.
15. Volkonskaya A.R., Chistyakova A.Yu. Legal and organizational problems in the work of the hospital physician-epidemiologist // Polyclinic 6/2013-M.-p.6.
16. Vsemirnyy Alliance for the safety of patients. Perspective development program for 2005. - VOZ, 2005 -34 s.
17. Instructive-methodical manual for practicing nurses "Organization of sanitary-epidemiological and disinfection-sterilization regimes in LPU" - N.B. Milovidova, E.B. Brusina, O.M.Drozdova. - Kemerovo, 2011-52p.
18. Ismailova M.A., Khodjamova N.K., Mirzaxmedova D.M. Assessment of knowledge and practice of neonatologists in the control and prevention of hospital infections. // Med.j.Uzb. - T., 2012. - №3. - S.77-80.
19. Ismailova M.A., Khodjamova N.K., Mirzaxmedova D.M. Monitoring of prevention of nosocomial infections.// Pediatrics.-T., 2012. -№3-4. -S.64-67.

20. Orlova O.A., Akimkin V.G., Chistova A.V., Efremova N.P. Epidemiological characteristics of infectious diseases, associated with the occurrence of medical aids, in the surgical profile of the department // Epidemiology and infectious diseases. - Moscow, 2014.t.19-№1. - S.20-27.
21. Saidaliev S.S. O dostijeniyax i dalneyshix zadachax v organizatsii i provedenii profilakticheskix i protivoepidemicheskix meropriyatiy v respublike. // Med.j.Uzb. –T., 2013. - №3. -S.63-87.
22. Sitnikova G.N., Vnutribolnichnye infections and the role of medical personnel in prevention // fvso @ mail .ru, 2015.
23. Sovershenstvovanie zakonodatelnyx osnov borby protiv VICh- vajnyy faktor sotsialnoy zashchity.// Byulleten Assotsiatsii vrachey Uzbekistana. - T., 2013.-№1. - S.6-10.
24. Sutyrina O.M. Sotsialno-gigienicheskoe issledovanie zabolevaemosti, obraza jizni i usloviy truda meditsinskix rabotnikov krupnoy mnogoprofilnoy bolnitsy: Avtoref. dis… kand.med.nauk - M .: 2011.- 22p.
25. Umirov S.E., Kholdarova X.M. Rychagi realizatsii sistemy infectionnogo kontrolya.// Byulleten Assotsiatsii vrachey Uzbekistana. - T., 2013.-№4. - S.95-100.
26. Xaldarova X.M., Umirov S.E., Rajabov G.X., Maxamatov A.A., Abdumutalova E.S., Khashimova S.A. Dynamics of the epidemic process of HIV infection in Uzbekistan // Med.j.Uzb. - Tashkent, 2015.-№2. - P.69-71.
27. Shkatova E.Yu. Morozkova O.A. Xetaguri N.V., Rudina O.L. Ifektsionnaya bezopasnost v LPU: uchebnoe posobie - Rostov n / D: Phoenix, 2008. - 235s.
28. Shchepanskaya L.V. Medico-organizational aspects of intrauterine infections, inpatient surgical profile, and the role of secondary personnel in prevention: Author. Dis.kand.med.nauk - M . : 2010. - 22p.

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