

# ACCREDITATION AS A TOOL TO ASSURE QUALITY OF MEDICAL CARE

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In 1976 A. Donabedian proposed systematic classification of methods for analysis of quality in health care, where he suggested to evaluate structure, process and results of medical service.

It is known following standards:

1. Standards of structure on which the resource base of the organization of health care are defined as: material resources (the finance, adaptations, the equipment, etc.); the staff (number of staff, professional suitability, qualification, etc.); organizational (methods of returning of charges, system of an assessment of works of doctors by other doctors, etc.).
2. Standards of process: validity; adequacy of volume; display of the competence of carrying out of techniques of treatment, a coordination of actions and continuity
3. Standards of results of treatment: outcomes of diseases (recovery, without improvement, complication after treatment, a lethal outcome); results of rendering of medical services, carrying out of manipulations, researches and procedures; satisfaction of the patient by medical and nursing service; social results of medical care; results of actions on preventive maintenance of diseases; safety of medical products and medical technologies. The basic characteristics of indicators are: efficiency, safety, timeliness, ability to satisfy expectation and needs of the patient, stability of realization of medical process and result, adequacy, availability, succession and continuity.

Health of the population in the Republic of Kazakhstan is an indicator of competitiveness of the state and one of the important factors of national safety of the country. Accreditation - procedure of a recognition of the special status and competences of physical and legal persons, for realization of medical and pharmaceutical activity, and also for carrying out of an independent expert estimation of activity of subjects of health care according to the established standards of accreditation. The purpose of accreditation is constant increase of efficiency granting of medical services concerning a minimum level. The primary goal of accreditation - stimulation of the medical organizations to improvement of parameters of quality of medical aid. The certain work on development of accreditation of the medical organizations is done. Rules of accreditation are developed and approbation of standards about which acceptability independent opinions of scientific clinics are collected is lead. Work on reception of an external estimation and the international recognition of national standards is conducted. It will allow our republican clinics to work in the future with the international agencies on accreditation. The recognition of activity of clinic corresponding to the international standards will allow to participate in multi-central scientific researches, to receive grants and orders for research activity, to accept patients from abroad.

Accreditation of health care subjects personifies a degree of quality of granting of medical services by subjects of health care.

## **INCIDENCE BY ACUTE INTESTINAL DISEASES OF CHILDREN IN SHYMKENT IN 2007-2009.**

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The problem of acute intestinal infections (AII) in the Republic of Kazakhstan occupies one of leading places in a pathology of children's early age and in many respects defines indicators of death rate in children. Even under condition of the favorable forecast transferred acute diarrhea at children promotes formation of dysbiotic and allergic conditions, render negative influence on the further physical and mental development. Growth of incidence during last 20-30 years was marked in many countries of the world.

During research we used materials of the official reporting of sanitary-and-epidemiologic service about registration of cases of AII in Shymkent for 2007-2009. The retrospective epidemiological analysis carried out with use of the standard methods of variational statistics.

In the present research the data on AII incidence in children of Shymkent are resulted: AII of established and unstated etiology, shigellosis, salmonellosis and food borne diseases.

It is established, that the highest incidence of AII are specific for children at the age of 0 - 2 years old. AII of defined etiology are registered at children under 1 year more often. In 2008 highest indicator was 4768,3 per 100000 of children's population. AII of undefined etiology accordingly also had a high incidence (947,2). Thus incidence of AII with bacterial etiology varied from 860,3 up to 1074,3. In 2009 the specific gravity of AII in a group of children at the age of 1-2 years old was 52 % in all age groups of children. Then follow children under 1 year (37,3 % from number of all cases of AII in 2008). Accordingly specific gravity for group of children at 3-6 years old among all children with AII was 10 %, and at the age of 7-9 years old - 2,3 %, at the age of 10-14 years - 2,6 %.

Conclusions:

1. During research period incidence by AII varied from 915,7 to 1173,7 per 100000 of population at the given age group. The most number of AII is registered among children at the age of 1-2 years old.
2. The main etiological factor of dysentery in Shymkent was Shigellosis Flexner
3. In the etiological structure of infections caused by commensal flora, mainly by Citrobacter (33,5%), Proteus (24,5%), and Klebsiella (16,4%).
4. The main way of infection in Shymkent was alimentary.
5. Salmonellosis and food-borne infections were registered among children of senior group and in warm period of year (spring, summer and autumn).

**PHYSICAL DEVELOPMENT OF SCHOOLCHILDREN AGED 7-**

# 11 YEARS LIVING IN URBAN AND RURAL AREA OF KYZYL-ORDA OBLAST

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6. Modern education demands much of pupils, including their health status. One of the important indicators of their health status is physical development.
7. Physical development is a set of morphological and functional characteristics in their interrelation and dependence on the surrounding conditions describing process of maturing and functioning of an organism during each moment of time.
8. We conducted study of physical development of schoolchildren aged 7-11 years in rural and urban schools of Kyzyl-orda oblast.
9. Aim of study
10. – conduct comparative study of indicators of physical development among urban and rural schoolchildren at the age of 7-11 years.
11. - summarize data, characterizing level of physical development among urban and rural schoolchildren and make a base for further study of dynamic changes in physical development of children
12. Object of research were 300 children of school age of 7-11 years: 2 groups - 1 group of a schoolboys of city school in Kyzyl-Orda and 2 - rural school of Kyzyl-Orda oblast. Compared groups on age, sexual and to a social composition were homogeneous.
13. Alongside with studying of physical development during routine inspections by us have been investigated incidence by a scoliosis and flat feet.
- 14. Results:**
15. Indicators of physical development of urban and rural children in the age of 7-11 years are characterized by the following.
16. The basic sizes of a body (growth, weight of a body, a circle of a thorax) at boys are on the average higher, than at girls, except for parameters of growth of girls 11 years age.
17. In the age of 11 years growth of girls is higher, than at boys of the same age both at urban, and at rural schoolboys.
18. Indicators of physical development of rural children are a little bit lower than indicators of physical development of urban children in all investigated age groups. The difference is statistically authentic. The available difference in physical development of children of rural and urban district, apparently is caused by influence on parameters of physical development of social, biological, ecological factors and other factors.
19. Somatoscopic examination of a bearing of rural and urban schoolboys has revealed infringements of a bearing in the form of a scoliosis at the greater number of rural schoolboys of 6 % (9 of 150 surveyed rural schoolboys), than at urban 2.6 % (4 of 150 surveyed urban schoolboys).
20. The method of plantography investigates presence of flat feet. It is established, that flat feet had place at urban children - 28 of 150 surveyed urban schoolboys is more

often, i.e. 18,66 % had flat feet, than at rural - 21 of 150, i.e. 14 % of the surveyed rural schoolboys had flat feet.

21. Thus:

22. 1. Parameters of physical development of boys both rural, and are higher than urban district, than at girls, except for parameters of growth and rural and city girls of 11-years age

23. 2. Height of girls of 11-years age was higher, than at boys of the same age. The established excess of parameters of height of girls 11-th years age above parameters of growth of boys is caused by features of biological development and the age changes of growth connected to earlier transition of girls to pre-pubertal the period of puberty.

## **HYGIENE CHARACTERISTIC OF TRAFFIC NOISE IMPACT TO HEALTH CONDITION OF PUBLIC TRANSPORT DRIVERS**

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Present time Almaty is one of the most polluted and ecologically vulnerable cities in the world. Rapid growth of motorization of the city from year to year huge is one of the main reasons. According to not counted data it is supposed that each family is an owner of 2 - 3 machines. At the moment 600 - 750 thousand units of motor transport is registered in the city and highways practically do not provide normal traffic.

Drivers of public motor-vehicle transport are exposed to impact of adverse factors during work in double dose because of direct influence at a workplace, and as inhabitants of harmful chemical and physical factors of city environment. One of the leading harmful production factors influencing to organisms of drivers are physical factors (noise, vibration, ultrasound and etc.). Under influence of noise probably occurrence not only a different sort of somatic diseases, but also mental disorders. A driver on a workplace is exposed to double loading noise factor - actually industrial noise which arises from work of the engine of passenger motor transport and so, named city noise, the significant part of which makes transport noise from all other kinds of motor transport.

Well known, as far as intensity of noise is high during movement of a plenty of motor transport in streets of the big city. On separate sites near to highways noise achieves 90 decibel. The greatest noise from all kinds of motor transport is created with engines of cargo diesel automobiles (80 - 89 decibel), then there are lorries with carburetor engines (81-82 decibel) a motorcycle (82 decibel). Automobile motor transport creates noise of the lowest level.

Now in the literature there is enough of works devoted to studying of influence of industrial noise as the harmful factor, causing various occupational diseases. Clinical physicians have studied a role of influence of noise (90 decibel and is higher) in development of many diseases, including an arterial hypertension (5 - 84). It is proved, that noise starts to render negative influence on health of the person already at a level 65 decibel though already noise by intensity

50 decibel, depending on a condition of an organism and presence of accompanying harmful and dangerous factors, can affect an ear, and the mentality suffers and at lower noise levels.

Studying of diverse character of action of transport noise - represents significant difficulties, because individual sensitivity to noise and character of reaction of noisy influence at people are various. Noise interferes with labour activity, breaks dream, prevents speech dialogue, can damage hearing and cause other reactions of organism.

Last years in the literature have appeared messages on influence of other physical factor of infrasound on an organism of drivers. The basic sources of an infrasound is the automobile. On given to E.J.Shajpak in cabins of lorries and buses on frequencies 2 - the level of an infrasound makes 16 Hz 107 - 113 decibel, and from an octave of 3,5 Hz abruptly falls. Influence of an infrasound of motor transport to organism of the driver is shown in oppressing action on central, nervous, respiratory, endocrine and other systems from which condition depend in many respects working abilities and traffic safety. On this reduction in a level of an infrasound in cabins of drivers remains an actual problem by way of the decision of the general problem of optimization a working condition of drivers of passenger motor transport.

## **COMPARATIVE ASSESSMENT OF THE MORBIDITY RATE OF UROGENITAL SYSTEM'S DISEASES AMONG ADULT POPULATION OF SOUTH-KAZAKHSTAN REGION.**

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It is known that comparative dynamic assessment of the level of general and primary morbidity, and also its distribution by the territories of the region, is very important for planning and realization of the current and perspective targeted programs of preventive, diagnostic and treatment-sanitation activities.

Based on this supposition, in the current research there were given the results of the study on the dynamics of level and change in the structure of morbidity rates of urogenital system' diseases among the population of administrative-territorial points of South-Kazakhstan region.

At that, there was conducted a scientific assessment of data of the official medical statistics and registration of urogenital systems' diseases in South-Kazakhstan region for the period of 2006-2008.

The conducted researches have shown that in 2006 the level of the general morbidity of urogenital system's diseases in Shymkent ciy, Tolebi, Arys, Ordabasy, and Saryagash rayons was 23-27% higher than in average by the region and made up accordingly 8592,3, 7554,7, 6819,4, 7184,4 and 7551,7 per 100000 population.

Simultaneously, it was detected that in the towns of Turkestan and Kentau, and also in Otrar and Baydybek rayons, the indicator under the study was fluctuating in the range of the average regional level.

In 2007 compared to 2006, the general morbidity rate of urogenital system's diseases in the region was decreased slightly (by 4,4%). It was detected that in average by the region in 2008 compared to 2007 this indicator was increased by 7,4%. At that in Ordabasy rayon there was detected the biggest (more than for 5 times) increase of the given indicator, and in Arys and Suzak rayons it was increased accordingly 1,3 and 1,5 times; in Shardara, Otrar and Kazygurt

rayons, on the contrary, it was decreased (accordingly for 46,7%, 23,1% and 15,7%). In other administrative-territorial establishments, it was either slightly decreased, or increased.

Thus, researches have shown that in South-Kazakhstan region among the adult population there was observed an increase in general, as well as in primary morbidity rate of urogenital system's diseases. A that, in different rayons of the region various levels of urological morbidity could be observed, which are requiring the provision the specialized services with adequate personnel, and first of all, with physicians at all administrative-territorial points of the region.

## **METHOD OF LOCAL TREATMENT OF PATIENTS WITH DUODENAL ULCERS: ASPECTS OF IMPACT ON QUALITY OF LIFE**

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Indicators assessment of quality of life in modern medical practice in the developed countries is a routine procedure, allowing to control clinical course of disease and efficiency of treatment as a whole. Integrated definition of quality of life in clinical researches should be focused first of all on introduction of obtained results in the practice. Distribution of information on changes in quality of life and influence of treatments on them in case socially significant chronic diseases, including - at a stomach ulcer acquires a special value.

**Aim of study** – identification of features of life quality of patients with duodenal ulcers after conducted routine treatment and complex treatment, including deposing of preparation under glue tape.

### **Materials and methods**

Using complex of clinical methods and method of identification of quality of life in dynamics we study 235 patients with duodenal ulcers at the age from 19 to 67 years old.

During our work we used set of routine and local treatment, in some cases we used immunomodulatory therapy. The treatment was differentiated on dependence to existence of H. pylori infection.

### **Results and discussion**

During primary study of patients between separated groups we had no statistically significant differences if the indicators of quality of life. Opposite, with control group they had statistically significant differences – towards decreasing.

In general we should notice to existence of minimal and practically not significant in all cases tendencies to improvement of quality of life after 1 year in groups who treated by development regiment to basic conservative. Probably it is connected to time of repeated examination of patient effects of developed treatment were graded.



At whole results of analysis of quality of life among patients who treated by conservative method with use of local cure permitted to define improvement of quality of life in early stage as well in relatively late states of ulcer treatment observed mainly in case of implementation of local treatment and its combination with immunomodulatory treatment.

## **CHARACTERISTIC OF APPEALABILITY TO ACUTE CARE DUE TO CARDIOVASCULAR DISEASES IN ALMATY**

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In the State program of reforming and development of health care in the Republic of Kazakhstan for 2005-2010 were defined the basic directions of PHC development where special attention was given to acute care service (ACS). Improvement of quality of ACS is now a priority task for health care system. The most frequent causes of appealability to ACS are cardio-vascular diseases. In this connection we had an interest to analyze data of appealability of Almaty population to ACS. We analyzed data of appealability to ACS of patient with high blood pressure, stenocardia, infarction, and stroke. We analyzed data fro 2007-2009. The total number of calls to ACS in 2007 was - 522580, in 2008- 514244, in 2009r-550349. Cardiovascular diseases were as causes of calls were 112258, 114147 and 115994 respectively, or 21,0 - 22,2 % in the structure of all calls. The majority of calls were due to high blood pressure. The specific gravity of calls to females was higher than to males ( $p < 0,05$ ), and varied from  $77,4 \pm 0,16\%$  to  $79,7 \pm 0,15\%$  opposite to  $55,7 \pm 0,30\%$  -  $58,7 \pm 0,29\%$ . Other nosologic forms of cardiovascular diseases, such as stenocardia, infarction, and stroke occurred more frequently among males, than among females on 14, 3,5 and 4,0 % respectively. We also revealed seasonability in appealability. The majority of cases of high blood pressure and stenocardia occurred in first and fourth quarters of year. Calls to ACS due to infarction and stroke usually occurred in the first and second quarters of year. The most number of call because of stoke took place in the first quarter of year.

### **Main conclusions:**

1) During study period total number of calls due to cardiovascular diseases increased from 112258 to 115994, intensive indicators calculated per 10,000 of population decreased from 872,08 to 849,71. We think that the main explanation of this phenomenon is growth of population in Almaty city.

2) Appealability due to high blood pressure during study period decreased from  $527,6 \pm 1,97\%$  to  $496,2 \pm 1,86\%$ , stroke from  $40,4 \pm 0,56\%$  to  $37,3 \pm 0,52\%$  ( $p < 0, 05$ ). Frequency of appealability because of infarction did not changed, but due to stenocardia increased from 133,4 (2007) to 145,9 (2009).

3) The total number of calls is connected with appealability due to high blood pressure.

4) The majority of cases of high blood pressure and stenocardia occurred in first and fourth quarters of year. Calls to ACS due to infarction and stroke usually occurred in the first and second quarters of year. The most number of call because of stoke took place in the first quarter of year.

## **WAYS TO IMPROVE QUALITY OF MEDICAL CARE TO PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA (BPH)**

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The wide prevalence of urological diseases impact on increasing of State's expenditure on health care. For example, charges only on the surgical care to patients with BPH in six most economically developed countries of the world make more than 3 billion dollars per year.

Definition of optimum terms of carrying out of operation depending on current and severity of the disease, full inspection and competent preparation, treatment of accompanying pathology, sanitation of pockets of infection, as a rule lead to good results and do not reduce quality of life of patients after one-stage surgical intervention. Also one-stage operation allows to reduce fatality after surgery.

During 2003-2009 178 patients with BPH were treated at the Taldykorgan city hospital. Patients were at the age of 54 -96 years old. We conducted 73 adenectomies, including 41 one-stage way (56,1 %). In the postoperative period, 3 (4,2 %) patients died: one case owing pulmonary embolism, two - owing to acute coronary insufficiency. Only 53 (29,8 %) of patients with BPH were registered for follow-up examinations at the outpatient clinics . The patients with BPH who registered for follow-up, in average attended an outpatient clinics 0,7 times per year then as the norm is 1 attendance per quarter, that testifies to infringement of dynamic supervision over the given contingent of patients.

Thus, it is possible to conclude, that incomplete coverage of patients at PHC level, irregular follow-up are principal causes of untimely rendering to the specialized medical care of patients with BPH. For improvement of quality of medical care to patients with BPH it is necessary to conduct health promotion work among males >45 years of cathchment area population, dynamic follow-up, at least once a quarter, for the patients who were registered at the clinics with diagnosis of BPH.

## **THE ROLE OF MENTAL HEALTH PROMOTION IN PATIENTS OF THE THERAPEUTIC PROPHYLE AT THE LEVEL OF PHC**



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**Background.** It is obvious, that qualification and diversity of preparedness of medical worker is one of the main factors of successful realization of various programs in health care field. Coming across with flow of patients every day, general practice physician should possess not only the required volume of medical knowledge, but also to consider the possibility to meet narrowly specialized areas such as medical psychology, psychosomatics, psychiatry, and boundary types of these conditions.

**Study methods.** At the base of research there was applied a complex approach to study of interrelationships of somatic symptoms and analysis of the combination of clinical indicators at pre nosological and nosological stages of dynamics in the development of psychogenetic forms of disadaptation based on the admissions to student's polyclinic.

For this purpose the survey was suggested for 230 young men, at the age of 18-25 years old, with suspicion on psychosomatic and neurotic disorders. The choice of the given population was justified by the fact, that the change of the environment and social roles of the former pupils, entrants and students is followed usually by such kind of disorders; more over, this particular age is most vulnerable in terms of adaptation.

In the research there were applied the following psycho diagnostic methods: clinical interview, test for psychosomatic diseases, and projective test of Lusher and MMPI questionnaire (mini-mult).

**Results:**

Based on the obtained data during the study of disease's histories of patients, taking into account the peculiarities and duration of diseases, concomitant diseases or their absence, and other anamnesis data, the examined population was divided into three groups: The first group (ND) was composed mainly by neurotic disorders – 60 persons. The second group (PS) includes psychosomatic reactions – 110 people. The third group – (CH) conditionally healthy persons, in which no diseases was revealed at the moment of examination, or were determined from 1 to 3 case of unburdened disease -60 people.

**Conclusion.** Correction at pre nosological level in young age gives a possibility to increase the level of physical and mental health of the population, which as a result could be found to be economically more effective, than the treatment of the developed nosological forms, inclined to chronic form, and in any case decreasing the potential of capacity for work of the population, as well as a quality of life.

## **ALCOHOL CONSUMPTION AMONG STUDENT OF ALMATY**

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One of the problems seriously menacing to a society, are a various sort of dependence. Among such dependences the use of alcohol is one of widespread habits among youth. In the Republic of Kazakhstan the age of the beginning of the use of alcohol on the average makes 17-18 years that reflect ineffective preventive measures at the school and among student's youth. Situation is aggravated with increase last years consumption of alcohol by the population of Kazakhstan. The Purpose of the given research - to study some features of epidemiology of alcohol consumption by student's youth Almaty and to define directions of activity on reduction in consumption of alcohol and development of healthy life style among student's youth.

Under specially developed questionnaire we conduct survey among students of first and last years of four higher educational institutions of Almaty. The total of the interviewed students was 1000 person, selected with use of a method of formation of casual sample. Statistical processing of results was carried out with application of software Microsoft Excel and SPSS.

From the total number of surveyed students 46,7% were at the age of 17-18 years; 21,8% - 22-23 years; 16,4% - 21 year; 8, 1% - 19-20 years; 5,2% - 24 years, and 1,8% - 25 years and older. According to gender feature respondents were divided in the following way: females – 53%, males – 47%. From universities: KazNMU – 218 students, KazNU – 215 people, KazNTU – 327 students, and KazNPU – 240 respondents. 56,4% were students of the first academic year and 43,6% were students of final year.

More than half of respondents started alcohol consumption at the age of 15-18 years; 19,8% - after 21; 9,7% - at the age of 18-21 and 8,4% - under 14. The main reasons for alcohol consumptions were: at 38,5% - interest to alcohol action; at 14,6% - desire to be as others; 12,4% to seem older; 8,2% - due to a lot of spare time.

The majority of students prefer to drink beer (48,2%), wine (42,9%), cognac and vodka (24,6%), champagne (14,5%), and home-made alcohol drinks (7,8%)

Young men consume no more than 2 times a month, single consumption in averages was 2-3 jars. Among regularly consumers (i.e. once a week) the volume of single consumption is much higher in the average more than 3 jars. At the surveyed girls irrespective of the fact how frequently they use beer, the volume of single consumption did not exceed 2-3 jars.

The situation is aggravated with that the beer alcoholization creates false impression of well-being as, in opinion of many, beer associates not about alcohol containing, and with soft drinks.

Beer alcoholism develops more insinuatingly, artfully, than vodka. To struggle with an inclination to beer it is more difficult, it is a heavy variant difficultly giving in to treatment form of alcohol addiction.

#### Conclusions:

1. The prevalence of alcohol consumption is high among students (73 – 67%). We did not reveal significant differences in the prevalence between males and females.
2. The majority of students prefer to consume beer (48,2%) and wine (42,9%). However 24,6% of surveyed students systematically consume or prefer such strong drinks as cognac and vodka.
3. Also, we found that age of alcohol debut was at the age of 15-18 years at 62% of surveyed students.
4. There is a need to activate preventive work to reduce alcohol consumption among youth.

# INCIDENCE MAIN CLASSES OF DISEASES IN 2006-2009 OF POPULATION IN KARASAI DISTRICT OF ALMATY OBLAST

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## **Background**

State of population's health is an integrated indicator of social orientation of community, social guarantees describing a degree of the responsibility of the State to citizens. Thus the special attention at realization of the Program of development of health care for 2005-2010 is given to reduction of incidence and prevalence of socially significant diseases.

Incidence is a major indicator of public's health condition, describing prevalence, structure and dynamics of the illnesses registered by doctors among population. Data on incidence of the population are necessary for an estimation of health status of the population, work of the doctor, medical organization, body of health care, efficiency of medical, hygienic and social actions, for scientifically proved planning the specialized medical aid, rational use and development of material and personnel resources of health care.

Special studies to learn incidence in Karasai district of Almaty oblast were not conducted before.

## **Materials and methods**

Aim of the study is to give characteristics of incidence among population of Karasai district situated in Almaty oblast and develop recommendations to improve health management.

Methods of study: entire study of incidence on the base of central district hospital of Karasai district and official data of JSC "Medinform".

## **Results**

Specific gravity of different diseases in the structure of incidence has significant differences. Thus, diseases of respiratory tract have a significant part in the structure of incidence (47%), gastrointestinal diseases – 8,9%, injuries and poisonings – 7,2%, diseases of urinary tract – 6,7%, skin diseases – 5,1%, blood diseases – 4,8%, cardiovascular diseases – 4,0%, and other classes – 16,3%.

During the study period we observed constant growth of incidence in the population, at distinctions between 2009 and 2006 in 1,4 times. The increase of incidence among children is connected, in our opinion, to improvement of revealing of the given pathology during obligatory medical surveys of the children's population. Also we marked essential growth of absolute number of cases of the given classes of diseases, that, naturally, assumes increase in volumes of rendered medical care.

## **Conclusions:**

1. We revealed that main causes of incidence in Karasai district of Almaty oblast were respiratory diseases (47,0%), gastrointestinal diseases (8,9%), injuries and poisonings (7,2%), diseases of urinary tract (6,7%).

2. Dynamic of incidence, in general, is characterized by constant growth. Significantly, we observed growth of respiratory diseases, especially among children, that requires adoption of special activities to prevent such kind of diseases.
3. The most highest indicators of injuries were observed among adult population. Also we revealed tendency of the growth of injuries among children.
4. Also we detected significant growth of incidence of urinary diseases among children in 19 times and adolescents in 1,4 times. Such kind of dynamics need in development of special measures directed to prevention of these diseases.

## BREAST CANCER INCIDENCE IN KYZYORDA OBLAST

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*Key words: BC, incidence, dynamics, epidemiology*

The problem of breast cancer (BC) continues to draw attention of numerous researchers that is connected to leading position of the given pathology at the women, outstripping on its frequency other forms of cancer, and not quite satisfactory results of treatment. BC occupies 1 place in structure of cancer incidence among women in the countries of the European Union, USA, Israel.

This problem is extremely actual and the Republic of Kazakhstan (PK) as last decade frequency of BC among female population has considerably increased, and also it takes a leading place.

**The aim** of present piece of work was study of main features of BC incidence among females of Kyzylorda oblast.

**Materials and methods of study.** Refined data about 626 patients with BC who were registered at the Kyzylorda oncological dcentre in 2000-2009 became sources of information. Also we used statistical data about number of population in 2000-2009, and indicators of oncological services of RK.

**Results and discussion.** In the structure of all forms of cancer in Kyzylorda oblast BC took 4<sup>th</sup> place (9.2%). The specific gravity of BC increased from 5,1% (2000 ) to 9,2% (2009 ), i.e. in 1.8 times. BC is a leading form of cancer (16.8%) among females of Kyzylorda oblast since 2009.

Statistical and demographic researches allow to reveal the important interrelations concerning features of distribution of malignant tumors which can be used for realization of actions on anticarcinogenic struggle, in finding-out of a complex etiology and pathogenesis of malignant tumors, development of rational methods of preventive maintenance of a cancer and of some other problems.

It is established, that in structure of all forms of cancer among female population of Kyzylorda oblast BC became a leader (16,8 %). As a result of epidemiological research of the statistical data for last 10 years, growth of frequency of the given pathology in Kyzylorda oblast and RK, trends steady expressed ascending ( $r_{KO} = 0,93$  is revealed;  $r_{RK} = 0,91$ ) with probability of such statement - 99,9 %. At studying territorial features of distribution of BC we found non-uniform distribution on areas of oblast with a high incidence in Karmakchinsky district ( $49,8 \pm 6,4\%$  000). Analyzing age indicators we revealed high incidence at the age of 60-69 years old. It is necessary to note, that materials about features of distribution of BC in Kyzylorda oblast should underlie administrative decisions on places.

## **ABOUT SOME ASPECTS OF RELATIONSHIPS BETWEEN SURGEON AND PATIENT DURING RENDERING OF URGENT CARE**

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Effective rendering of medical care to patients is carried out not only under condition of use of modern technologies, loyalty, legislation, but also under condition of interaction between patient and doctor. The base of mutual relationships between a patient and a doctor should be first of all a moral atmosphere of trust, goodwill when the basic purpose of the doctor provision of care to patient, and as a feedback gratitude and appreciation of the patient to the doctor for his(her) hard and self-denying work.

The most typical example of mutual relationships between a doctor and a patient is a situation arising between the surgeon of an admission ward and a person addressed with an emergency pathology.

Characteristics of surgery work at the admission ward: round-the clock shift makes surgeon exhausted physically and emotionally; a large number of patients, with many relatives and acquaintance with different psychotypes, social status, official status, age, ethnicity; surgery work itself very complicated due to many manipulations and surgeries, sometimes with fatal final. All these characteristics make work of surgeon very hard and one of the consequences could be development of emotional burnout syndrome.

What is conflict of interests and its essence? Relationships related to provision of medical care includes three elements of conflict: social, economical, and legislative. One of the important aspects is absence of consistent legislation protecting medical workers and absence of accurate regulation for each case, some differences in standards and medical and economical protocols, and on the other hand sound awareness of patients about their rights and strong administrative recourse that "the patient always right".

On the base of above information we can conclude that:

Improvement and maintenance of legislation to strengthen positions of doctor, as a responsible and judicially protected person will become a base to enhance status of physician not only for patients but also for tort claimant people. Segregation of medical law as a separate norm is necessary to improve and detail elaborate of legislation in health care. Also, important introduction of lawyer position to regular staff of medical organization to regulate conflict situations and protect health care workers.

# **NEEDS ASSESSMENT OF PEOPLE WITH DISABILITIES DUE TO NEPHROPATHIES LIVING IN ALMATY IN DIFFERENT TYPES OF REHABILITATION**

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The problem of physical disability and rehabilitation takes a special place among actual issues of modern nephrology. It is connected not so much to the prevalence of kidney diseases, but with high prevalence of chronic renal insufficiency among young people. Percentage of kidney diseases is 5-6 % from prevalence, and more than 60 % of patients with nephrological diseases are people younger than 40 years.

One of the most severe outcomes of kidney disease, inevitably resulting in disability of the patient, is chronic renal insufficiency (CRI). CRI remains as one of the most actual both medical, and social problems. In modern conditions formation of individual programs of rehabilitation of disable people with the given pathology in system of medical-social examination of the country has a significant role for rehabilitation of the social status and integration of disable people into society.

The most developed questions of medical rehabilitation in case of diseases of urogenital system including modern both medicamentous methods of treatment, and various kinds of the highly technological care (such, as a system hemodialysis, peritoneal dialysis, and etc.), sanatorium treatment. Questions of professional and social rehabilitation which takes a leading place in the general rehabilitation system are less investigated and has a significant role to involve to active daily life of society and family.

We conducted sociological research among patients of hemodialysis departments of Almaty city (76 disable people owing to nephropathology), aimed to study needs of the given contingent of disable people in various kinds of rehabilitation. 85 % of the interrogated respondents were persons younger than 60-years, 53 % - were younger than 50 years, 36 % - than 40 years. In structure of kidney pathology resulted in development CRI, on the first place were patients with a chronic pyelonephritis – 40.8 %, on the second place - patients with chronic glomerulonephritis – 38.2 %, on the third place - patients with congenital anomalies of urogenital tract – 13.2 %, with urolithic illness - on the fourth place (7.9 %).

According to the data of the study, 23.7 % of disable people required in-patient care, 50 % - in transplantation of kidney, 7.9 % - in out-patient rehabilitation treatment, 55.3 % - in psychotherapeutic care, 26.3 % - in sanatorium treatment.

The need for employment of disable people with CRI was 39.5 %, and only 13.2 % of respondents were engaged in work activities. The need for services in social taxi was 51.3 %. 40.8 % of patients informed about financial aid, and 75% of disable people required free-of-charge medicinal maintenance.

Sociological research revealed significant need in rendering of various kinds of rehabilitation, discovered that they have a need in medical, psychological, social and professional rehabilitation. The further studying of the problem is necessary with the purpose of development of a complex of preventive measures to reduce physical disability due to kidney



diseases, development of the state programs directed on duly revealing and rendering medical, social and other kinds of help to the given contingent of patients and disable people.

## **EPIDEMIOLOGICAL SITUATION ON TUBERCULOSIS IN KAZAKHSTAN**

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Tuberculosis in the Republic of Kazakhstan till present time is the most important epidemiological and medical-social problem. Deep social and economical changes in the republic, which took place in the 90-ties, were reflected on the quality and volume of conducted antituberculous actions. Especially suffered under these conditions the system of prophylactic antituberculous actions (immunization with BCG vaccine, tuberculin test, fluorography). Social-economical instability influenced on increase of migration processes, facilitated growth of sociopathic families. Under the conditions of worsening epidemiological situation on tuberculosis and increase of risk groups, most of attention is being required to patients from the pestholes of tuberculosis infection and social risk groups.

The severity of the epidemiological situation on tuberculosis in Kazakhstan is determined by levels of morbidity and mortality. During the period of 2005-2009 tuberculosis morbidity in Kazakhstan decreased by 28,5% (from 147,3 to 105,3 per 100 thousand population). However, the change of this indicator was not equal in different regions because of the complex of socio-economical problems. So, despite the general improvement of epidemiological situation, in Astana city the given indicator not only didn't decrease, but on the contrary, it increased compared to 2005 by 72,1%. Unequal rate of decrease of the given indicator is marked also in various regions of Kazakhstan: if in Akmolinsk region its decrease made up 6,7%, in Aktobe region it was 53,9%.

In the structure of morbidity of children some positive trends are marked also: in 2009 morbidity was decreased from 39,4 to 21,4 per 100 thousand population. The rate of decrease – 45,7%. But at the same time there could be observed inequality in the changes of this indicator: during the same period morbidity of children increased in Almaty (by 11%), as well as in Akmolinsk region (by 1,9%).

Special attention is required to epidemiological situation among adolescents, which is initially characterized by the same values of the indicators as in adults. In this case at the rate of decrease equal to 18,9% morbidity in the country decreased only from 139,2 to 112,9 per 100 thousand population. Alongside with this, there could be marked the growth of the indicator by 41,9% in Akmolinsk region (from 101,6 to 144,2) and by 15,3% in Almaty city (from 77,2 to 118,0). The indicator remains stable and high in Atyrau region (215,7), Kyzylorda (163,9), Mangystau (185,5) regions and in Astana city (179,1).

Special attention in Kazakhstan is paid to registration of the most neglected and severe forms of tuberculosis, as an indicators of epidemiological situation. Decrease of the registering of neglected forms during the last 5 years has a stable trend for decrease in the country - from 3% to 0,7%, which is accompanied by decrease of cases of meningitis in adults (from 37 to 13

cases), as well as among children (from 10 to 3 cases). At that, in some regions annually new cases of tuberculosis meningitis are being registered (South Kazakhstan, Pavlodar, and Zhambyl regions).

Despite the positive character of changes in above mentioned figures in the country, in such regions as Akmolinskaya, Atyrauskaya, East-Kazakhstan, Kyzylordinskaya, Mangystauskaya, North-Kazakhstan and in Astana city epidemiological situation remains hard. So, for instance, in Mangystau region alongside with decrease of the general morbidity from 204,4 (in 2005) to 118,8 (in 2009) per 100 thousand the weight of the patients with neglected forms of tuberculosis among first time detected is 2 times bigger that average republican indicators.

During the last 4 years, in the country the decrease of mortality rate by 39,9% (from 20,8 to 12,5) is marked, rate of decrease is also unequal, and is fluctuating from 8,5% in Akmolinsk region to 64,3% in Mangystau region. Most significantly the mortality rate is decreasing among those patients who were diagnosed for the first time – by 41,4%, and the main contingent of dead people was consisted of patients with chronic complicated form of tuberculosis.

One of the most priority directions of antituberculous program is the struggle with multi-drug resistant tuberculosis (MDR TB). In Kazakhstan among patients detected for the first time, this form of disease is being met in 18,55% of cases, and among those being treated earlier – in 45,2%.

Creation of laboratory basis and inculcation of DOTS-plus program allowed organizing in the country of the treatment with reserved medications, the coverage by which was 85,7% (4366 patients) in 2008-2009. Introduction of DOTS-therapy of tuberculosis in Kazakhstan was reflected on a certain stabilization of disease morbidity, incidence, mortality and disability. Nevertheless, no one of these rates, excluding disability rate, did not achieve the level of the year of 199.

The above given figures prove the fact that currently epidemiological situation in general by tuberculosis, as well as by prevalence of its drug resistant forms, is quite complicated. Increase of the number of patients with MDR-form of disease includes a threat of transformation of the epidemics of the ordinal disease into the category of drug resistant one, which fraught with significant worsening of epidemiological situation, as well as with increase of financial expenses for struggle with this severe infectious disease. In connection with this, the study of the reason for the development of drug resistance is of great importance, since it will allow determining clearly the set of problems, which should get priority efforts of the society.

## **FOOD-BORN OUTBREAK AMONG WORKERS OF INDUSTRIAL COMMUNITY X IN ATYRAU OBLAST, KAZAKHSTAN, JULY 2009.**

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## **Introduction**

Food-borne diseases are acute infectious diseases caused by commensal bacteria, producing exotoxins. A staphylococcal has a short incubatory period and rapid development of symptoms of disease. Over the clinical picture is dominated with attributes of a gastritis. A basis of laboratory diagnostics make allocation of activators of emetic masses, washing waters of a stomach and excrements. However, in most cases separability is not significant.

Food-borne outbreak occurred among workers of industrial community of JSC N in Atyrau oblast. First cases of disease were registered on 25.07.2009г., all sick people were hospitalized to infectious hospital.

**Objectives:** description of the outbreak: who? Where and when; identification of possible factors and conditions of outbreak occurrence; detection of non-registered cases of the disease.

**Method:** retrospective cohort study.

All cases were revealed with help of questionnaires among workers who lived in the dormitory before July 25, 2009. Sources of data were questionnaires, results of lab diagnostics, data from histories of disease, results of sanitarian epidemiological inspection of nutrition unit and cafeteria. Entrance, processing and analysis of data was conducted with use of Epi Info software.

**Case definition:** person who had vomit or diarrhea 2 and more times during the same day.

## **Результаты**

The total number of workers were 741 persons, including 670 shift workers, 71 technical staff. Shifting takes place every month on 16<sup>th</sup>, 335 persons came for the given shift. According to the results of lab diagnostics: 2 samples of water met all requirements of sanitarian norms and rules; 1 did not meet norm of finished articles (meat- beef), 3 workers of nutrition unit had in their noses *St.aureus* 10<sup>3</sup> and one had positive test on hands for *St.aureus*.

**Conclusion:** Food-borne disease was caused by **St.aureus**, way of infection - nutritional, possible factor of infection – vermicelli, source of infection – worker of the nutritional unit. Conditions of infection: break of sanitarian rules and norms for nutritional unit.

# **MEDICAL AND SOCIAL ASPECTS OF TEEN PREGNANCY (LITERATURE REVIEW)**

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WHO strategy for XXI century includes Section 3 about «Healthy beginning of life» specifies, that to 2020, all newborns, children of younger age and children of preschool age in region should be more healthy, that will provide them healthy beginning of life. It assumes Task 4 - « Healthy youth »: to 2020, the youth in region should be more healthy and be better prepared for carrying out the duties in a society. In this connection the Republic of Kazakhstan as a member the WHO, has big tasks in maintenance of general availability of protection of reproductive health.

"Reproductive health" today includes a harmonicity and equation in concept of physical, sexual, psychosexual, psychosocial development, somatic and mental health of the teenager, and not just gynecologic diseases and STIs. Wider sense is put in the term «reproductive potential» as a level of physical and mental condition which allows to reproduce healthy posterity at achievement of a social maturity.

Last decades are characterized by expressed tendency of increase in number of pregnant women among teenagers which is connected not only to sexual liberalization, but also with earlier somatic maturing.

Child-bearing at teenage age, especially before 16 years old, represents more serious health hazard for teen girl and for newborn, than child-bearing at mature age, that is connected to an opportunity of formation of a fistula during labour (as result of underdeveloped of pelvic bones of patrimonial ways) and hypertension. By estimations of WHO for teen girls a degree of danger to die due to reasons connected to pregnancy, in 20-200 % higher, than for adult women (less age of the teen girl more risk to die).

Thus, among the questions of public health connected to sexual health of teenagers, the greatest concern is caused with teenage pregnancy and its consequences), and also the sexually transmitted infections (STIs). These phenomena cause significant medical, social and economic problems in young people, however they can be warned the coordinated efforts of family, school, medical and educational organizations and public organizations.

## **PROBLEMS OF ADOLESCENTS' REPRODUCTIVE HEALTH (REVIEW).**

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Under the modern demographical crisis problems of reproductive health of the young generation are becoming extremely important. By long-term observations the indicators of the status of reproductive system in women of fertile age have a tendency to worsening, and a retrospective analysis of its formation has revealed a high percentage of various disorders already in a puberty age. So, gynecological pathology in adolescent age was noted in 1/3 of

women, suffering from infertility, in 40% of women with miscarriage and pregnancy failure, in 50-60% of girls, admitted to the 2<sup>nd</sup> and 3<sup>rd</sup> groups of health. In the structure of gynecological pathology in girls under 18 years old “functional” disorders (menstrual disorders - 18,38% and dysmenorrhea – 16,33%) are on the second place after inflammatory diseases (44,37%). However, these dysfunction often remain out of the view of specialists, who are appealed usually in several years later from the appearance of the first symptoms of the diseases and already in the presence of the intensive secondary organic changes (for example, polycystic ovary. It is obvious, that these problems have their roots in the earlier stages of ontogenesis. Importance of the neuro-endocrine regulation in the development and realization of reproductive function determines careful attention to study of the peculiarities of neuro-psychic development of girls with high risk of its disturbances.

Thus, treatment of girls at the puberty age with disorders of menstrual function should be complex, pathogenetically justified, of sufficient duration, with application of the modern pharmacological medicines, which don't have side systemic effects on the young organism. As a criterion of the effectiveness of the treatment being conducted the normalization of a menstrual function should serve.

## **APPLICATION OF CONTRACEPTION BY ADOLESCENTS (LITERATURE REVIEW)**

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Modern youth population is characterized by high level of sexual activity, which can lead to early and unwanted pregnancy, criminal abortions, risk of acquiring sexually transmitted infections (STI) if not to use contraception methods. Contraception in adolescents partly allows avoiding the above listed consequences, being one of the ways of reproductive health maintenance.

Recently the attitude towards hormonal contraception in adolescents was changed positively both from the side of medical professionals, as well as from public opinion's side. However, according the accumulated experience of application of modern contraceptive methods in adolescents, it becomes obvious that some of them have a negative influence on a forming organism.

Methods of contraception in adolescents should answer to the following requirements: to be safe for health, highly effective, convenient to use, accessible for purchase. Application of micro dosed oral contraceptives not only allows to prevent effectively unwanted pregnancy in young women, but under the proper individual selection and observation it renders intensive curative effect on somatic and reproductive health of adolescent girls.

The revealed tendencies to the increase of the level of contraception culture are determining favorable rates of decrease in the number of abortions.

As researches have shown, all adolescent respondents consider the knowledge about contraception to be significant for their lives; however, it is not sufficient yet. All adolescent confirm that they want to know about contraception more. Therefore, there is an acute need in sexual education of adolescents, and questions of contraception are part of it.