

**ABOUT RESULTS OF REALIZATION OF THE STATE PROGRAM ON
DEVELOPMENT AND REFORMING OF THE REPUBLIC OF KAZAKHSTAN FOR
2005-2010 IN WESTERN-KAZAKHSTAN OBLAST**

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Health status is an integral indicator of social orientation of society, social security, characterizing the degree of state responsibility in front of its citizens. In order to implement the Decree of the President of the Republic of Kazakhstan № 1438 dated by 13.09.04 on "State Program of Reforming and Development of Health Care in the Republic of Kazakhstan for 2005-2010" and the Action Plan for implementing of the State program approved by the Government of the Republic of Kazakhstan from 28.03.07 № 234 on Amendments and Additions to the Decree of the Government of the Republic of Kazakhstan on October 13, 2004 № 1050 in Western Kazakhstan oblast has developed a regional program on Health Reform and Development of Western Kazakhstan Oblast for 2005-2010. The program aims to improve the health of the population of Western Kazakhstan region by creating an effective system of care to the priority development of primary health care and affordable competitive health care system. During the period of implementation of the National Health Program a series of transformations has undergone.

Creation of optimal and accessible network of health care, 10 state enterprises transferred to the status of state-owned enterprises in the right of economic management, created a diversified regional children's hospital with 200 beds by combining two regional children's hospitals and hospital beds held re-structuring of TB service to separate the flow patients with Bacilli.

Analysis of the impact of the Program indicates a high social value and positive things in achieving of socio-economic indicators.

Today in the health field there was a positive balance in reducing the deficit medical staff from 290 to 240, in connection with an active involvement to our region of 50 young professionals from the medical academies of Almaty, Aktobe, and Karagandy.

The project "with Diploma to the village," there were sent to the countryside 18 specialists with higher medical education, 14 of them in need of shelter provided by the service apartments, 23 young professionals aimed at medical organizations of the city provided one-bedroom apartment.

The reforms of the industry in recent years associated with the initiatives of the President and are reflected in the President's message. It is not surprising, because the nation's health is one of the most sensitive indicators of economic development.

We medical specialists of Western Kazakhstan oblast must apply all our abilities, experience to implement President's message, purpose and targets of the State Program on Development of Health Care "Salamatty Kazakhstan" for 2011-2015.

**DRUG SUPPLY OF OUTPATIENTS UNDER CONDITIONS OF UNITED
NATIONAL HEALTH CARE SYSTEM IN THE REPUBLIC OF KAZAKHSTAN**

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One of the objectives of the State Programme of Health Care Development of the Republic of Kazakhstan named as "Salamatty Kazakstan" for 2011 - 2015, approved by Presidential

Decree. № 1113 dated from 11.29.10, is development and improvement of the Unified National Health Care System (UNHCS). As part of this objective they plan to improve mechanisms for outpatient drug supply, in particular increasing an availability and improving of quality of medicines to population, improvement of supply by medical equipment.

In the past three years outpatient drug supply (ODS) in Almaty city was observed a significant trend towards to increasing of allocations. If in 2008 total cost of drugs dispensed with discounts or free of charge was 1,471 billion tenge, then in 2010 – 1,623 billion tenge. Almaty has 35 organizations that provide primary health care (PHC), and outpatient drug provision with discounts and free of charge is carried out only by 13 pharmacies located in various parts of the city. For a big city it is a negligible number of pharmacies participating in the program of ODS. The analysis showed that primary care organizations, that have in pharmacy/drugstore, settle allocated budget in 1.5-2 times higher than those clinics that do not have pharmacy items.

However, there are problems associated with the introduction of UNHCS: prescription forms, used for released discounted/ free of charge drugs are stored at the pharmacies, and justification of the benefits and fact of treatment of patient at the clinic, his diagnosis was confirmed and stored at the clinic. This fragmentation of information, lack of link between doctor, patient, and pharmacist preclude the holding of expert system of accounting and control. The second significant problem is a calculation of the financing needs of ODS. The third problem - orphan drugs outpatients supply as well as financing the purchase of costly medicines from the local budget, used to treat certain nosology: oncology, multiple sclerosis, etc. The fourth problem - lack of awareness of patients about their right for ODS with discounts and free of charge. Thus, in the frameworks of qualitative implementation of the State Programme of Health Care Development of the Republic of Kazakhstan "Salamatty Kazakstan" for 2011 - 2015 years, improving of the quality of outpatient drug for citizens on the basis of developing a new draft national drug policy of the RK is possible.

JOINT RESPONSIBILITY FOR HEALTH

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World Health Organization (WHO) has identified three principal values of an ethical framework "Health 21":

-Health as a fundamental human right;

-Equity in health and health care and effective solidarity among countries, groups and contingents of people within countries and both among males and females;

-Participation in health development and commitment/accountability of individuals, groups, communities and agencies, organizations and sectors.

An effective approach to development of health requires a responsible attitude and accountability for the consequences of the health impact of its policies and programs, recognizing the benefits and advantages for themselves in efforts to promote and protect health.

A key issue for all areas of health care is a culture of health, increasing the prestige of health, self-awareness of health value as a factor of resilience, active aging, social, and economic motivation to protect and promote health.

The State program on development of Health Care in the Republic of Kazakhstan "Salamatty Kazakhstan" for 2011-2015 settled questions on increasing of joint solidarity of citizens and on further development of health insurance. In the framework of implementation of this important concept on social and demographic development of the RK Ministry of Health is preparing a proposal for development of health care, taking into account the implementation of mechanisms of joint responsibility of citizens for their health. In this regard, studies of preconditions and the imparting of cultural formation of healthy lifestyle of every person, every family and creation of conditions for a healthy lifestyle from the state - raising the standard of living for a healthy and quality nutrition, creating conditions for the development of mass sports are relevant and practically significant.

STATE OF PROBLEM AND PREVENTION OF DIABETES

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Diabetes mellitus (DM) is one of the diseases with social significance. Its prevalence, complications, outcomes, prevention and treatment should be considered as one of the major problems of health and society in general.

According to the World Health Organization (WHO), more than 100 million people on the planet suffer from this disease, but more than 50% of patients even do not suspect about their illness. Studies aimed to identify patients with impaired glucose tolerance (IGT), impaired fasting glucose (IFG) have not carried out in many countries. Available in Kazakhstan Diabetes Register contains information only about those patients who are aware of their disease (190682 patients were registered at the end of 2010). The number of patients with type 2 diabetes who do not know about the disease is unknown in Kazakhstan. Experts predict that by 2030 the number of patients with diabetes will increase to 435 million in case of absence of systematic prevention.

DM became the first non-communicable disease, reflected in the UN (December 2006) calling to establish national programs for the prevention and treatment of this disease and include them in the state programs of health.

On November 29, 2010 President of the Republic of Kazakhstan has approved the State Program for Development of Health Care as "Salamatty Kazakstan" for 2011-2015. The aim of the Program is to achieve quality improvements in terms of individual and public health in Kazakhstan. In the frameworks of the State Program has been planned establishment of the National Screening Program. Large-scale screening surveys covering large groups of people in Kazakhstan are being introduced in 2002. For all patients who applied to the National Center of Allergology on therapeutic disease, to assess a risk of diabetes and provide specific recommendations we developed a special questionnaire with score system for early detection of DM.

In cases where the patient was diagnosed pre-diabetes (impaired glucose tolerance and impaired fasting glucose), s/he was examined and, where appropriate, treated in relation of possible risk factors (overweight, obesity, high blood pressure).

Therefore, that is necessary always inform a public about healthy lifestyle (healthy diet, normalization of weight, physical activity, quit of bad habits), and in sufficient volume to

provide educational materials on prevention, early diagnosis and modern methods of diabetes treating.

EXPERIENCE OF USED INNOVATIVE METHODS OF FINAL ATTESTATION IN A FORM OF OBJECTIVE STRUCTURED CLINICAL EXAM

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The call to adapt a process of the training of health workers to the real problems of practical medicine is not new. Traditionally, the examinations on clinical disciplines were carried out during several stages, one of which was supposed to control the possession of the student's practical skills. According to our observations, this stage of the exam generally takes place in a limited format, and virtually no effect on a choice of priorities identified in the planning of workshops during the semester. Examination on clinical disciplines, conducted in several stages, involving the control of ownership students practical skills, has several disadvantages: consuming of time, different complexity of tasks for students, lack of standardization in the evaluation criteria for practical skills, and bias of the teacher.

Knowledge and skills control sets a task to identify the learner's mastering a curriculum. The results also allow to monitor an assessment of effectiveness of teaching method, as well as a control method. Regarding control system of knowledge, it should meet the following requirements: measurability of results, objective assessment, commonality, adaptability, and reliability. The solution of the problem was found by undertaking of the practice in assessing of knowledge and skills of graduates via objective structured clinical examination. OSCE (objective structured clinical examination):

Objective – an exam provides unbiased assessment of real clinical knowledge and skills of graduates.

Structured – is based on precise rules for tutor and student.

Clinical – defines clinical content of the exam.

During an examination a teacher must ensure that the graduate can apply existing knowledge into practice. With this purpose in the room where the exam is conducting, they organize booths (stations) through which a student must pass successively to convince the examiner that he or she has a necessary skills luggage. On the passage of each station is assigned a certain amount of time.

Kokshetau Medical College uses OSCE during more than 10 years and during 6 years at the final state of attestation that is carried out in a form of an objective structured examination in conjunction with the theoretical stage of assessment in a form of automated testing of the educational process (ASTEP). The developed version of the OSCE was adapted to the system of technical professional medical education and provides a significant period of time to perform manipulations on phantoms, models and work with standardized patients.

EXPERIENCE OF INTRODUCTION OF THE UNIFIED NATIONAL HEALTH CARE SYSTEM IN WESTERN-KAZAKHSTAN OBLAST

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Introduction. The effectiveness of the Hospitalization Portal regulated by Order # 492 of the MoH, RK from July 3, 2010 titled as "About approval of regulations on the organization of a planned admission to hospital in the framework of guaranteed free medical care through the Portal Office of hospitalization," as amended by the Orders of the MoH of RK # 983 dated from 20 December 2010 and #166 from March 31, 2011, that is to ensure the protection of patients' rights in order of transparency and free choice of medical organizations in the framework of guaranteed free medical care, the interaction of the participants UNHCS, planning number of hospital admissions.

The purpose was study of the process and results of introduction of UNHCS to the work of city outpatient clinics # 3 in Uralsk, WKO.

Materials and methods of study. Statistical reports of the clinics and the City Department of health care during last two years since introduction of the UNHCS.

Subjects of study. Adult and child catchments areas of the outpatient clinics # 3.

Results of study. An indicator that reflects the efficiency of UNHCS's introduction to the organizations of primary health care (PHC) is reduction of consumed health care. It should be noted that during the study period and the introduction of UNHCS the total number of hospitalized patients decreased by 11.8%. Moreover, the number of patients hospitalized on an emergency basis from the catchments areas of the outpatient clinics # 3 decreased by 20.8%, but on a planned area only by 8.7%. Structure of the patients treated in hospitals at home showed that in 2009 (before the introduction of UNHCS), the largest proportion of their weight on cardiovascular disease (55.4%). After the introduction of UNHCS leading position occupied by diseases of nervous system, respectively, in 2010 - 38.8% in 2011 - 42.8%.

Conclusion. One of parts of the introduced UNHCS is an organization of the Hospitalization Portal for scheduled patients referred from primary care organizations. Introduction of Hospitalization Portal allowed to provide transparency in accounting of availability of free beds, planned hospitalization of patients and reduce hospital waiting times (from 1 to 3 days), which was a decrease in the number of planned hospitalization among children and emergency - in the adult of the outpatient clinic's # 3 catchments area. Further development of hospital replacement care by increasing a number of planned patients at the day care and hospital at home will reduce the amount of hospitalization to 24-hours hospitals and reduce spends from the budget for expensive inpatient care.

ABOUT REALIZATION OF UNIFIED NATIONAL HEALTH CARE SYSTEM

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In order to improve a health care system the Ministry of Health of the Republic of Kazakhstan introduced Unified National Health Care System (UNHCS) since January 1, 2010, which was a result of a critical evaluation of previous reforms and current situation in health care. This system provided a free choice of doctor and medical organization, creation of a

competitive environment for provision of medical services and payment for medical services at actual cost. The introduction of the Unified National Health Care System provided a right to every citizen to choose a doctor or clinic in the city and if needed with referral of patient may choose to treat any profile hospital in the country. The exception is hospitalization to emergency, when patients are delivered by emergency rescue to the hospital to provide emergency care. Hospital replacing technologies were developed in the frameworks of further development of UNHCS. The clinic has increased the number of treated patients at day hospital from 3355 people in 2009 to 5110 in 2011. The introduction of UNHCS permitted to schedule around the hospitalization to 24-hours hospitals, to ensure the development of low-cost inpatient care at the outpatient clinics.

1. Regulate internal and external audit at the PHC organizations to prevent cases of incorrect referral of patients to hospitals, the completeness of their of pre-hospital examination, the correctness of the wording and coding of diagnoses according to ICD-10, timely removal of a patient from a waiting list for his/her refusal of admission or initial choice of medical organizations.

2. It should strengthen work of district service to raise awareness of patients about their responsibility of selection of medical organization and refuse admission without a valid reason, a timeliness of informing patients about a date of hospitalization and monitoring of their arrival to the hospital.

3. Further development of inpatient care by increasing of the number of planned patients at day care and hospital at home. This will reduce the volume of admissions to 24-hours hospitals and reduce spends for expensive inpatient care.

4. Healthcare organizations providing inpatient care should work with staff admission room to increase reliability of entered data about reasons of denials of service.

5. The organization providing outpatient care should conduct daily monitoring of the planned hospitalization, sample cases of emergency situations, to analyze the cause of each case an extraordinary situation to reduce them.

6. Create a working committee for regional administration of health care to parse the extraordinary events to determine the reliability of the defects exhibited by hospitals for planned hospitalization.

THE KNOWLEDGE OF PHYSICIANS IN THE FIELD OF HEALTH TECHNOLOGY ASSESSMENT

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Due to intensive development of science in the medical market constantly appearing new technologies that can improve public health through more effective treatments and require investment of additional resources for health. For best results, and quality within available resources and complicate the patient's health warnings on the latest technologies to develop a mechanism for efficient allocation of resources taking into account organizational, social and ethical issues.

Currently, the Republic of Kazakhstan established the Centre for Standardization and evaluation of health technologies as a structural unit of the National Center for Health Development mission, which is to improve, coordinate the activities of organizations in the field

of Health: Standards of medical care through the development and implementation of clinical guidelines / protocols, as well as implementation and improvement of OMT through the effective development of pharmaco-economics and the principles of evidence-based medicine, as well as the further implementation in practical public health. There is a necessity to identify level of knowledge of practitioners in OMT for further involvement into OMT process.

Purpose: to study level of knowledge of practitioners in OMT.

Research methods: sociological interview among 448 respondents of 6 out-patient and hospitals in Almaty and Astana.

Conclusions:

Ability and skills to use Internet resources, as well as English language of basic level, will allow doctors rapidly increase the capacity of OMT during the additional training programs. When state regulation of cost-effective investments in young professionals, as of particular importance is a provision of advanced scientific tools, and "overflow" of specialists capable in solving of complex problems and in finding of effective ways to solve such problems in the sphere of scientific research in health care system.

Medical organizations in the frameworks of state regulation can compete on price and delivery of qualitative health services. To attract patients, health care organizations offer new medical technologies that can ensure better results of treatment, respectively, and physicians who can implement and apply these technologies. Therefore, OMT, which plays an important role in providing accurate information about these results will have an important role in the pricing of health. In this connection it is necessary to create a pool of experts on OMT, which will effectively promote the OMT methodology.

Evaluation of effectiveness and a real choice of treatment depends on the accuracy of the information on these results, that can be found by statistical indicators. Statistical indicators make it possible to assess the level of public health, health care organization, the organization and effectiveness of routine inspections, to judge the quality of medical care. It is therefore necessary to develop mechanisms for timely access and increase interest among doctors about seeing trends in statistics.

THE BASIC SOCIAL AND HYGIENIC FACTORS PROVIDING AN ACTIVE PARTICIPATION OF A FAMILY IN REHABILITATION OF DISABLE CHILDREN

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Keywords: disable children, family, major risk factors, recommendations, medical institutions, rehabilitation at-home.

Priority direction of development of public health in the Republic Kazakhstan is improvement of protection system of motherhood and childhood.

Among actual problems in the field of motherhood and childhood protection at the present stage it is necessary to allocate a problem of rehabilitation of disable children who have huge medical and social, social and economic importance.

However, it should be noted that medical and social rehabilitation of disabled children should be carried out not only in public health services establishments, but also at the child's family.

Reorganization of work of establishments of PHC system by a principle of family service demands consideration of questions of interaction between family and doctor in carrying out of treatment-and-prophylactic and rehabilitation of children with disabilities.

One of the conditions to ensure satisfactory care for a disabled child and the quality of rehabilitation procedures in the family is the clarity of the recommendations of the physician and the establishment of mutual understanding between the family and medical personnel.

In this connection we had been conducted the research which purpose was working out and a scientific substantiation of a complex of the offers providing active participation of the family in realization of medical and social rehabilitation of disabled children. To study the role of families in the rehabilitation of a disabled child were taken by children affected with infantile cerebral palsy (CP), and their families as well as cerebral palsy the disease, which adequately exhibit all the features that characterize a disabled child.

Its features consist in defeat of children in early age with simultaneous infringement of activity of various bodies that creates difficulties of restoration of the broken functions and leads to profound physical inability.

When disassembling the working papers and analysis of submissions received, we used the "International Classification of Impairments, Disabilities and Handicaps," according to which the sequence of events associated with the disease, can be represented as a disease- breach- Disability- social failure.

The study was conducted on the basis of a psycho neurological clinic. The sample population was 402 families, which ensured the representativeness and reliability of the data. The study used modern social-hygienic, sociological and statistical methods. In the analysis of collected scientific information to determine the dimension of the studied complex phenomenon, which is a family activity in the rehabilitation of the disabled child, and finding the minimum number of the most significant socio-hygienic characteristics in sufficient detail describing the target population, we used factor analysis (FA).

During the FA a set of variables under study were included 50 factorial and effective signs that describe the target population. The transformation of the correlation matrix in a matrix of factor loadings was accomplished in several ways: by using centroid method, principal component analysis and the method of extreme groups of parameters. In all ways of calculating the matrix of factor loadings were very close, confirming the objective nature of the identified structures. The basis for determining the factors served as the serial number of the Eigenvalues of the original correlation matrix. The contribution of each factor in the description of all attributes defined as the sum of squares of factor loadings in column, divided by the total variance of the total symptoms, and compared with some threshold on the basis of which we selected four factors. Interpretation of the results FA was carried out by the values of the factor loadings and deposits (Table 1).

Table 1. The value of factor loadings (A) and deposits (B)

Factor number	Characteristics	A	B
A disability, the child's character and his social failure.	Age of child	0,883	5,54
	A child's capacity for games	0,854	
	Carrying a child free time	0,845	
	The possibility of the child for climbing steps	0,820	
	The child's need for assistance with personal care and self care	0,728	
	Pre-school childcare, school facilities	0,708	

		The use of child support facilities while moving	0,708	
	Public and social status of mother nature and its socio-economic activities	Public and professional group of mother	0,809	2,80
		Mode of mother	0,790	
		Workweek mother	0,752	
		The time it takes a mother to care for a child	0,577	
	Way of life and psychological climate of the family	Father's bad habits	0,806	2,60
		Regularity of the father of morning exercises	0,796	
		Family members	0,724	
		The nature of relationships in the family	0,559	
	Preparedness four family members in the implementation of rehabilitation measures in the home and its material possibilities	Number of practical training sessions, parents gymnastics skills and massage	0,724	2,43
		The presence of a family of devices for development and training of the child's movements	0,687	
		Briefing of parents in the appointment of rehabilitation at home	0,670	
		Material costs for the implementation of the rehabilitation of the family of the child	0,602	

As the table shows, the main factor that characterizes the families of children with disabilities and determining their ability to live in a period of rehabilitation of the child is to limit the child's disability and the nature of his social deficiency (factor number 1). He formed seven attributes that are closely interrelated. When considering separately each of the features can be noted that all of them had significant influence on the process of rehabilitation of the child and its effectiveness. For example, the child's age determines many aspects of the rehabilitation process of children. According to K.A.Semenova, in the case of early rehabilitation in cerebral palsy 60% of them are almost completely recover to 7 years. Significant impact on it as regularity of the family rehabilitation. According to our data, in families of children with cerebral palsy up to 1 year are regularly carried out rehabilitation activities in 80%, and 7-14 years old - only 41.5% ($p < 0.05$). Psychologists believe that this is largely due to the change attitudes of parents to "take" of the child at an early age, to "not take" later, when a child behind their peers in psychological development becomes more pronounced, and parents are losing faith in the possibility of curing the child. The following 6 attributes that formed the factor number 1, reflect the severity of damage of central nervous system of the child and its manifestation in the form of movement disorders, care needs, social integration and social adaptation in society of peers, etc. It should be noted that these signs have the greatest impact on the lives of family child with a disability its way of life, psychological climate, socio-economic activity of parents, etc. Next in importance of the weight contribution is factor number 2 "Social and public status of mother and its socio-economic activity", formed by four characteristics, the leading of which is the socio-professional

group of the mother (the sign "-" values of the load factor indicates the nature of communication, direct or inverse, between attributes that formed this factor depends on the correlation coefficients between each other). According to our data, the most favorable for a regular work at home as had prescribed, is the permanent residence of mother with child (regularly did the activities 69.1% of housewives, 47.9% of workers and 47.0% of employees). In cases where the mother worked, the most favorable for the regular performance of procedures has been a daily chart of reduced working week. Naturally, these features affect the time it takes her mother to care for the child, which ultimately is the determining in performing the designated rehabilitation in the family.

Factor number 3, which characterizes the target population of families of disabled children during rehabilitation of the child, determined by the presence of own father in the family, his way of life and participation in the creation of an optimal microenvironment, necessary for the rehabilitation of the disabled child. In forming the factor the leading factors are the habits of father, as their presence has a negative effect on lifestyle and psychological climate of the family, may to lead family disintegration, reducing the effectiveness of rehabilitation. The data obtained in those cases where family relationships were good, rehabilitation activities carried out regularly in 63.7% of cases, and where they were bad - only in 20.8% ($p < 0.05$).

Factor number 4, "preparing members of the family to the implementation of rehabilitation measures in the home, and her material possibilities" determined the quality of work the health care facilities (HCF) with families of children with disabilities and the amount of social assistance to families by the state and society.

According to our records, the families, well-informed on issues related to the illness of the child and its possible outcome, and social consequences, they regularly performed assignments in 65.7% of cases, and family, insufficiently informed, at - 47.9% of cases ($p < 0, 05$). When the number of lessons conducted by MPI with parents that improve parents skills in physical therapy and massage at home, did not exceed 3, regularly performed assignments in 50.8% of families and 4.7 sessions in the number of households was 58.3%.

In cases where the family received assistance (practical, advices, etc.) in carrying out complex activities that assigned to the house from the medical or specialized children's institutions, the regularity of their performance was 64.0%, and otherwise - only 50.4%.

Almost all the families of children with disabilities (89.2%) did additional costs when implementing the rehabilitation of the child. According to our data, obtained in the survey, they are mainly related to the acquisition of lacking medicines at prices much higher than the governmental (60.4%), to exit with child to a spa or treatment in another city (58.4%), pay massage at home (37.3%) and to pay advice from specialists (29.3%).

Thus, on the basis of the study using the FA can construct the following model for families during the rehabilitation of disabled children: a disabled child (taking into account the factor limiting its ability to work and social deficiency) - family (including parental factors, first of all social status of the mother) - environment (expressed in a given period of interaction with the health establishments, social ensuring and society).

Based on the foregoing, we propose the main lines of work in providing medical and social assistance to families of disabled children during rehabilitation of the child. It is early diagnosis and early treatment of children with chronic pathology that threatens to develop into a disability extension and improvement of a network of special schools and kindergartens for children with disabilities and chronic conditions, the release of the mother from work with payed period of rehabilitation, as well as providing additional benefits to mothers raising a child with a disability, special training for parents or other family members to carry out rehabilitation activities in the home, providing psychological assistance to families in order to correct the relationship of family members.

During, the period of rehabilitation of the child in a medical facility should focus on working towards the establishment of parental knowledge on a broad range of issues related to child disease and its possible consequences, including consequences of a social nature, the formation of appropriate skills, as well as a conscious parents attitude to implement a systematic and full completion scheduled for home activities.

Conclusion

The main factors affecting the provision of active family involvement in the implementation of medical and social rehabilitation of disabled children with cerebral palsy (CP) were the degree of disability, the child's character and his social failure, social and social situation of the mother and the character of its socio-economic activity, the image life and psychological climate of the family, as well as readiness of members of the family to the implementation of rehabilitation measures in the home and its material capabilities. The results showed that during the rehabilitation period special attention should be paid to the development of relevant skills, as well as conscious attitudes of parents to implement a systematic and consummated home event.

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INTER-SECTORAL TECHNOLOGY ON HEALTH PROTECTION AND HEALTH PROMOTION AMONG WORKING POPULATION

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In this paper we consider a situation with health of population in working age, provided an use of innovative intersectoral techniques on health protection and health promotion among working people. A fundamentally new is an effective inter-ministerial (intersectoral) and an interdisciplinary approach based on knowledge, education and awareness of people working on these issues. The technology model is based on intersectoral collaboration of employers, an administration of the personnel, medical and social organizations. Thus the main objective is aimed is improving of health among workers of industrial enterprises, providing employees techniques to improve personal health.

To implement the indicated purpose we think that we should comply with the following algorithm of the study:

- 1) conduct survey among employees to assess their health status and to identify factors affecting their health, 2) evaluate sanitarian and hygienic conditions of workplaces at the enterprises, 3) identify employees' needs in examination of medical specialists and in-depth examination, 4) preparation of individual programs for preventive and rehabilitation work, and 5) drawing up an action plan to improve the workforce and improve working conditions in collaboration with employers and trade union organization of the enterprises.

As indicators of effectiveness for monitoring purposes we propose to use:

1. Number of interviewed employees of the enterprises.
2. Number of employees received qualified care and individual health promotion programs.
3. Adoption of health promotion program for employees by the administration of an enterprise.

The program will be implemented in three stages.

I stage – organizational actions on joint planning with the administration and all participants of the project, total survey among employees.

II stage – sanitarian and hygienic assessment of working conditions at the enterprises, in-depth examination of the workers by clinicians.

III stage – development of individual recommendations for employees and of the action plan for administration of an enterprise.

INFORMATION TECHNOLOGIES–ON–DEMAND IN HEALTH CARE

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Each branch of the State's economy is evolving, bringing new changes to its structure. In recent years, Kazakhstan IT-industry is rapidly developing, appearing private IT-companies are doing their mite to development of the sector. In general, the pattern of IT-industry development in our country seems to be sufficiently promising. Unified Health Information System (UHIS) is actively introduced in the Republic of Kazakhstan. The general concept of health care informatization is a creation of patient-oriented system of health care. The new concept of IS Medicine includes a full range of medical software.

Market study allows consumers to determine the true picture of their preferences, beliefs in the need for IS Medicine product. For this purpose, we conducted a market survey of consumers.

During the study we interviewed 557 respondents, 51% of them were physicians, 39% - students, 10% - other respondents. The conducted survey among consumers of the product, revealed that half of the respondents who are Internet users have heard about the product. The prevailing majority of them would like to buy the product, but they would prefer to obtain more information about the product. The survey demonstrated that users of IS Medicine did not experienced problems in finding of information.

Thus, in the perspective consumers would like to use the product in 3 languages: Kazakh, Russian and English, preferably in Kazakh language. On the whole the results of the study could be summarized that the IS Medicine product is necessary, useful and unique tool in the work of medical professionals. One of the timely solutions could become an information system on plan-table PC (such as iPad) that represents an indispensable device in terms of sources of information in above cases. These devices do not need much spaces, they are not heavy and bulky, and always near at hand. The proposed solution, in our opinion, is appropriate and

beneficial for use in a system of national health care, especially for remote areas without access to the Internet.

Resuming, virtually all health care professionals, experts in the field of public health, health management, on demand of modern Information Systems that are relevant to the health care industry.

The choice of technological solutions demanding information systems needs in resource availability. The strategic objectives set by the health care system, clearly define the use of information systems as a tool for the efficient organization of medical care to the population.

WORK ANALYSIS OF THE THERAPEUTIC DEPARTMENT OF ILI CENTRAL DISTRICT HOSPITAL OF ALMATY OBLAST IN 2011

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Introduction. A therapeutic service covering a huge layer of somatic diseases commonly found in adults, and affecting a huge damage to human health is a most approached to population and demanded type of medical care. One of the objectives of the State Program of Health of the Republic of Kazakhstan "Salamatty Kazakhstan" for 2011-2015 is to improve health of the citizens of Kazakhstan and formation of a competitive health care system to ensure sustainable socio-demographic development and reduction of morbidity with further strengthening of public health.

Materials and methods of study. Statistical reports of methodical department of the Ili Central District Hospital (CDH) for 2011.

Results of study. The catchment area of Ili CDH (adults, adolescents) is 184600 people, including adult-128058, teens - 8807. Therapeutic care to residents of Ili district is provided by the CDH, which includes a therapeutic department at the hospital and therapeutic areas within the clinic: 44 therapeutic areas and teenage room, as well as rural hospitals in town Borolday, v.Akchy, v.Zhetygen. Medical personnel staffing the therapeutic department is 100%, therapeutic areas - also 100%. As part of CDH of Ili region a department of anesthetists and intensive care with 5 beds is functioning as well as day hospital for 85 beds. Central District Hospital has a fairly good diagnostic features: a clinical laboratory, which produces clinical, biochemical studies, X-ray department, endoscopic techniques, ultrasound, electrocardiography. Advisory services to patients of therapeutic profile is provided by 7 specialists of different specialties of postgraduate training in internal medicine of Kazakh National Medical University after S.D. Asfendiyarov.

Conclusions. Thus, material and technical base and personnel capacity of CDH of Ili district can provide qualified therapeutic medical care to residents of Ili district on the proper level. But, nevertheless, analyzing the statistical data necessary to answer that the pathology of the circulatory system takes the first rank in the structure of morbidity, of which the most common pathology is arterial hypertension, ischemic heart disease, in combination with arterial hypertension. This can be attributed to lifestyle of these patients, decreased physical activity, increased stress factors, weight gain, lack of follow-up and late treatment of patients. To improve health of the borough need to intensify efforts in identification, taking care record during routine inspections and referral. Improve the quality of timely diagnosis. Expand efforts to combat cardiovascular risk factors: hypercholesterolemia, hypertension, obesity, smoking and sedentary

lifestyle. To increase the effectiveness of early detection, treatment and rehabilitation of the patients with coronary diseases. To improve the continuity between the work of hospital and health center.

PRELIMINARY ANALYSIS OF INTRODUCTION OF MODERN QUALITY MANAGEMENT SYSTEM TO CITY OUTPATIENT CLINICS #5

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City outpatient clinics # 5, Uralsk, Western-Kazakhstan oblast

To increase the effectiveness of health care management by organizations of the MoH of the RK they introduced in 2011 a project "Today – you are best one, tomorrow – all of us" on the training and dissemination of best practices for the implementation of modern management technologies to the health system. In the Western- Kazakhstan oblast (WKO) to the Project were involved six medical organizations: 3 hospitals (Regional Hospital, the Regional Cardiology Center, and Zelenovsk Central Regional Hospital) and three city health centers (Uralsk city outpatient clinics ## 1, 3, and 5.)

The total number of trained professionals from the city outpatient clinics # 5 was 58 (doctors – 31, nurses – 23, and health care managers - 4). By continuing professional education of health care managers among head physicians and their assistants, economists, financiers, internal auditors have been trained - 6, and Health Management - 4.

The main priorities in the implementation of this project in the WKO are: the adoption of international experience in management, attracting the leaders of medical organizations and health professionals to use modern forms and methods of health management, effective and efficient use of available resources, improvement of management decisions and the introduction of new medical technologies.

Uralsk city outpatient clinics # 5 was opened in September 2010, and due to introduction of modern management we obtained some initial positive results: enhanced autonomy in the implementation of the industrial and financial activities, the direction of net income (not less than 60%) on the development of production and strengthening the material-technical base, increased motivation of health workers to reach the final impact of labor, reduction in the proportion of unjustified visits of people from catchments area; increased number of trained specialists in health management, resource efficiency and cost savings.

Thus, the training of health managers is certainly relevant and important way to improve the management of the health care system, the health system of the country has concentrated all its efforts on addressing the issues of competitiveness, security and focused on achieving a high level of domestic medical services, introduction of modern quality management systems.

«CRIMINAL ABORTION» FROM THE POINT OF VIEW OF THE LAW

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With the acquisition of the independence of the Republic of Kazakhstan and the change in policy criminal - legal policy has changed also, which has become a priority for protection of life and human health. Crimes against health include various types of injury, including an illegal abortion.

Abortion is an artificial interruption of pregnancy. In accordance with the Code of RK "About health of population and health care system" from September 18, 2009 in order to protect women's health they use modern methods of family planning in reproductive health.

Abortion in generally is divided into: legitimate and illegitimate. According to the Art. 104 of the Health Code of RK "About health of population and health care system" from September 18, 2009 "an artificial interruption of pregnancy is carried out at by the request of women with terms of pregnancy up to twelve weeks, due to social reasons - up to twenty-two weeks, and in the presence of medical conditions - regardless the duration of pregnancy. "

Damage to health is inextricably linked with the concepts of life and death. We know that life and human health from a biological point of view, consists in the continuous metabolism, nutrition and selection. With the cessation of these functions cease and a person's life. The doctrine of criminal law there is no consensus with respect to the criminal - the legal protection of life. Most lawyers believe that the beginning of human life is the beginning of physiological (normal) birth, that is, when what is - or part of the body of the child appeared from the womb of the mother. Causing harm to a child up to this point can not qualify as bodily injury.

Thus, the act of murder can be considered only if the person is deprived of his life was born. Encroachment on the life of the human fetus under the given position does not constitute murder, but is abortion. In connection with the foregoing, particularly urgent question is: at what point the criminal law must begin to protect life and health.

Based on the above information and in view of the latest medical regulations, it can be argued that the killing of a fetus should be recognized on the timing of termination of pregnancy over 22 weeks, of course, if we are not talking about the state of emergency, when the abortion is performed to save a life of the pregnant woman. In practice, prevalent cases when artificial interruption of pregnancy is performed at a later date. A child who is born as a result of this "operation" is often viable. However, these children are often detrimental to health. In our opinion, in such cases, there is every reason to bring the guilty to criminal liability for personal injury.

Thus, the criminal law protects life and human health since the beginning of physiological labor. The life and health of the fetus and newborn life and health - two distinct phenomena that can be considered as a biological and social aspects. In this case the legal regulation of all activities related to the life and health of the fetus and the life and health should be different. Accordingly, the law must protect the lives and health, as the fetus and newborn child. To exclude the statement of disputed issues of life, should legislate, at what point human life is protected. The point should be recognized as a beginning of physiological labor.

EPIDEMIOLOGICAL AND STRUCTURAL INDICATORS OF THYROIDOLOGIC CARE IN SEMEY REGION OF THE REPUBLIC OF KAZAKHSTAN

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Conducting of large-scale preventive measures requires an ongoing monitoring system to study the efficacy of the preventive maintenance and development of proposals for optimizing of thyroidologic service. However, the information about activities monitoring and clinical examination of thyroid disease in some regions of Kazakhstan appeared relatively recently. The successful solution of the problem is possible only when you create an effective coordinated dispensary services for prevention and treatment of thyroid disease on out-patient and hospital phases.

The purpose of study:

Analysis of thyroidologic service in Semey region of the Eastern- Kazakhstan oblast for 2006 - 2010, study of epidemiological and structural indicators of out-patient and hospital services.

Materials and methods:

This version of the observational cross-sectional study that represents indicators of hospitalization, distribution of patients by sex, age, nationality, cartographic characteristics of appealability by the regions. The study gives an overall picture of thyroidologic care to the population of Semey region.

Results of study:

During a study of the general characteristics of the endocrinological care we found that between 2006 and 2010 in the region 4,866 patients were hospitalized to receive specialized care, 1,321 of whom were patients with thyroid disease, or 27.14% of all hospitalized patients with endocrinological diseases.

Thus, we revealed that the majority of patients received specialized care were citizens of Semey city (69%) and only 31% were patients from districts..

Conclusions:

Thyroidologic care in Semey region in the total structure of endocrinological diseases is 30% and in average 264 persons per year are hospitalized with thyroid diseases. The ratio between females and males is 3:1. The average age of patient was 42.5 years. Distribution by ethnicity shows that 75% of hospitalized patients were Kazakhs, the ratio between Kazakh people and other nationalities is approximately 3:1. Appealability for specialized thyroidologic care in urban area of Semey region was 69% and in rural – 31%.

EPIDEMIOLOGY OF TB IN AKSU DISTRICT OF PAVLODAR OBLAST

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The introduction of the concept as "epidemiological capacity of tuberculosis", due to the need for strategic planning of TB control, that requires an adequate assessment of the activities in the regions of Kazakhstan.

TB Hospital of Aksu district of Pavlodar region that is characterized by typical of many climatic, economic and geographic zones of the country on the demographic structure of the population, the indicators of social and economic infrastructure and development level of health care was selected as a base area in our study.

Assessment of the epidemiological situation on tuberculosis in 2009-2011 in Aksu district was conducted on the basis of morbidity and mortality in adult, adolescent and child population.

Despite on the persistent downward trend in mortality in Aksu district, however, the data are below of mean values comparing with country indicators. Thus, in the Pavlodar oblast over a three year period, the death rate from tuberculosis as a whole decreased by 53.9%. At the same rate in 2009 was - 16.3, in 2010 - 12.0 and in 2011 - 7.5 per 100,000 of population.

For the purpose of early detection of tuberculosis each year they covered by the preventive fluorography examinations in average 98% of the adult population, by tuberculin diagnostics - 99.6% of child population. At the same time the proportion of patients identified during screening examinations in the total registered number of TB patients is 79.1%.

Thus, in order to stabilize the epidemiological situation in the region, focused on improving of the quality of preventive examinations of the population, reducing morbidity, disability and mortality from tuberculosis there were identified key areas such as: integration of TB services in the oblast with a network of primary health care, interaction with other services and agencies to protect the oblast's population from tuberculosis, organization of preventive measures to protect the oblast's population from tuberculosis, early detection of TB patients, effective treatment and monitoring on the computer-based monitoring programs, conducting a controlled chemotherapy of tuberculosis in all stages of treatment and controlled chemoprophylaxis to TB infected children, improving organizational forms of TB services in the oblast, strengthening of the material-technical base of the hospital, continuing education of PHC specialists how to improve quality of the TB control activities according to international standards.

FUNCTIONAL DIAGNOSTICS OF THE CARDIOVASCULAR SYSTEM IN PILOTS, AS A COMPONENT OF SAFETY IN CIVIL AVIATION

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First steps of aviation development proved health safety of flights is one of the important directions of its development. States bear great economic and human damage caused by aviation accidents, taking into account the cost of the liner and the investigation, payment of lump-sum compensations to the bereaved families, long-term payments, direct and environmental damage, not to mention the loss of people's lives that are invaluable. In the U.S., for example, a system of flight safety is a major public health problem.

In general, flight conditions contribute to the development of occupational diseases and the growth of chronic somatic disease among pilots. The most common reason for disqualification of pilots are diseases of cardio-vascular system (ischemic heart disease, hypertension, atherosclerosis).

During annual check-ups of pilots flight medical examination (FME) includes a mandatory number of examinations of the cardiovascular system: electrocardiography (ECG),

bicycle exercise trial (BET), stress tests and Holter monitoring of ECG and blood pressure. This article considers first three methods of investigation of the cardiovascular system. ECG is the most important functional diagnostic method in the FME. It uses a standard 12-lead registration system. They allow to detect changes associated with inflammatory, degenerative, ischemic lesions of myocardium. ECG recorded at rest, has a low sensitivity for detection of coronary heart disease (CHD), and therefore applied to the study of physical activity (BET) and use of pharmacological tests.

BET is one of the options of the test with physical load to detect coronary artery disease. Diagnostic value of BET accounting for 85% of high specificity. Bicycle exercise study is being conducted among pilots of 1, 2 Class from 35 years old annually, according to medical indications: clinical signs of cardiovascular disease, changes in the final part of the ventricular complex of ECG (ST segment changes, and tooth T); lipid and carbohydrate metabolism, obesity, atypical chest pain (etiology has not been established by clinical examination).

In-depth examination of the cardiovascular system among pilots at the Center includes stress tests. Drug tests administered to pilots with suspected coronary artery disease and altered the final part of the ventricular complex. Before intake of the medicine specialist recorded baseline ECG, after the administration - control ECG in the defined periods of time.

SYSTEM OF ORGANIZATION AND IMPLEMENTATION OF POST-GRADUATE EDUCATION FOR SPECIALISTS OF SANITARIAN AND EPIDEMIOLOGICAL SERVICE OF THE REPUBLIC OF KAZAKHSTAN DURING 2010 AND 4 MONTHS OF 2011

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SPCSEEM of CSSES

In recent years, the Head of State and Government of the Republic of Kazakhstan pays special attention to the issues of staff training. In 2006, the Concept of reforming of medical and pharmaceutical education in the Republic of Kazakhstan for 2006-2010 was developed, that became a foundational document in the activities of all government agencies implementing educational programs.

The Purpose of the Concept is implementation of new educational system in training of medical specialists on the base of international standards adjusted to priorities and features of health care in Kazakhstan.

The Concept defined following objectives:

1. Changes in the structure and content of training programs for medical and pharmaceutical staff.
2. Changing the selection and reception of citizens in health education organization.
3. Changing the system of quality assessment, the level of professional competence and access to professional activities.
4. The introduction of accreditation of educational institutions with the participation of international experts.
5. Strengthening of material-technical base of medical educational institutions.
6. Improving the legal framework of medical and pharmaceutical education.

SPCSEEM implements educational activity on the base of obtained State License. The Commission from the Ministry of Health conducted control of SPCSEEM's activities on enrolment and training of students at the courses of advanced training in the frameworks of State standard of post-graduate education of 2009.

Commission recommended to improve teaching and to implement them there were done the following work:

- a seminar-meeting with the heads of departments of SPCSEEM with the discussion of teaching methodology of courses on advanced training in the specialty "Hygiene and Epidemiology," in accordance with the applicable standard;
- Prepared new curricula, teaching and methodical documentation, test and exam questions for the training course, in accordance with an instructive letter # 9;
- Drawn up and approved a training schedule for 2010 year in specialty "Hygiene and Epidemiology."

In 2010 the Department of Science and Human Resources of MoH RK confirmed capability of SPCSEEM to conduct courses of advanced training on specialty "Hygiene and Epidemiology".

The number of teaching hours at the course on advanced training in accordance with SSPE 2009 is 108 hours or 2 weeks and 234 hours or 4 weeks. Curricula at the 4 weeks courses of advanced training consist of obligatory and elective components.

The teaching staff of our Centre is represented by 2 Doctors of Medical Sciences, 13 Candidates of Medical Sciences and specialists of higher qualified category.

Thus during 4 months of 2011 on the base of SPCSEEM we conducted 11 courses on advanced training, taught 96 specialists of oblast CSES, including 54 participants with higher education, and 42- with secondary education.

The analysis of staff structure of SSES demonstrated urgency of issue of professional training of specialists.

ASSEMENT OF HIV PREVALENCE AMONG IDU OF ALMATY OBLAST ON THE BASE OF SENTINEL EPIDEMIOLOGICAL SURVEILLANCE

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In Kazakhstan, from 1987 until March 2012, there were 17,947 cases of HIV infection, the estimated number of persons living with HIV and AIDS (hereinafter - the PLHIV) is 18,500, 70% of whom are drug users. HIV prevalence among the general population is 0.11% of the population from 15 to 49 years - 0.18%. According to official statistics, the spread of HIV in Kazakhstan occurs primarily due to injecting with non-medical drug.

A similar situation has a prevalence of HIV among IDUs in Almaty oblast. Thus, since 1993 (early registration of HIV cases in the Almaty oblast) in March 2012 in Almaty oblast registered only 1,285 cases of HIV, and HIV prevalence was 67.1 per 100,000; among children under 14 years - 25 cases, prevalence per 100,000 was 5.0.

According to the Rapid Assessment of Situation (hereinafter RAS), estimated number of IDUs in Almaty oblast is 4,500, in Taldykorgan – 1,200.

Sentinel Epidemiological Surveillance (SES) among IDUs was introduced in Kazakhstan in 2005 and is conducting annually on the national level. Its conducting is financing from republican and local budget. SES is a key element of second generation epidemiological surveillance and base for the national system of monitoring and evaluation, and it was institutionalized in the Republic of Kazakhstan. In Almaty oblast SES among IDUs is conducting in Taldykorgan.

Sentinel Epidemiological Surveillance is a valuable source of information in addition to the existing systems of surveillance of HIV infection. The prevalence of HIV infection based on sentinel surveillance among IDUs in the dynamics of the years in the RK was: 2006 - 3.4%, 2007 - 3.9%, 2008 - 4.2% 2009 - 2.9%, 2010 -2.8%, which may characterize the situation as stable. The situation on the prevalence of HIV infection in Taldykorgan on the results of SES is as follows: 2005 -0, 5%, 3% in 2006, in 2007 - 1,5%; 2008 -0, 5%, 2009 - 0 2010 -0, 5%, 2011 - 1, 5%. Uneven distribution of HIV, as indicated by the data for reporting cases of HIV infection and confirm the results of SES. Official statistics are correlated with the results of SES and suggest higher levels of HIV infection among vulnerable groups, especially among injecting drug users. Thus, the SES is a valuable methodology for the implementation of tracking the evolution of the epidemic of HIV infection and infections with it similar transmission routes, as well as a tool for monitoring and evaluation of the epidemic.

The purpose of SES is the regular collection, analysis and interpretation and dissemination of data necessary for planning, design, implementation and evaluation of measures aimed at combating the HIV epidemic. All of these studies, including both behavioral and laboratory data are stored in compliance with all principles of confidentiality. Participation in the survey anonymous and voluntary, based on informed consent.

EARLY DIAGNOSTICS OF ARRHYTHMIAS AMONG PILOTS

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One of the most frequent causes of disqualification of pilots are various heart disorders. According to the literature, pilots encountered arrhythmia in 4 times more likely than persons of other professions.

The aim of the study was to explore the possibility of early diagnostics of cardiac arrhythmias among pilots during medical expertise conducted by the Center on provision of safe flights.

A retrospective analysis of outpatient cards of pilots with disorders of cardiac rhythm examined at the Center, and ECG data for the last three years (2009-2011) in dynamics. In average during a $987 \pm (18)$ pilots attend our Center. To analyze the data obtained pilots were stratified into four age groups: under 30 years, 31-40 years, 41-50 years, over 51 years. Among pilots passing medical examination there are only three females, the rest - males.

In average, over the study period among all surveyed pilots we revealed 2% ($\pm 0,8$) of pilots with different types of arrhythmias. It was founded that the arrhythmias were detected primarily in case of cardiovascular diseases (73.7%). The most frequently diagnosed was extrasystolic arrhythmia (30.1%), with supraventricular extrasystole that was determined in

25.8% of mentioned cases, and ventricular - in 74.2% including allodromy in 10.5% of cases. All pilots with identified various types of arrhythmias were referred to the therapist for advice and treatment.

The results allow to conclude that in persons of older age groups revealed rhythm disturbances were early signs of atherosclerotic cardiosclerosis, which became a basis for preventive treatment and consultation on non-pharmacological correction (changes in nutrition habits, physical activity, quit of bad habits, etc.).

In individuals of younger age groups the presence of supraventricular arrhythmias, mainly was due to the presence of cardiac type of NCD. Timely corrective medication and non-pharmacological therapy was effective in 90% of cases, which enabled pilots of young age group to continue their careers.

In the context of management of pilots with arrhythmias, early diagnosis of cardiac arrhythmias is a best estimate of the risk of serious cardiovascular disease leading to disability or death. Along with a careful analysis of the data that of electrocardiography that is important to collect information about life history of a pilot, details of harmful habits, stress, physical and emotional pressures at the workplace. Based on these data, we developed leaflet for pilots containing information on prevention of cardiovascular diseases and extending longevity of employment.

MODERN SYSTEM OF REHABILITATION OF PATIENTS WITH CHD AFTER SURGERY ON MYOCARDIAL REVASCULARIZATION (LITERATURE REVIEW)

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Coronary heart disease (CHD) remains a leading cause of premature death in developed countries, despite advances in modern medicine. CHD occupies the 5th place among all diseases as a cause of disability, and by 2020 could reach the 1st place. In this regard, the considered issue is relevant and has a social significance. The overall incidence of cardiovascular diseases (CVD) in the Republic of Kazakhstan over the past 10 years has tended to steadily increase. In general, the total number of patients with CVD is more than 10% of the total population of the Republic of Kazakhstan. According to WHO standardized mortality rate of population in Kazakhstan as a result of CVD is 2 times higher than in European countries (867.9 vs. 448.0 per 100 thousand of population, respectively). The peculiarity of heart disease is affection of the adult working population. The percentage of deaths due to CVD in hospital condition before the age of 63 years was 47.3%, i.e. basically affect the economically active population.

In recent decades, are widely used treatments for CHD, such as coronary artery bypass grafting (CABG), transluminal balloon coronary angioplasty (TBCA) and stenting of the coronary arteries (CA). However, after discharge from the hospital maintaining of the achieved success by the operation and the further course of the disease depend on the measures aimed at improving long-term outcome and prognosis of coronary artery disease.

Among the achievements of cardiology, of course, we should say about cardiac rehabilitation. Cardiac rehabilitation is defined by the World Health Organization (WHO) as: "The sum of activities required for a positive impact on the underlying causes of disease, as well as improving the physical, mental capacity and social conditions, so that human could, in its

effort to maintain or renew, then place in a society that was lost. Typically, rehabilitation can not be regarded as an isolated form or stage of therapy, but rehabilitation should be integrated within secondary prevention services, as only one aspect of it "(World Health Organization, 1993). Outpatient service became as one of the main forms of rehabilitation in the Soviet Union. As a result, they selected three rehabilitation systems: in-patient, sanatorium and resort treatment, and general practitioners on the basis of regular check-ups.

Summarizing the results of literature review on aspects of the rehabilitation of patients with coronary artery disease after surgery for myocardial revascularization, and international experience we should note that this problem is extremely important not only from the standpoint of public health, but is one of the most important national objectives. Further development of a phased system of rehabilitation will improve a quality of life of patients and their return to workplaces and the effective use of all resources.