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OFFICIAL DOCUMENTS

International Conference “25th Anniversary of the Alma-Ata Declaration on Primary Health Care and Health for All Strategy”

Dates for the conference:

October 23-24, 2003

Venue:

Almaty, Kazakhstan (the venue where the Declaration of Alma-Ata WHO/UNICEF was adopted in 1978)

Guests and participants

Total of about 200 participants plus observers:

1. Dr. Jong-Wook Lee, WHO Director-General Elect;
2. Mr. Cul Gautam, UNICEF Deputy of Executive Director;
3. Mr. Mark Danzone, Director, WHO European Regional Bureau;
4. Mr. Halfdan Mahler, former WHO Director-General (1971 – 1982), chairman of the 1978 Alma-Ata conference;
5. Mr. Joe Aswall, former Director, WHO European Bureau;
6. Mr. Imangali Tasmagambetov, State Secretary, Republic of Kazakhstan;
7. Ministers of health from the NIS and Baltic countries;
8. Other government officials from the Central Asian countries;
9. Representatives of international donor organizations based in Almaty: multilateral and bilateral: UNDP, UNICEF, WHO, USAID, DFID, JICA, KfW, SIDA, etc.;
10. Representatives of international organizations providing technical assistance in Central Asia: CDC, MSF, Soros Foundation, Abt Associates, AIHA, etc.;
11. World Federation of Public Health Associations and representatives of national public health associations from central Asian and other countries;
12. Researchers and educators working in the field of public health;
13. Representatives of NGOs from the 5 Central Asian countries;

14. Representatives of oblast health departments all the oblasts of Kazakhstan and some oblasts of the other Central Asian countries;
15. Observers: participants of Kazakhstan's national conference on internal medicine, media representatives.

Background

In September 1978 the World Health Organization and UNICEF organized historical International Conference on Primary Health Care in Alma-Ata, the capital of Kazakhstan. The Conference adopted the Alma-Ata Declaration and "Health for All" strategy. The central tenets of the "Health for All" strategy call for creating primary-care-driven health systems that guarantee equal access to all citizens (see Declaration of Alma-Ata). These systems are expected to develop locally controlled, publicly responsible health programs that are:

intersectorial and intrasectorial;
preventive and curative;
population-based and individually oriented.

Following the Alma-Ata conference many developing and developed countries adopted national strategies reflecting fundamental principles of the Alma-Ata Declaration. These strategies are still in effect and health systems in many countries continue to operate based on Alma-Ata philosophy.

With the political and economic changes and social transitions of the last decades the principles of Alma-Ata Declaration require serious revision. Many countries of the World revised their national strategies to address the needs for change in the new historical situation. Specifically, new ideas are needed to address intersectoral approach, community involvement and regional interactions, the areas where the Alma-Ata principles were not successful enough. However, the main philosophical principles of the Alma-Ata Declaration could still be envisioned as a core of health care systems in many countries of the World.

In his speech to the Fifty-sixth World Health Assembly convened in Geneva on 19 – 25 May 2003, Dr. Jong-Wook Lee, WHO Director-General Elect stated: "We cannot turn back the clock to Alma-Ata. But we must renew the fundamental commitment to equity expressed by "health for all." WHO must

work to translate this ideal into measurable results, through a new relationship with Member States”.

During the Fifty-sixth World Health Assembly, member states have decided to support the WHO initiative to celebrate 25th anniversary of the Alma-Ata Declaration and call for revisiting its principles by initiating extensive discussion on how the principles of the Alma-Ata could apply to the modern world. With this idea the WHO has decided to hold several regional conferences in 2003: in Brazil for Pan American region, Spain for European region and in Almaty, Kazakhstan, where the historic Alma-Ata Conference was organized in 1978. This document is to discuss the goals, framework and types of outputs to be expected from the conference in Almaty.

Main goal of the conference and expected outcomes

The goal of the conference is to have a regional convention of public health leaders from the five countries of Central Asia to discuss the principles of the Alma-Ata declaration, their application to the current situation in sub-region, and to adopt a joint resolution (see draft resolution) that discusses historical context and a new vision on health care, and addressing main focus areas for renewing the Health for All Strategy in 21 Century, such as:

- The right to health care and improvement of access to health care
- The imperative to contain costs of health care
- The need for population-based medicine and individual care
- Strengthening the role of primary health care
- Prioritizing and rational allocation of health care resources
- Gaps: needs to improve primary health care in Central Asia
- Strengths: identification of areas with national expertise in each country of Central Asia
- Call for assistance: potential avenues for collaboration and regional assistance

The expectation is that such dialogue would lead to harnessing spirit of regional collaboration by jointly addressing challenges on health care that are common to the countries of Central Asia.

DECLARATION OF ALMA-ATA

International Conference on Primary Health Care, Alma-Ata, Kazakhstan, 6-12 September 1978

The International Conference on Primary Health Care, meeting in Alma-Ata this twelfth day of September in the year Nineteen hundred and seventy-eight, expressing the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all the people of the world, hereby makes the following Declaration:

I

The Conference strongly reaffirms that health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector.

II

The existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable and is, therefore, of common concern to all countries.

II

Economic and social development, based on a New International Economic Order, is of basic importance to the fullest attainment of health for all and to the reduction of the gap between the health status of the developing and developed countries. The promotion and protection of the health of the people is essential to sustained economic and social development and contributes to a better quality of life and to world peace.

IV

The people have the right and duty to participate individually and collectively in the planning and implementation of their health care.

V

Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures. A main social target of governments, international organizations and the whole world community in the coming decades should be the attainment by all peoples of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary health care is the key to attaining this target as part of development in the spirit of social justice.

VI

Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.

VII

Primary health care:

- reflects and evolves from the economic conditions and sociocultural and political characteristics of the country and its communities and is based on the application of the relevant results of social, biomedical and health services research and public health experience;

- addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;

- includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of

safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs;

involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors;

requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate;

should be sustained by integrated, functional and mutually supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need;

relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community.

VIII

All governments should formulate national policies, strategies and plans of action to launch and sustain primary health care as part of a comprehensive national health system and in coordination with other sectors. To this end, it will be necessary to exercise political will, to mobilize the country's resources and to use available external resources rationally.

IX

All countries should cooperate in a spirit of partnership and service to ensure primary health care for all people since the attainment of health by people in any one country directly concerns and benefits every other country. In this context the joint WHO/UNICEF report on primary health care constitutes a solid basis for the further development and operation of primary health care throughout the world.

X

An acceptable level of health for all the people of the world by the year 2000 can be attained through a fuller and better use of the world's resources, a considerable part of which is now spent on armaments and military conflicts. A genuine policy of independence, peace, détente and disarmament could and should release additional resources that could well be devoted to peaceful aims and in particular to the acceleration of social and economic development of which primary health care, as an essential part, should be allotted its proper share.

The International Conference on Primary Health Care calls for urgent and effective national and international action to develop and implement primary health care throughout the world and particularly in developing countries in a spirit of technical cooperation and in keeping with a New International Economic Order. It urges governments, WHO and UNICEF, and other international organizations, as well as multilateral and bilateral agencies, non-governmental organizations, funding agencies, all health workers and the whole world community to support national and international commitment to primary health care and to channel increased technical and financial support to it, particularly in developing countries. The Conference calls on all the aforementioned to collaborate in introducing, developing and maintaining primary health care in accordance with the spirit and content of this Declaration.

Draft Resolution of Conference on 25th Anniversary of the Alma-Ata
Declaration,
Almaty, Kazakhstan, October 2003

**HEALTH FOR ALL IN 21 CENTURY:
A NEW MANDATE FOR COUNTRIES OF CENTRAL ASIA**

Alma-Ata Declaration and Health for All Strategy: Historical Context

The founders of the World Health Organization (WHO) defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". The Constitution of WHO proclaimed that the health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States. This was the vision shared by Member States in the post-war world of the late 1940's. Experience gained from WHO's work throughout the world demonstrated the increasing need for this vision to be translated into a conceptual framework, strategy and operational principles.

The conceptual framework of Health for All was for the first time proclaimed in 1978 during historical International Conference on Primary Health Care jointly sponsored and organized by WHO and UNICEF. The Health for All strategy defines the main social target of governments and WHO in the coming decades as the attainment by all citizens of the world by the year 2000 of a level of health that would permit them to lead socially and economically productive lives. The Declaration of Alma Ata adopted during the Alma-Ata Conference, stated that Primary Health Care (PHC) was the key to attaining health for all as part of overall development.

The Conference defined PHC as "essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and the country can afford". The Alma-Ata Declaration stated that PHC should include at least the following elements: health education related to prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; provision of an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization programs against the major infectious diseases; prevention and control of locally endemic diseases;

appropriate treatment of common ailments and injuries; and provision of essential drugs. Each country, the Conference stressed, had to interpret and adapt PHC within its own social, political and developmental context. They should develop comprehensive national health care systems, of which PHC should be an integral part.

Following the Alma-Ata Conference the World Health Organization has invited Member States to consider using the present document individually as a basis for formulating national policies, strategies and plans of action, and collectively as a basis for formulating regional and global strategies for attaining an acceptable level of health for all. Countries were expected to have a similar general understanding of the term health for all as signifying that every individual should have access to PHC and through it to all levels of a comprehensive health system, with the objective of continually improving the state of health of the total population.

Health for All: A New Vision

However, the conceptual and practical interpretation of health for all was seen to differ from country to country and among groups of countries in light of their social and economic characteristics, health status and the morbidity patterns of their population, as well as the state of development of their health systems. Subsequently, countries were expected to vary greatly in their interpretation of what was an acceptable level of health.

The WHO emphasized that widely different approaches could be used in attempting to provide health for all. Some countries, for example, might provide the full range of services required, starting with people in greatest need, and progressively reaching the whole population. Others might provide limited services to the total population from the beginning and progressively extend the range of these services. The WHO also stressed that the planning and implementation of health for all strategies at national, regional and global levels was a long-term process, which should be extended progressively, in both geographical coverage and content, until it covered the entire population encompassing all the essential components. In addition, it was especially noted that an acceptable level of health for all could not be achieved by the health sector alone. It could only be attained through national political will, commitment and coordinated efforts of all sectors of society. Thus, the call for Health for All was, and remains fundamentally, a call for social justice. The Health for All Strategy is a

societal response that acknowledges unity in diversity and the need for social solidarity. It is a strategic process leading to progressive improvement in the health of people, and is not a single finite goal. Health for All By the Year 2000 was only the initial stage of that process.

Over the past two decades, governments, international intergovernmental and nongovernmental organizations have increasingly accepted The Health for All Strategy as a conceptual framework for improving health. However, a long period elapsed before adequate human and financial resources were reoriented towards PHC. Access to the elements of primary health care steadily increased, albeit with wide variations within populations and between countries. PHC, together with economic, educational and technological advances has contributed, in many countries, to expanded health infrastructures, increased literacy, rising incomes, and improved nutrition, sanitation, education and opportunities, particularly for women. The incidence of infectious diseases has declined in many countries and smallpox has been eradicated. Control and prevention of diseases, such as measles, poliomyelitis and diphtheria, have greatly reduced childhood mortality and morbidity. Millions of children have survived to adulthood as a result of early health interventions. The most important achievement for international public health over the last 50 years is the fact that today people are living longer: The average life expectancy at birth has increased, and the gap in life expectancy between rich and poor countries has narrowed.

However, despite these health gains, progress towards The Health for All Strategy in many countries has been hampered by a number of factors, including: slow socioeconomic development; lack of political commitment; failure to achieve equity in access to all PHC elements; inappropriate use of, and allocation of resources for, high-cost technology; difficulty in achieving intersectoral action for health; unbalanced distribution of, and weak support for, human resources; and the persistently low status of women.

Health for All Strategy: New Challenges in the 21 Century

The foreign debt crisis of the 1980s and world economic crisis in mid-1990s made many countries reduce their support for health and social services. Dramatic political changes throughout the 1990s, often accompanied by civil unrest, seriously impaired health and economic development. In some countries, notably in the countries of the former Soviet Union, previous gains in life expectancy and health standards have been reversed. Health has

suffered most where economies have been unable to secure adequate income for all, where social systems have collapsed and environmental resources have been inadequate or poorly managed. Most importantly, resources for financing healthcare expenditures in the countries of the former Soviet Union became very limited.

As a result, the countries of the former Soviet Union, particularly Central Asian republics inherited a healthcare system that was in a chronic state of disarray. Such failure to maintain essential health systems has led to deterioration in the health status of populations, especially in the face of emerging new and re-emerging diseases, such as tuberculosis, HIV/AIDS and malaria.

The failure of the state-run healthcare system forced people to turn to a growing array of private health services that are available mostly through cash payment. As a result, the picture now emerging in the countries of central Asia is that of a dual system: the old state structure, facing chronic under-funding, and a second, loosely regulated private scheme/arrangement, offering market and competitive solutions. Rapid growth of private health care in the countries of Central Asia has had a varied impact on public-sector services. In most of the cases, private and public sector health-care providers have not established effective partnerships. In some cases, this rapid growth has contributed to continuously rising costs, to inefficient care, and to unequal access to health care.

The Health for All Strategy remains the cornerstone of WHO's institutional vision. But in the new historical situation, it has become increasingly clear that this conceptual framework has to be revised and updated to answer the new socioeconomic, technological and epidemiological realities brought about by profound changes of global magnitude.

Renewing the Health for All Strategy

The Conference on 25th Anniversary of Alma-Ata declaration convened in Almaty to take the necessary steps for renewing the Health for All Strategy together with its indicators, by developing a new holistic health policy based on the concepts of equity and solidarity, emphasizing the individual's, the family's and the community's responsibility for health, and placing health

within the overall development framework, and further, to elaborate the new national health policies based on the outcome of the consultation process.

Health for All in the 21st century for Central Asia means an extensive and inclusive process of consultation with and within the countries of Central Asia, and should include the following elements:

- The right for health
- Focus on primary health care
- The imperative to contain health care costs
- The need for population-based medicine

The Right to Health Care. Rephrasing the Alma-Ata Declaration, all people should have equal access to a reasonable level of health services, regardless of ability to pay. We believe that health care should be a right enjoyed equally by everyone. This right is not easy to translate into reality, especially with market economy infiltrating the health care systems. The right to health care requires the establishment of a network of health care institutions accessible to everyone and a method of financing those institutions that allows everyone to obtain needed services without regard for ability to pay.

Focus on Primary Health Care. As stated in the Alma-Ata Declaration, primary health care forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process. We believe that focus should be placed on strengthening institutions of primary health care to ensure equal access to adequate health care services.

The Need for Population-based Medicine. Most doctors and nurses are trained to provide clinical care to individuals, while the clinical care is not the only determinant of health status; standard of living and public health measures may have an even greater influence on the health of population. Health care, then, should have another dimension: concern for population as a whole, what is called public health.

The Imperative to Contain the Costs. Limits must be placed on the costs of health care services, and the cost controls can be imposed in a manner that does relatively little harm to the population's health. The rapidly growing

costs of health care are in part created by scientific advances that generate new, extensive technologies. Some of these technologies truly improve health care, some are of little value, and others are of benefit to some patients but are also inappropriately used for patients whom they do not benefit. Eliminating medical services that produce no benefit is one of the ways of “painless” cost control. Reduction in the rapidly rising costs of administering the health care services is another route to painless cost containment.

PUBLIC HEALTH

Academic Training for Public Health Policy, Planning and Practice and the OSI/ASPHER PROGRAM

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This paper describe concepts of academic training at the Master's level in Public Health and to see this in the context of the OSI/ASPHER Program. It should be stated at the outset that modern public health training must include both the basic principle of public health responsibility for the health of the total population with the necessary knowledge and skills of modern management practice at any or all levels of the health care system. This is at the basis of the unique OSI/ASPHER Program.

Very shortly what is this program? The Open Society Institute of New York (OSI), cognizant of the post-Soviet condition of public health services, initiated in 2001 with ASPHER, the Association of Schools of Public Health in the European Region, a program to enhance institutional public health teaching programs in the region. The basic premise was that by bringing together existing European academic public health expertise and experience, with the institutional development of new frameworks in Eastern Europe and Central Asia, that training and practice would be substantially improved. (1)

The Program is designed to develop quality in the teaching programs and was aimed at two groups of schools. In Stream 1 seven more advanced schools (Armenia, Bulgaria, Estonia, Hungary, Lithuania, Kazakhstan, and Poland) were chosen with the objective of "Strengthening and deepening public health education and training". Stream 2 defined five emerging and developing schools and programs (Albania, Latvia, Rumania, Ukraine, Uzbekistan) with the objective of "Building public health education and training capacity".

While the Program has been planned to extend through three academic years from 2001-2004 it is certainly to be hoped that the funding will continue and that there is little doubt that the impact will continue far beyond these dates.

If this is the institutional framework of the OSI/ASPHER Program what do we hope to achieve? It is clear that we are worldwide, and in this region in particular, facing very considerable challenges. As academic institutions we have the responsibility to prepare the professional cadres of public health personnel that are capable of handling a wide variety of these challenges. We must consider in our training plans the fact that the students who will enroll next year for an MPH will be practicing public health well into this century. How do we prepare them to handle change and not only the past problems? I want to highlight three areas that seem to me to be of the highest priority:

- A. **To answer the changing health needs of the population.** The analysis of this entity and the planning of the necessary policy and practice is at the heart of public health responsibility.
- B. **To achieve the above within the rapidly changing structure and functioning of health services worldwide.** This of course is in relation to the growing appreciation of the economic implications, both positive and negative, of health service reform.
- C. **Possibly the greatest challenge will be to meet the first two while considering the worldwide changing socioeconomic reality and especially the public health implications of the widening gaps in almost all societies.**

A. Population Health Needs

Much has been invested in recent years in the attempt to predict future health needs at the population level. It certainly seems that the changes will be dramatic and test the ability of society and its services to handle them. WHO has adopted the DALY (Disability Adjusted Life Years) as a measure of population health. During the 30-year period from 1990-2020 the Disease Burden as measured by DALYs will change considerably. (2) Substantial increases in DALYs will occur in mental health, ischaemic heart disease, road accidents, AIDS and lung cancer. There will be a fall in many of the communicable diseases. When considering death as a measure mental health is obviously absent but there will likewise be considerable changes. Perhaps the most interesting of measures is that of Years of Life Lost (YLL) which especially reflects those conditions resulting in premature mortality, e.g. accidents, HIV/AIDS, war. The predicted changes are certainly considerable and we should remember that we are at present in the middle of this defined time period.

In the 2002 World Health Report (3) WHO highlighted the role of risk in determining the health status of populations and therefore the priority that should be given to preventing or reducing risk. An interesting feature from the Report is the difference in risk as a cause of disease burden in different countries. For example, while alcohol is not listed as a risk in high mortality developing countries it is very high on the list of all the others (low mortality developing countries and developed countries); blood pressure, tobacco and cholesterol appear in all, if at different levels; underweight and unsafe sex are the highest risk elements in high mortality countries, while very low or absent in others. In this connection an observation from a different part of the world is very interesting. “Adults under the age of 70 in Sub-Saharan Africa today face a higher probability of death from a non-communicable disease than adults of the same age in the Established Market Economies” (i.e. the industrialized world). Is this the case in other regions of the developing world? If so, and it does seem likely, what are the implications for public health training?

However to return to RISK. What is the relevance to public health training and practice. It highlights the classical public health approach to prevention at a population level and will require the content to include considerable accent on health promotion, behaviour change and an understanding of the socio-cultural milieu in which our students will function. We have to be cognizant of the fact that different countries have different problems of risk. We need to adapt our training accordingly.

While we are certainly facing a new series of “epidemics” in this century that are clearly illustrated in the data described this is not the total picture.

Society will have to plan for two developments that are “exploding” on the international health arena. The first is that of population aging and growth.

The population age/sex pyramids projected from now for the next 50 years (the period when our graduates will be functioning), reveal predicted changes the world over. In both developed and lesser developed regions, the aging process is clear and with it the changing health needs of the population. It is well illustrated by reviewing the world distribution of the 60+ population today and the projection to 2050 in the Central Asian area of the world where this conference took place. Today (in 2003) there are less than 10% over 60. This will increase to at least 25% of the population by 2050. We have to prepare public health professionals for this challenge.

The next change that science has provided is for many possibly science fiction but is certainly a growing reality. I am referring to the potential impact on health and health services of the “Genetic Revolution” that has become more of a reality since the mapping of the human genome. While I imagine that the reaction of many in Central Asia will be “this is not our reality, now or in the near future” I would submit that this is not the case. In a recent 2002 publication from WHO on “Genomics and World Health” the conclusion was that “Clearly genomics has a considerable potential for the health of the developing countries in the future.” (4) It is clear that it is not too early to begin planning to apply the fruits of genomics research here as well”. The potential examples are many and in this analysis one should consider the many inherited disorders, genetic resistance to communicable disease, drug resistant organisms, individual variation in drug response, and clearly in the major non-communicable diseases such as diabetes. Public health genetics will become, if it is not already, a requirement in MPH training.

This subject brings me to the two other major areas that I defined as the challenges that will face the MPH graduates in the near and more distant future.

B. Health Inequity

The first is embodied in what has been defined by the Director General of WHO, Dr Gro Harlem Brundtland as the greatest threat to health worldwide – that of poverty. In her introduction to the 2002 World Health Report (already referred to) she concluded, after reviewing the risks to health, “the contrast between the haves and have-nots have never been more starkly illustrated”. There is no country in the world where socio-economic status differentials are not related to population health. Our role is to challenge public health and its professionals as to how we propose to handle the health implications of this growing gap between the haves and have-nots. Let me not refer to others but to my own country. We have evidence of a growing gap in mortality by educational level in the last two decades; differential mortality by the socio-economic status of the community where we live; a substantial difference in infant mortality by educational level of the mother; substantial differences in behaviour, whether smoking, physical exercise or dietary intake by income levels; and the list could continue. (5) This is a question that we in public health need to tackle. We cannot wait for there to be a change at the macroeconomic level with its potential for health improvement. This will take many years, if it happens at all, and we cannot in the interim negate the responsibility of public health.

There is however another process of social change that is occurring worldwide and closely related to the question of health inequality and inequity. A comprehensive review of the many factors at the interface between globalisation and health is beyond the scope of this paper. Suffice it to say that opinions differ. In the same 2001 edition of the British Medical Journal, Feacham wrote “Globalisation is good for your health, mostly”. (6) Woodcock, in a Rapid Response to this paper, took a very different stand in saying “The struggle for public health and against economic globalisation go hand in hand”. We do not know the complete answer. However when we consider the positive economic potential and weigh it against the exacerbation of income differentials, or, improved international communication as compared to the consequences of global environmental changes, or, the globalising of the tobacco industry and the spread of infectious diseases (remembering the present SARS epidemic and international travel); then it is clear that a public health professional in any country will need to understand the social processes that are occurring, their potential impact on health and the public health answers to them.

C. Health Care Management

I want now to move to the third critical area of challenge. Much has been written and said about the integration of Medical Care that is oriented to the management of disease in the individual and Public Health with its total population responsibility. This has come to be known as the New Public Health. (7) I want however to consider this, shortly, in the context of Health Care Reform that is occurring almost everywhere. Notwithstanding the vast differences in the % of GDP devoted to health there is no country that is capable of providing everything to everyone. Therefore the integration in policy and planning between health needs and resource availability and allocation has become a core issue everywhere. There are a multitude of questions that need to be addressed including, amongst others, the hospital/ community divide; the context of health insurance and its coverage; the public/private mix in health care delivery; differential service provision for different populations. All this only accentuates the essential place of public health in any and all health care management decisions.

I would like to illustrate this as follows. Public Health Policy and Action has as its major objective the Improvement of the Health of the Population. There are three integral parts contributing to this goal. (Figure 1)

Public Health Policy & Action

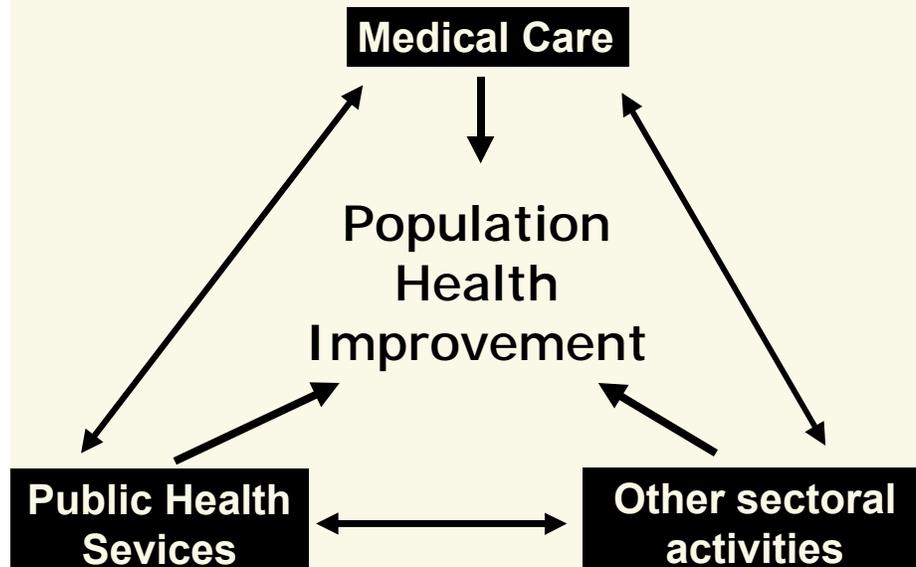


Figure 1: Components of Public Health Policy & Action

Clinical Medical Care is at the heart of the management of disease that has not been prevented. Public Health brings to the scene two complementary entities – a requirement that medical care be provided to all those in need of it, irrespective if they have requested it or not; and in addition to clinical care, the full spectrum of public health services especially in promotion and prevention. (8) To these must be added the critical role and responsibility of the Other Sectors of societal services. This interaction and complementary function of health, welfare, education, environment, and many others has already been enshrined in the Alma Ata Declaration of 1978. (9) This is however not enough. Each of the three functioning alone will have a limited effect. There needs to be a policy decision at all levels of the services in order to achieve the required integration with its potential and maximal impact on health.

We basically have a concept. We wish to answer population health needs, while existing within a fixed budget. Utopian perhaps but it should be the basis of all modern public health training and practice.

I have until now tried to define the content of the role that public health professionals will be required to undertake in coming years and hence the training they require. John Last in his book “Public Health and Human Ecology” summarized what he considered to be the necessary sequence of

events that are required to control any public health problem. (10) They could well form the framework for our thinking when planning the role of the public health specialist. The stages defined were:

- 1. Awareness that the problem exists**
- 2. Understand what causes the problem**
- 3. Capability to deal with the problem**
- 4. A Sense of Values that the problem matters**
- 5. Political will to control the problem.**

If we can produce MPH graduates with these values and skills we will be producing a relevant cadre of professionals. The question however is how to translate the challenges described and the process defined by Last into the content of public health training. I will not attempt to detail all the courses and their content, however let me raise for your consideration the core curriculum for an MPH as defined by Roemer in 1999. (11) The reason for this choice is the obvious integration of those areas of public health expertise that are required to meet the multiple and complex challenges facing the “new” professional.

1. Basic Tools of Social Analysis: These include a series of basic skills that the MPH graduate requires. While those related to quantitative measurement, including health economics, are present they have alongside them and of similar priority the lessons of the past, the changing population structure and the critical understanding of population functioning and behavior. This does after all bring together an understanding of many of the challenges that have described.

2. Health and Disease in Populations: This will include the epidemiological basis for public health and health services – a prerequisite for any logical policy, planning and intervention in relation to measured population health needs.

3. Promotion of Health & Prevention of Disease: The recent WHO Report accentuating the importance of RISK provides an up to date rationale for the central role of this entity in training.

4. Health Care Systems and their Management: This will include the total spectrum of the management skills that will complement and be integrated with public health practice.

5. Environmental Health Sciences: Our immediate and distant physical and biological environment is exerting an ever-growing influence on population health and obviously includes the occupational reality in which we work.

As we look to the future what is our vision of the role of our graduates in the field of public health. In a new book “Global Public Health: a new era”

Beaglehole and Bonita have defined their vision of what will characterize a reinvigorated practice of public health. (12) It is applicable to every one of our countries:

1. Public Health practitioners will lead the response to health crises
2. Public Health practitioners will lead reforms to improve health and not only to control costs
3. Public Health practitioners will promote intersectoral activity to improve health and reduce inequity
4. Public Health research, training and practice will be high priority in all health services
5. Public Health values will reinforce the interactions between practitioners and the communities they serve.

If we succeed in framing our educational goals in this context there is a high probability that our graduates will be the basis for a vibrant public health practice capable of answering the changing challenges of a new century.

Charles Darwin probably summarized the challenges and the road ahead better than anybody:

“It is not the strongest of the species that survive, nor the most intelligent, but the most adaptable to change”

That after all is the essence of the OSI/ASPHER Program and the goal of all who are involved in the training of the future specialists in Public Health.

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Prophylactics of Quarantine and Zoonotic Diseases Infections is the important part of the Public Health Care in Kazakhstan

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Especially dangerous infectious diseases are ones which can appear among the population as separate cases, epidemics and even pandemics and frequently being consequence of extreme situations (natural disaster, war etc). First of all, plague, cholera concern to their number. Recently the problem of bioterrorism with the using of causative agents of especially dangerous infections was actually. Appearance of quarantine infections on scales is subdivided into epidemics and extreme situations (Donald J. Dansmor "Security measures at outbreaks of infectious diseases", WHO, Geneva, 1990).

The significant part of the territory of Kazakhstan, more than 39% is enzootic on plague. The main natural carriers of the plague microbe on the focal territory are marmots, susliks, great and little gerbils and the main vectors are fleas which are parasite on these rodents. Annually the acute epizooty of plague with isolation from 300 till 900 of high virulent strains of plague microbe is registered in the territory in 10-40 thousand square km.

Epidemic potential of focal plague territory sharply grows because of the increasing of intensity of economic development of these territories and anthropogenous changes of landscape. Annually in the territory of Kazakhstan the cases of human plague and camel plague are registered. There is a real danger of occurrence of serious epidemic complications. Only due to constantly functioning system of epidemiological survey on plague, the stable situation limited by sporadic cases of plague in people is kept in the country.

The existing system of epidemiological survey on plague consists of the following sections of scheduled work of Plague Control Institutions, Sanitary and Epidemiological Stations and Medical Institutions:

1. **Survey on the population health.** In the plague enzootic territory it includes the registration, clinic, laboratory and epidemiological analysis of all diseases in patients suspected on plague. All cases of rapid sudden death of the people are exposed to analysis. The special system of

information and measures planned for each administrative unit of the Republic starts to function at each suspicious case on plague. At such plans all aspects of work in the foci of the dangerous infectious diseases are taken into account.

2. **Epizootological survey on the plague natural foci.** 10 antiplague stations, 13 antiplague departments and 30-36 temporarily antiepidemic units constantly carry out surveillance on the natural epizootic process. Number of rodents and fleas in field and settlements, borders and intensiveness of the plague epizootics among the rodents, direction of movement of epizootic process, character of properties of the plague causative agents is under the constant control. If need be, the regulation of rodents and fleas-parasites number is carry out on the border with settlement and destruction of them in these settlements.

3. **Vaccination of the population.** Annually the vaccination of the population is carried out on the most dangerous plots of natural foci. Thus concrete group of the risk among the temporarily and constantly living contingents of the population in the given region beforehand are determined. Vaccination is carried out by the medical workers who annually past the special preparation and certification.

4. **Survey on the camels.** Camels are in constant contact with the wild nature and the sick camel by infected with plague is dangerous, since in the case of uncontrolled slaughter it is possible group outbreak of human plague. In the case of receipt of the information about the patient (with suspicion on plague) or dead camel, experts of antiplague institutions without fail carry out the laboratory research, and at the confirmation of the diagnosis of plague the slaughter and destruction of the camel's corpse is carried out.

5. **Preparation of the medical workers.** Medical workers of the all level including from village medical points up to city clinics have training obligatory annual preparation on diagnostics, clinic, treatment and carrying out of antiepidemic measures in plague focus. Such training provides the duly information and carrying out of the complex measures for the rescue of the life of patient and localization of plague focus.

6. **Sanitary-educational work among the population.** Sanitary-educational work among the population is the important component of the preventive work in plague foci. Explanation of infection mechanism, bases of prophylactics, rising of the level of sanitary culture of the population represents necessary section of all preventive work among the population living directly in zone of plague natural foci.

All system of epidemiological survey on the plague should be improved constantly on the basis of new scientific and practical achievements, information and technical progress in view of concrete specificity of each region of Kazakhstan.

As shows the epidemiological analysis, for the last 9 years the cholera has penetrated in the territory of our country from the neighboring countries and also from Pakistan, India, Turkey and Indonesia. The most intensive cholera outbreaks are marked in 1993, 1997 and 2001 and epidemic in 1997 had extensive character with the subsequent drift of an infection in other regions or republic.

In 2002, there are no transferred cases of cholera. Vibriosis caused *V. cholerae* non O1 were registered in patients. 30 patient by vibriosis and 4 carriers were detected during the year.

Analysis of cholera shows that transmission in modern conditions is inevitable despite of control and corresponding preventive actions. Sanitary-quarantine points (SQP) can reveal patients by cholera only with expressed clinical displays and easy forms, vibrio carriers and patients who are in incubatory period do not detect. That is why at the present time detection, laboratory confirmation of the first cases of cholera and carrying out of antiepidemic measures for localization and liquidation of cholera focus.

For the prevention of epidemic complications on cholera in the territory, carrying out of all complex preventive, antiepidemic and sanitary-hygienic measures including strict control over the quality of potable water, improvement of water supply, control over the disinfecting of sewage, removal of sewages and other sanitary-hygienic measures is obligatory.

Epizootic and epidemic conditions on anthrax, brucellosis and other zoonoses are unfavorable in Kazakhstan.

Anthrax brings the big economical damage. In 2000-2001, 50 persons were infected by anthrax in the Republic of Kazakhstan, 3 cases of them were lethal. Persistence of this infection is connected with presence of points unfavorable on anthrax which ground is contaminated by anthrasic microbe. More than 3500 points unfavorable to anthrax are in Kazakhstan where infected people or live stock were registered. They periodically show activity expressing in new cases of human and animal anthrax.

Tularemia natural foci were determined in the territory 1.3 million sq. km that makes 54% from the total area of republic and these foci are with high enough epidemiological potential. Now in the territory of Kazakhstan the single cases of human tularemia were registered. Such success has been

achieved due to mass immunization of decreted population by tularemic vaccine. However it is necessary to note that in connection with absence of the registered vaccine for immunization of people, in immediate prospects it is necessary to expect growth of disease by this infection.

Brucellosis is still the most important infection for our republic in socio-economical relation in connection with high incidence both in live stock and people. Annually 1800-1900 human cases are registered in the Republic. Delayed detection of sick live stock by infected with brucellosis, especially in individual sector, is the main cause of the growth of human brucellosis.

Researches of the last years testify to wide circulation of yersiniosis and listeriosis in Republic.

Now human yersiniosis diseases caused by *Y. pseudotuberculosis*, *Y. kristensenii*, *Y. enterocolitica* is registered practically all over the world. During the last 10 years 5219 patient were registered. Causative agents were isolated not only from the people but also from the wild and synanthropic rodents, live stocks. Listerias were found in synanthropic rodents in Almaty, Atyrau, Aktobe, West-Kazakhstan, Kyzylorda, East-Kazakhstan oblasts. In regions of Kazakhstan where listeriosis was registered among the rodents it was observed also among the live stock. During 1993-2002, more than 300 patients infected with listeriosis were detected only in Almaty by the lab of zoonotic infections of M. Aikimbayev's Kazakh Science Center of Quarantine and Zoonotic Diseases (KSCQZD).

The important place of zoonoses in infectious pathology of the men and animals in Kazakhstan determines the necessity of development and improvement of diagnostic methods, introduction to practice the highly sensitive and specific immunobiological preparations in which are in critical supply for laboratory service of republic. In complex preventive measures the laboratory diagnostic is etiological basis to their conduction. In KSCQZD the development of new immunobiological preparations is carried out for the diagnostic of infectious diseases, evaluation of immunity strain and also production of preparation for the specific prophylactics of infectious diseases. In particular, optimal conditions for production technology of erythrocytic antigen diagnosticums are developed anthrax, listeria and yersinia (*Yersinia kristensenii*) diagnosticums for isolation of specific antibodies to. Their activity and specificity was studied in laboratory and field conditions.

Monitoring of biological properties of fresh isolated and museum strains of causative agents of zoonotik diseases is carried out by the

specialists of KSCQZD, their epidemic importance is determined also. Sensitivity of causative agents to antibiotics was studied, list of antibiotics recommended for using in clinics is made up, studying of activity of new antibacterial preparations is carried out.

Development of live tularemic vaccine is priority trend in tularemia prophylactics for immunization of people. It is known that vaccination by tularemic vaccine creates long and sometimes life immunity. For the prophylactics of tularemia it is preferably to use vaccines corresponding on antigen structure of causative agents which is circulated in corresponding type of focus. In connection with that and high reactogeneity of used vaccine now, searches of new variants of tularemic microbe are carried out in KSCQZD. for the using of them as vaccine strains. Work on attenuation and testing of immunogenic properties of attenuated strain of tularemic microbe of central asian subspecies as vaccine was carried out by specialists of KSCQZD.

So, development and promoting of new immunobiological preparation to practice allows to make the full idea on infection distribution and to value and make prognoses the epizootic and epidemic situation and have the necessary information for the basis of rational system of preventive measures.

New Approaches to Strengthen Health of the Population in Rural Regions of Kyrgyzstan

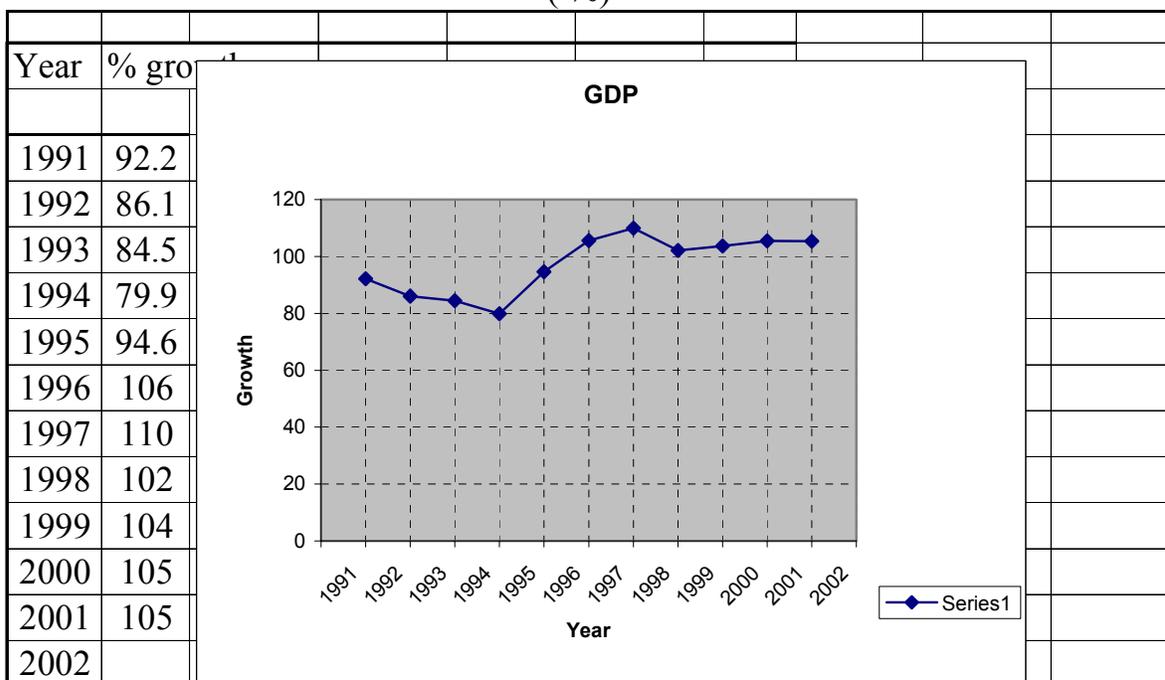
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In Kyrgyzstan, as well as in all countries with transitional economy, almost all spheres of the life have changed. Economical growth in republic managed to be reinstated, since a 1996. The rates of economic growth in republic during 1996-2001 achieved on the average 5,6 % per year, that is one of the best parameters of transitional period (Kudabaev, Ibragimov, 2002). However, 1998 financial crisis in Russia negatively reflected on development of Kyrgyz economy. GDP growth rate reached 109,9 % in 1997, but in 1998 has decreased almost by 8 % to 102,1%. In subsequent years economics began to increase, but GDP growth rates remained minor, and in 2001 a tendency of decrease was exhibited. From these data it is visible that Kyrgyz Republic, despite undertaken measures, continues to be under high financial pressure.

Table 1

Modification of GDP growth rates, 1996-2000.
(%)



Source of information: 1991-1995 - Modern stage of transition to market economy. National Human Development Report of Kyrgyz;

Life condition of population

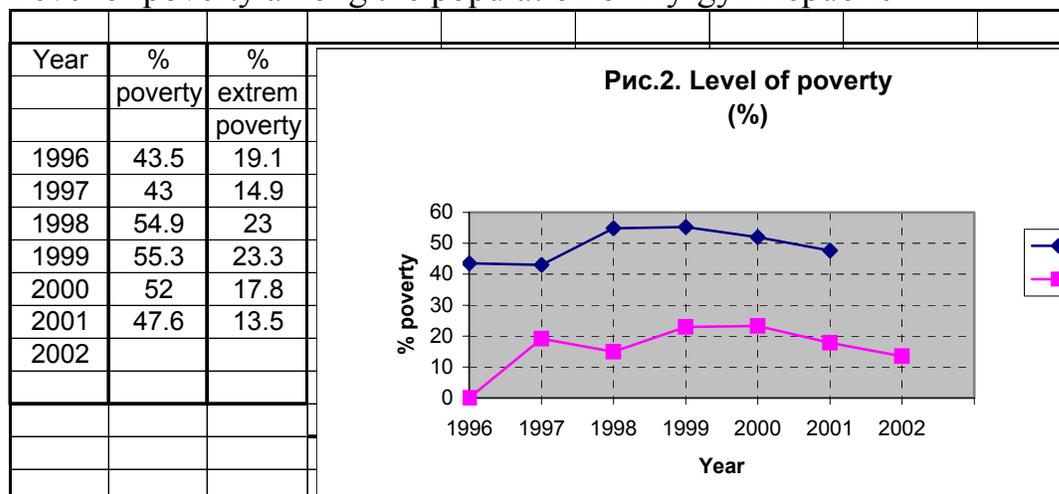
A main purpose of carried out economic reforms is improvement of life of the population. As it is evidenced from the Table 2, the population living below the line of popery, effective from 1999 is beginning to decrease. In 2001 the level of poverty has decreased down to 4,6%. Unfortunately, hardly less than half of population (47,5 %) continues to remain in a poor category, and more than 13 % of the population is behind the line of extreme poverty.

From these data it is visible, that in Kyrgyz Republic, despite the improvement of economic situation, the inequality still exists. Average expenses of the population per capita is 9560 som (2001), in the poor 47,6 % expenses are less than 4510 som. (Kudabaev, Ibragimova III., 2002), even after considering the fact that wages of civil servants and pensions were increased by 20% in 2001.

These data demonstrates that a large portion of the population of Kyrgyz Republic doesn't have opportunities to pay for health services, including dentistry. In this regard, for underpaid stratum of the population the state has to pay the expenses.

Table 2

Level of poverty among the population of Kyrgyz Republic



Social expense allowances

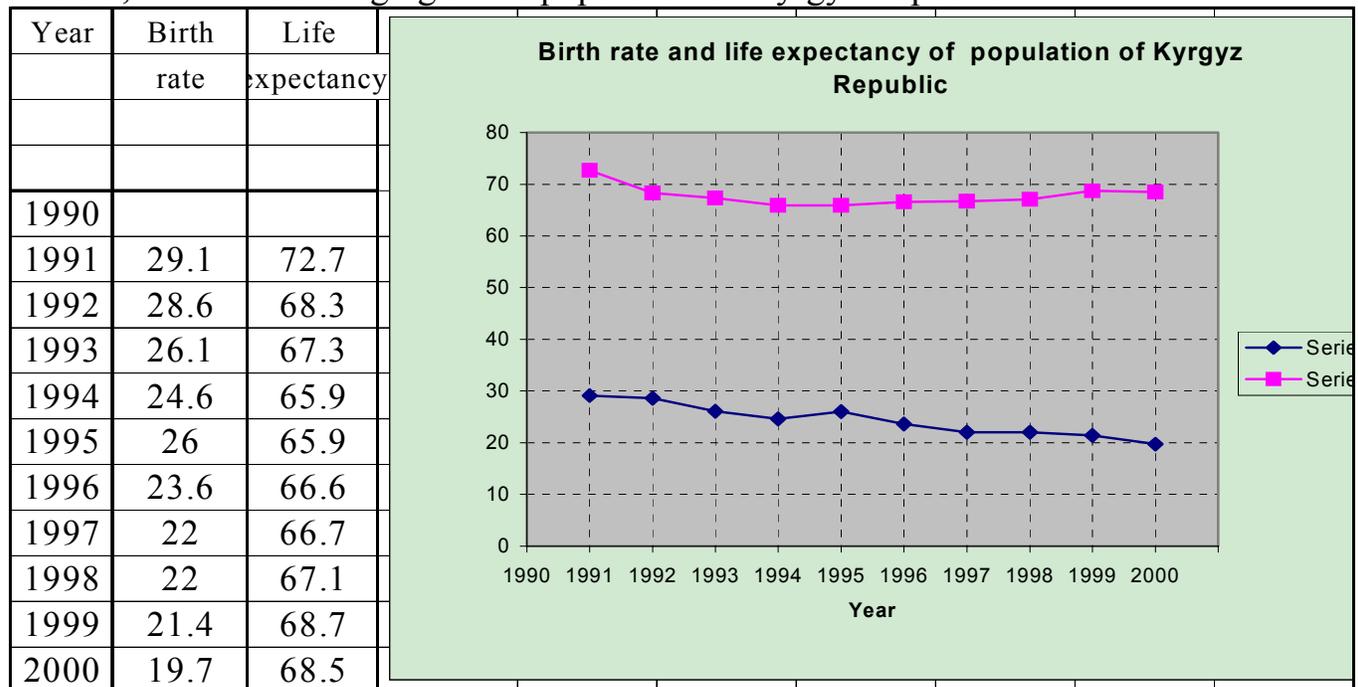
The state allowances in the country in 1999 were received by 15,6 % of the population. Those allowances constitute a portion of the income of a family around 8-11 %, and in families of the rural inhabitants - up to 23%. For example, a typical social expense allowance is sick pay (Law " On state allowances in Kyrgyz Republic " - 1998). Health services paid by a service of social insurance, in a 1993 composed 26,0 %, in 1994 -7,9 %, in 1995 - 7,9 %, in recent years practically are shown to zero.

Birth rate and aging

It is well known, that the load to dentistry services is determined by level of birth rate and rates of aging. The birth rate in Kyrgyz Republic for the last 10 years is reduced as shown in the Table 4, though continues to remain rather high (19,7 on 1000 population).

Life expectancy in Kyrgyz Republic during first years of independence was reduced almost by three years and was 65 years in 1995. For the next 5 years there is tendency of growth. Currently life expectancy in the country is 68,5 years, that almost 10 years less than in countries of European Union (Health of the population and public health services in Central Asian Republics: an information center for CAR on health).

Table 3, Birth rate and aging of the population of Kyrgyz Republic

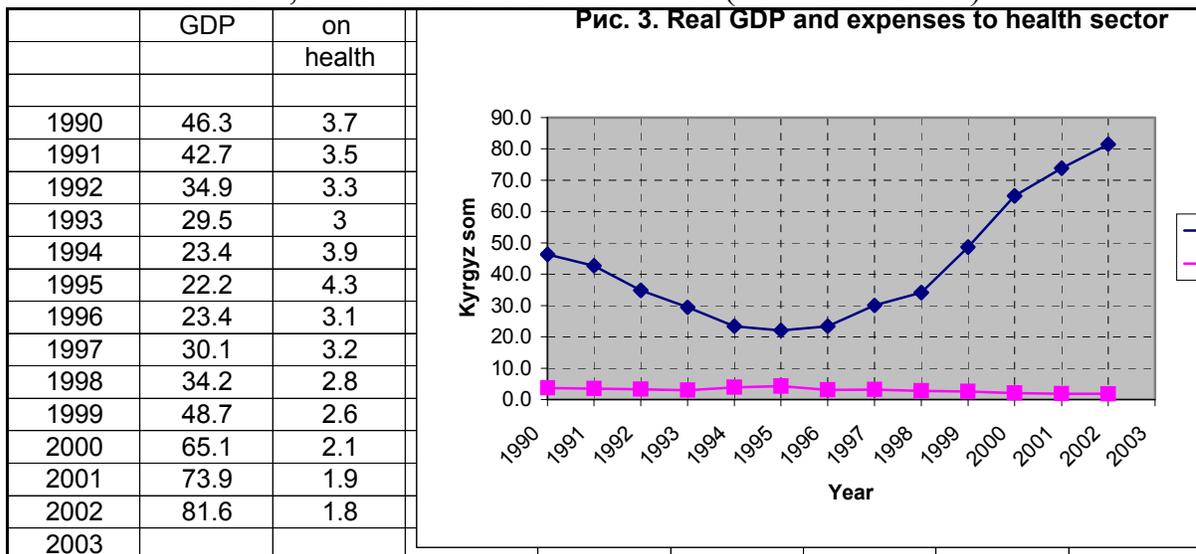


Population of Kyrgyzstan is demographically young: 38 % are children and teenagers, 53 % - adults, and about 9 % are elderly. Aging of the population is very slow. The densities of the age of 65 years is 5,0- 5,6 whereas in economically developed countries of Europe is 16 %, in Russia - 15 % (Publication of Health of the population and public health services in Central Asian Republics CAR 2002). On the basis of these data, it is possible to assume, that in Kyrgyzstan the load to dentistry services will be increased in the long term perspective, as the birth rate is reduced, and the expected duration of life is increased.

Expenses for health sector

Table 4 depicts that until year 1995 the government of Kyrgyz Republic tried to increase allocations to healthcare, despite a recession of economy. Since 1996 GDP is increasing but allocation to health sector is decreasing. For the period 1995 - 2002 allocations to health sector were reduced from 4,3 % of GPD down to 1,8%. In accordance with the international standards expenses to health sector should be no less than 6 %, because the lower level can lead to destruction of health care system.

Table 4, Allocations to health sector (in % from DGP)



Survey of health delivery

The objects of the survey were two villages with the different population and distance from the province and district centers and different capacity of the medical services.

Survey covered 432 medical facilities, consisted 119 - polyclinics, 90 - hospitals, 223 – family obstetric stations in all areas of republic, the questionnaire were answered by the chiefs of medical institutions. The outcomes and results of the survey were generated using quantitative and qualitative analysis.

Outcomes of the research

According to the survey major factors that complicate work of health facilities were as follows: firstly, insufficient supply with pharmaceuticals and consumables (84,7 % of the medical facilities), low wages of health professionals (74,8 %), irregular financing from the budget and bad material basis (66 %), lack of medical equipment (63,9 %) and computer equipment (35,4 %), lack of staff (16,9 %), insufficient provision with donor blood (16,2 %), withdrawal to the Budget of 50-percents of resources generated through fee-for-services (14,1 %), lack of mid level health service providers (9,5 %).

46,1 % of inspected healthcare facilities needs their buildings to be renovated. 52,9 % of them are Family obstetric stations, 43,7 % - polyclinic, 32,2 % - hospitals. About 4 % of buildings requires reconstruction work and 34,5 % - overhaul is required. According to the judgments of the medical chiefs, 8 buildings are subject to a drift, 2 of them – family obstetrician stations in Jalal-Abad province, 4 - family obstetrician stations in the Osh, 1- polyclinics and 1- family obstetrician stations in Talas area. Most of health facilities covered by the survey don't have basic necessities: there is no water-pipe in 27,7 % buildings of polyclinics and in 15,6 % hospitals; water drains accordingly in 35,3 %, and 31,1; a hot water-supply - in 63,0 %, 68,9 %, central heating - in 35,3 %, and 22,2 %, telephone service - in 31,1 %, and 1,4%. Especially low level of an accomplishment at family obstetrician stations: 69,5 % of them don't have water-pipes and 79,8 % - telephone service.

Attendance of out-patient clinics within the last year by their chiefs is appreciated ambiguously: in 28,9 % of establishments it increased, in 32,2 % has remained at a level of the last year and was reduced - in 38,9 %. The similar situation is marked in the hospitals: 27,6 % of the facilities have marked growth of number of the patients comparing to the previous year and 37,9 % have declared decrease, 34,5 % consider, that the situation practically was not changed.

Huge problems exist in health facilities in terms of medical equipment: 56,9 % - lack in diagnostic X-ray equipment, 51,4 % - clinical x-ray and ECG equipment, 56,7 % - photofluorographic equipment, 68,1 % - labware, 60,2 % - physiotherapy, 53 % - laser and stomatological, 50,7 % - ultrasound equipment. Even available equipment in majority of health facilities is outmoded, its service period significantly higher than the one recommended by producer. 52,8 % of inspected healthcare facilities have equipment with exceeding period of operation by 10 years and more, 29,4 % - 5-10 years, 18,1 % - 3-5 years, 8,8 % - 1 year, and only 19 % of organizations have equipment with service life that satisfies requirements. Majority of inspected healthcare facilities (88,7 %) have marked a dissatisfaction with transport, besides that 89,1 % of health facilities, which have means of transport, have indicated, that they are not supplied with fuel sufficiently. And 10,9 % of inspected healthcare facilities marked satisfactory provision by fuel, have indicated, that do it at the expense of fee-for-services - 89,7 % and budget appropriations - 17,2%.

During survey in two villages in Issyk-kul province 115 people were interviewed (87 women and 28 men), in Jalal-abad - 88 people (72 women and 16 men) between the age 18 and 50. The subjective evaluation of health condition during the last time has appeared very similar in all inspected villages. Among the reasons of aggravation of health the majority of respondents indicated unemployment, specifying that when there is a work, the state of health becomes satisfactory. Improving of health condition is connected to family income growth and improvement of well-being. This includes not only the fact that better nutrition, but also the higher morale, and hope for the future. It seems that in many respects the evaluation of health by the people reflects their physical as well as their psychological conditions.

Currently people would seek care only in case of acute necessity. If in Issyk-kul province only 58,2 % of the adults that needed care have addressed to the doctors of FGP (Family Group Practitioners), but children have this indicator much higher, which is 70,5 %, and in Jalal-abad province 71,9 and 75,0 % accordingly.

On the basis of the results of the survey main reasons of decreased care seeking behavior are as follows:

- Decreased availability of health services, especially on the part of specialized doctors (high costs of health services, lack of specialist in the neighborhood, only in regional health facilities);

- Deterioration of health services quality (lack of pharmaceuticals, low qualification of the doctors in perception of the population);
- Decreased confidence in doctors, and other reasons.

Conducted analysis of patient visits has shown that possibility of free choice of the doctor or health facility depends on a place of residence of the respondent. In two inspected remote villages of Issyk-kul in most of the cases people would go to local hospitals or Family obstetrician stations, and only 7,0 % sought care out of their residence area. At the same time, people in Jalal-aba more often leave limits of their resident area to visit a doctor in region or regional center.

According to survey data preventive behavior of the pregnant women, in general, confirms the requirements of the doctors. All respondents have marked that the observation of pregnant women influences health of the future child. It is one of few items, on which the level of knowledge does not differ from a behavior. The behavior of women during pregnancy has not differences neither on areas, and does not depend from the profession.

It is possible to mark a trend that with each consequent child the woman comes to register her pregnancy a little bit later. During the first pregnancy an average due date of statement of registration 2,5 months, during fourth - 3,1 months.

Main obstacle in establishing partnership relations between population and health system is the absence of readiness to partnership, both on the part of the population, and on the part of health professionals.

Conclusions:

1. The subjective evaluation of health condition during last times has appeared very similar in all inspected settlements. In general, majority of valuations testify that the situation with health has not become worse, and according to judgment of a quarter of respondents even was improved.
2. The preventive behavior of pregnant women satisfies requirements of the doctors. The average duration of breastfeeding is 14 -15 months. Majority of respondents are familiar with family planning methods, they know at least two methods of contraception - Intra Uterine Devices (75,4 %) and condoms (59,5 %). 8,7 % of the respondents don't know about it.
3. Main obstacle in establishing partnership relations between population and health system is the absence of readiness to partnership, both on the part of the population, and on the part of

health professionals. If efforts undertaken by the Government will be supported by population at sites, the effectiveness of health system can be reinforced in a very short time. Main advantage of such system would become orientation to constant increase of efficiency based on mutual interest of the parties and guaranteed by financial participation of the population in activities of health services.

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ROLE OF ECONOMIC MECHANISMS IN OPTIMIZATION OF HEALTH SERVICES DELIVERY

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Economic mechanisms of health management will enable rational utilization of limited resources under conditions of health system reform, improvement of health insurance, and introduction of market economy elements into healthcare system.

Following are attributes of current health status of Kyrgyz population:

- It doesn't satisfy social and economic goals of the society;
- There is discrepancy between declared human right to health protection and free of charge health services and financing that support those health services;
- Health is not on top of social priorities;
- There is a lack of economical responsibility of the society, employment, and each individual in maintaining health;
- Extensive ways of health system development still exist;
- There is no enough attention to evaluation criteria of effectiveness, quality and incentives in the health sector.

In order to study a role of economic mechanisms in health system reform there was a research study conducted by our team. The study researched day care services in outpatient clinics and hospitals, as well as home care services. The study used survey, statistical and analytical methods. Survey was conducted for 755 rural inhabitants, and 469 urban ones.

Survey demonstrated that 26.6% of men and 12.5% of women evaluated own health as good, 57.4% of men and 70.8% of women – as satisfactory, 13.1 of men and 15.1% of women – as bad. If we consider age distribution of respondents, then majority of those who evaluate their health as good is from the group of 20-29 years old (33%), bad – 40-49 years old (26.7%). Healthiest men are in the group of 15-19 years old (32.5%). Majority of men with satisfactory health condition is in the group of 40-49 years old (29.0%).

We were greatly interested in care seeking patterns of the respondents. It appeared that 75,6 % of men and 76,6 % of women seek care in local public outpatient clinic, and 3,2 % of men and 1,7 % of women go to private health facilities. We were worried about the fact that 12,2 % of male respondents and 10,7 % of female ones don't seek care and self treat themselves.

In 83,0% of men and 81,4% of women hospitalization was based on acute case, 13,7 % of men and 16,1% of women were hospitalized due to exacerbation of chronic condition.

Insufficient financing of health sector makes necessary attraction of personal resources of the patients for different needs. According to survey 85% of respondents used out of pocket resources to by pharmaceuticals and medical supplies. Advance payments in 66 cases were done in admission department: 17,6 % of respondents paid at cashier desk, and 16,4 % directly to the staff. Only 23,6 % of respondents received receipts for the full amount of payment, 54,9 % was registered in the book, and 20,8 % didn't have any document about the payment. 15,3 % of the respondents paid for hospital stay, 64,8 % of them paid to cashier desk, 13,8 % to admission department, and 20,3 % to the staff. Two thirds of the patients received a receipt for the full amount.

Health reform introduced co-payment for all types of health services, received during hospital stay.

In 2001 pilot co-payment was introduced in Chu and Issyk-Kul regions of the country. Survey demonstrated that 96,5 % of patients in Issyk-Kul and 60,6 % in Chu regions made co-payments.

Introduction of co-payment reduced under-the-table payments for health services. Two thirds of those who made co-payments didn't have any other expenses excluding food. 17.2% of respondents in Issyk-Kul region, and 59% in Chu region that made co-payment had additional expenses in terms of payment to the staff upon their request.

In other regions that didn't introduce co-payment hospitalization fees were as it is shown in the Graph 1.

There is dependence of the amount of the fee on the level of the hospital and its territorial location. It varies from 18 soms in Talass region to 309 soms in the tertiary hospitals of national level of Bishkek.

Expenses of the patients during hospital stay.

96,4 % of the patients were additionally buying pharmaceuticals, 59,7 % - medical supplies, and 71,6 % - bed sheets. 10 % of the patients had their relatives taking care of them in the hospital. It is attributable to all types of hospitals and departments, but the worse situations is in the urban hospitals. In urban hospitals percentage of the patients that had to buy pharmaceuticals and supplies is 18-20 % higher than in other hospitals. Majority of these cases happened in the general and surgery departments.

The worse situation in drug supply developed in Osh and Jalal-Abad regions, where patients had to buy pharmaceuticals themselves in 95 and 83% of cases accordingly. Graph 2 shows distribution of the patient expenses according to the type of the hospital.

Territorial distribution of the hospital per capita expenses are also different: In Talass region they made 1010 soms, in Batken– 1108, in Kssyk-Kul – 1133, in Jalal-Abad – 1265, in Naryn – 1499, in Chu – 2013, and in Bishkek – 2787 soms.

Major cost categories remain the same: food, pharmaceuticals, and salary of health professionals. Graph 3 represents distribution of patients' expenses in the hospital.

Introduction of co-payment changed general distribution of expenses? Identifying three major categories such as food, hospitalization, and pharmaceuticals. (Graph 4)

Significant changes happened in the population of Issyk-kul region, where 2/3 of the patients made advance payment for the inpatient services. There

48 % of total payment was a co-payment, 34 % - food, and 18 % - other expenses.

60 % of the hospital patients in June 2001 paid for health services officially and unofficially as gifts. Totally population paid approximately 15 millions soms. Average amount of the payment was from 258 soms in district hospital to 1000 soms in republican. 10% of the patients paid 1000-2000 soms, and 4% - 2000 - 4000 soms, and in 26 cases this amount was over 4100 soms.

Table 1. Distribution of the patient according to total payments for provided health services.

	Average payment, in soms					
	- 50	51-100	101-190	191-570	571-1140	1141 -
Total number of the patients that made payments	24,1	17,7	17,3	25,9	8,4	6,7
Distribution by regions:						
Batken	27,7	21,6	18,2	25,5	6,1	0,8
Jalal-Abad	22,2	14,8	17,3	26,8	13,5	5,2
Issyk-Kul	25,9	26,6	17,7	20,9	4,4	4,5
Naryn	37,8	23,9	14,0	15,8	5,0	3,7
Osh	27,1	16,7	18,2	24,7	10,2	3,1
Talass	20,5	15,7	24,5	33,2	5,7	0,4
Chu	23,4	16,6	16,3	27,1	5,1	11,6
Bishkek	8,1	12,6	12,2	31,5	9,9	25,7

In 80% of cases payment was made in cash, 20% paid in kind. In Talass and Naryn regions in kind payment were particularly well spread, half of the patient made in kind payments.

The most expensive are surgeons' services, they make 24% of all cases, and average amount varies from 618 soms in district hospital to 1562 soms in the republican. Every 7th patient paid more than 1890 soms. The highest fee was 14 000 soms.

In general, services of the doctor were paid by every 5th patient. Amount varies from 115 soms to 5000. In 80 cases payment was made as a gift. Services of the nurses were paid by 11,7 % of the patients, at the amount up to 100 soms, and in 42 cases payment was made in kind. Payments for diagnostic examination was made by every 5th patient, and for physical therapy by 5%. 23,3 % of patients paid for lab analysis. Some patients (15 %) made gifts to other hospital staff, these amounts usually were not exceeding 570 soms, however sometimes they reached 4800 soms.

There is a need to create a legislative basis that should answer following questions:

- How to organize efficient and resource saving health services delivery;
- How to provide priority financing to health services;
- How health technologies can efficiently be utilized and how to provide quality control.

Services that substitute inpatient ones are being implemented during last 12 years. They are represented by day care in outpatient clinics and hospitals, and home care services. Average cost of hospital day care health services constitutes 37,3 % of inpatient health services, and outpatient day care– 24,7 %.

Thus, we can make a conclusion that planning is a part of marketing process of the most efficient sections of health services provision system. It is very important to provide participation of rational purchasers of health services. Briefly a scheme of financial planning might be presented as follows:

- Calculate expected financial resources;
- Analyze volumes and framework of health services delivery, identify inefficiencies;
- Develop recommendations on the volume of services;
- Plan delivery of services by PHC;
- Develop regional and local restructuring plans, including human resources retraining and employment;
- Form territorial orders for health services delivery.

Epidemiological Characteristics of Respiratory Diseases and Asthma in Children from Southern Region of Kazakhstan

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According to official statistics of Kazakhstan, the prevalence of pulmonary diseases was 47,7% of total morbidity rate among children in 2002. Consequently this leads to great number of patients with chronic course of the disease. High level of mortality from such pathology makes this problem pressing.

The prolonged growth of allergic diseases in children leads to the fact that pulmonary diseases are often accompanied by syndrome of bronchial obstruction. This syndrome is associated with bronchial asthma and can determine potential course of disease (Linney W., 1997).

Asthma morbidity in Kazakhstan mainly was studied only within those who seek care. The rate was 1-1.3 per 1000 population in the southern part of the Republic, and 1.5-3.7 in the northern part. Asthma morbidity in city of Almaty is 1.5 per 1000 population (Imankulova T.M., 1999).

Discrepancy of epidemiological indices of asthma was connected with some factors, like the absence of united criteria of prevalence evaluation and misunderstood criteria of diagnostics (Yakushenko M.N., Kochubey A.V. and etc., 1999; Magaradze D.Sh., Sepiashvili R.I., 2000).

All epidemiological investigations in foreign countries are performed on basis of international program ISAAC (International Study of Asthma and Allergy in Childhood). The uniformity of evaluative work provides comparative data inside region, country, and also between countries. This also serves as the main data for prognosis, prevalence and severity of these diseases (Asher M.I., Anderson H.R., Stewart A.W., 1998).

The elaboration of comprehensive plan for bronchial and pulmonary diseases and asthma in children can be performed only on the basis of mass epidemiological investigations, which will allow obtaining real data on the prevalence at different ages, and its distribution based on severity. This also provides basis for determining risk-factors of disease and main reasons of late diagnostics. This is the method to develop the most optimal approaches to prevention of this pathology in children.

The aim of this research was to determine the real indicators of prevalence of chronic lung diseases and asthma among children.

Materials and Methods

The prevalence of nonspecific bronchial and pulmonary diseases among children was studied in regions of Kazakhstan: Almaty region, Taldykurgan region and Kzyl-Orda region, Aral Sea Basin and Jana-Kourgan region.

The standard method of epidemiological research was used. The examination of selected populations was performed with use of special cards for determination of pediatrics diseases and its risk-factors. The research study consisted of two stages. On the first stage mass prophylactic examination of children was performed in these regions. On second stage the clinical examination of selected patients was performed in order to diagnose and treat.

In three sections of Taldy-Kurgan region (Almaly village, Large Shygan village and 1 section in Garkent city) 3607 children, aged from 1 month to 14 years, were examined (Table 1).

Children were examined in out-patient pediatric clinics. The following examinations were performed: the clinical examination, the study of anamnesis data, and examination of external breath function by spirometry method in order to study the functional status of respiratory system.

Research Outcomes and Discussion

The distribution of children, who were involved in this examination, is presented in Table 1.

The results of research at second stage has showed, that the prevalence of chronic respiratory diseases (bronchiectasis, pneumosclerosis, congenital pathology of respiratory system, mucoviscidosis) among children, aged from 1 month to 14 years, was 6,1 per 1000 children in Taldy-Kurgan region. The prevalence of chronic pathology of lungs was 0,3 per 100 thousand of children during the period of study in this region. Thus, epidemiological study testified the discrepancy between official statistics and significant prevalence of chronic respiratory pathological among children.

Table 1.

Age and sex distribution of children participated in epidemiological study in Taldy-Kurgan region

Age	Sex				Total	
	male		Female			
	N	%	n	%	N	%
1 - 36 months	470	13,0	450	12,5	920	25,5

4 - 7 years	510	14,1	647	18,0	1157	32,1
8 - 14 years	772	21,4	758	21,0	1530	42,4
Total	1752	48,5	1855	51,5	3607	100

The similar epidemiological study was performed in 2 regions of Kzyl-Orda region.

Table 2.

Age and sex distribution of children participated in epidemiological study in Kzyl-Orda region

Age	Sex				Total	
	male		female			
	N	%	n	%	N	%
1 –36 months	372	12,3	408	13,5	780	25,8
4 - 7 years	511	16,9	542	17,9	1053	34,9
8 - 14 years	555	18,2	630	20,9	1185	39,1
Total	1438	47,6	1580	52,4	3018	100

Table 2 shows distribution of children according to their age and sex that participated in epidemiological study in Kzyl-Orda region.

2nd stage of study discovered that prevalence of chronic respiratory diseases (bronchiectasis, congenital pathology of respiratory system, Haman-Richi syndrome, pneumosclerosis) among children, aged from 1 month to 14 years was 9,1 per 1000 children in study fields of Kzyl-Orda region. According to official statistic data prevalence of chronic respiratory diseases among children in this region during the period of study was 0,4 per 1000 children. The study has shown that real prevalence of these diseases significantly exceeded official statistics.

The prevalence of asthma among children was studied according to ISAAC program which firstly considers prevalence of symptoms of disease rather than identified diagnosis.

1st stage included a study of asthma symptoms prevalence within school students of Almaty city in accordance with international ISAAC program strictly following protocol requirements. School students were divided in 2 age groups (7-8 and 13-14 years). Each group was surveyed with an ISAAC questionnaire developed for this purpose.

The study was performed in 24 schools of city simultaneously (during the period from September, 1997 till February, 1998). The screening survey

covered 3771 children divided according to their age and sex into following groups (table 3).

Table 3. Age and sex distribution of children participated in epidemiological study

Age	Sex		Total
	Male	Female	
7-8 years	819	780	1599
13-14 years	1048	1124	2172
Total	1867	1904	3771

Children were examined in randomly selected groups. The number of examined children (more than 3000) makes the study representative enough for selected group. The data was analyzed using Microsoft Access program.

2nd stage of study included deep comprehensive examination of children, who gave positive answers for questionnaire. Their number was 369. All of them had symptoms of asthma during the period 12 month before the survey, but they didn't have identified diagnosis of asthma.

Besides the clinical examination and study of anamnesis, the investigation of function of external breath by method of spirometry was performed in order to investigate the functional status of respiratory system (1st stage).

The study showed that asthma symptoms are often found. For example, 799 children of 3771 examined (21,2%) had at least one attack of heavy breathing or wheezing in their life and during 12 month before the survey. Night asthmatic attack was indicated in 142 cases.

The study didn't reveal any significant differences in a number of asthma symptoms in different age groups (Table 2). First of all, it was related to the cases of heavy breathing and wheezing registered in the anamnesis of school students during last 12 months before the survey. It is necessary to note that difference in data of recurrent asthma symptoms frequency in compared groups wasn't statistically significant. Majority of children had less than 3 attacks during the year (84,2% - 7 to 8 years, and 82,8% - in older group).

More significant difference between age groups was identified in registration of attacks during the physical exercise (21,1% in older group against 7,9% in younger one) and during the sleeping (2,7% and 5,3% accordingly). It is necessary to select the registration of isolated night cough, which wasn't connected with cold. It was observed more often in older group (12,1%) comparing to younger group (7,5%). Higher frequency of night asthma attacks in younger group was determined only due to higher detection ($P < 0,05\%$). In younger group such pathology was detected in single cases ($3,8 \pm 0,5\%$) comparing to older group ($1,8 \pm 0,3\%$). A difference wasn't statistically significant ($P > 0,05$).

Thus, based on the results of questionnaires, the presence of asthma can be assumed in 9,8% of children. Distribution of severity of asthma was as follows: light forms were registered in 83,5% of children, middle forms – 10,5%, severe forms – 6,0%.

Table 4. Asthma symptoms frequency according to ISAAC questionnaires (depending on age)

Asthma symptoms	Age of patients						Total		
	7-8 years (1599 children)			13-14 years (2172 children)			(3771 children)		
	n	%	m	n	%	m	n	%	m
Heavy breathing sometimes	345	21,6	1,0	454	20,9	0,9	799	21,2	0,7
Wheezing and heavy breathing during last 12 month	171	10,7	0,7	198	9,1	0,6	369	9,8	0,5
Frequency of attacks of heavy breathing:									
1-3	144	9,0	0,7	164	7,6	0,6	308	8,2	0,4
4-12	21	1,3	0,3	18	0,8	0,2	39	1,0	0,2
more than 12	6	0,4	0,2	16	0,7	0,2	22	0,6	0,1
Night asthma attacks during last 12 months	84	5,3*	0,6	58	2,7	0,4	142	3,8	0,3
Isolated night cough during last 12 months	120	7,5*	0,7	262	12,1	0,7	382	10,1	0,5
Heavy breathing while speaking	27	1,7	0,3	48	2,2	0,3	75	2,1	0,2

Wheezing during physical exercise	120	7,5*	0,7	458	21,1	0,9	584	15,4	0,6
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* - P < 0,05) – reliable difference between data among examined children.

If we compare these data with statistic reports of medical institutions (which report asthma prevalence during the period of study as 62,4 per 100 thousand children) we will see that official statistics registers only severe forms of asthma with frequent attacks (Table 5).

Table 5. Asthma prevalence within children according to data of epidemiological study comparing to official statistics data.

Structure of severity of asthma	The prevalence of asthma (per 10.000 children)	
	Epidemiological study	Data of official statistics
Light form	816,9	--
Middle form	103,4	--
Severe form	58,3	--
Total	978,5	6,2

The results of the study, which were obtained with use of ISAAC questionnaire, show high prevalence of asthma symptoms in both age groups and the difference in comparison with official statistics. The comparison of indicators of symptom prevalence and frequency of previously determined diagnosis of asthma, which were obtained with the help of questionnaire, testified the significant difference. There is hypodiagnosics of asthma, especially of the light forms, in healthcare institutions. 10% of schoolchildren can be included into «risk-group» of development of this pathology.

The necessity of detailed study of harmful environmental factors influence will lead to successful decision of preventive measures and early revealing of asthma among children. In our study we have performed factor analysis of children with asthma, but its results were not different from well-known factors: predisposed factors (atopia, heredity, hyperreaction), reason or sensible factors (different kinds of allergens), promoted factors (respiratory virus infections, air pollutants and etc.), complicating factors (physical exercise, meteorological conditions, odors etc.).

In summary, the epidemiological research shows that real frequency of respiratory diseases and asthma is different from official statistics. High

prevalence of such pathology among children is the reason to change preventive programs.

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Role of expertise in the process of licensing and accreditation

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Licensing and accreditation are carried out to ensure consumers' trust to the activities performed in accordance with state license, and certification of accreditation. These mechanisms effectively influence the quality of health services (1,2).

Healthcare organizations, legal entities, having expertise in various types of medical services are responsible for processes of licensing and accreditation.

For healthcare organizations, accreditation and licensing criteria is a set of requirements that should satisfy the specific steps described in the licensing and accreditation in order to be recognized as competent organization to perform the healthcare services.

If a healthcare organizations has conformed to the given requirements, state license or the certificate are issued. This decision is followed up by on site inspection control by the state body which uses a commission with experts to evaluate and conclude whether inspection results were in accordance with the criteria. In sum, delivery of the state license depends on the licenser who can test the conformity of the applicant organization and measure the qualifying requirements of the location visited. In accreditation cases, an expert commission examines all functional divisions and carries out an expert evaluation of the submitted documentation. Upon completion of accreditation evaluation, experts present a report with a detailed statement of specific measures for the inspected healthcare organization, and their recommendations on how to correct revealed discrepancies to accreditation standards.

Acknowledgement of conformity for qualifying requirements and professional standards documented in resulting certificate, which gives confidence to consumers the process or service corresponds to established requirements.

Process of expertise evaluation consists of examining the structure, technology and outcomes of healthcare performance. There are three general measurement approaches within a system of health services quality and efficiency assessment: structural, professional and qualitative.

Structural approach is most used approach in licensing and accreditation of healthcare organizations. This approach includes evaluation

of management, medicines, materials and equipment, and whether health professionals provide high-quality health services. Structural approach is considered in the analysis of the factors influencing a choice of medical technologies, like resources availability, condition of patient, organizational forms, etc.

Thus, licensing expertise includes evaluation of:

- Conformity of an organization that provides health related activities to requirements of regulating statutory acts;
- Level of professional training of physicians and nurses, staff availability according to a staff schedule, adequacy of work status and specializations;
- Conformity of industrial premises to requirements of sanitary and architectural norms and regulations, fire safety, labour safety;
- Level of conformity of special equipment, techniques, toolkit, the equipment, special clothes, means for maintenance and observance of conditions of their storage according to legislation of the Republic of Kazakhstan;
- Availability of medications for providing urgent medical care according to list approved by the authorized body of Kazakhstan responsible for health protection of population;

We analyzed rejected documents submitted for licensing at the level of the Ministry of Health (MOH) of the Republic of Kazakhstan during the period of 2002. Licensing Department of MOH issued state licenses for 6492 legal entities, including 1758 licenses for manufacturing, processing and wholesales of disinfections, desinsection, deratization substances, as well as activities involving its utilization; 4069 - for pharmaceutical activities, and 665 for activities related to narcotics turnover. In average about 36 % of license applications were rejected.

Decision to reject a license for health related activities was based on expert conclusions. Following are criteria of rejection:

- Discrepancy of buildings and premises to requirements of sanitary and architecture regulations and norms, meeting the requirements of fire safety and labour safety;
- Absence of the necessary medical facilities and equipment;
- Insufficient quantity of medical toolkit;

- Understaffed for experts and nurses;
- Discrepancy of health professional training requirements;

Additionally, experts who evaluate healthcare organization conformity to standards of accreditation, in addition to above-mentioned criteria, should evaluate correctness of medical technologies choice, and observance of the chosen requirements while providing health services. It is also necessary to take into account the level of maintenance and quality assurance of treatment and a degree of patient satisfaction.

Experts should make a conclusion on completeness and timeliness of diagnostic, clinical, and preventive activities, including rehabilitation.

Experts are responsible for conformity of performance of medical technology for the licensed activity.

Thus, utilization of a system of decision-making criteria for developing uniform approaches to issue or reject a license for health related activities is the first step in the area of licensing standardization.

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Healthcare Financing in Kazakhstan: Current Issues and Future Prospects

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Healthcare is one of most important sphere of economics, because good health of the nation determines economical growth. During last years the Kazakhstan healthcare system has undergone significant changes. While the country transformed to a market based economy, a new health economics system has been established.

Since declaration of independence, the health system of Kazakhstan has been in decline, and it is directly linked with economic conditions of the country. The economical crisis caused sharp decrease of health sector financing from the state budget.

World practice shows that there are four main sources for health financing: *general tax, social insurance, private voluntary insurance, and out of pocket payments*. Most of the countries are based on mix of all four sources. Republic of Kazakhstan was classified as country with mixed sources from 1996 to 1998.

In 1996, system of Mandatory Health Insurance Fund (MHIF) was introduced. Unfortunately because of political decisions, this system ceased to exist in 1998. The role of MHIF as a driving force for reforms was limited by its dependence on local administrations for financing and lacked power for large-scale changes, as well as by chronic insufficient financing that put MHIF to the position of debtor against healthcare facilities. Moreover, MHIF lacked opportunities to initiate rationalization of service delivery system because of weakened position of local health administrators.

Despite existing limitations MHIF system started changing roles and relations between government, providers and patients within healthcare system. Innovative provider payment systems, computerized information systems, quality provision systems were mainly promoted by MHIF efforts, with less efforts from Ministry of Health (MOH) within the period of 1995-1998. Using its status of non-budgetary fund, MHIF raised issues on accumulation of resources and non-line item financing. Kazakhstan. MHIF revived the healthcare system and opened discussion about splitting purchasing and providing functions. As a driving force of health reforms MHIF was playing an important role in health sector development.

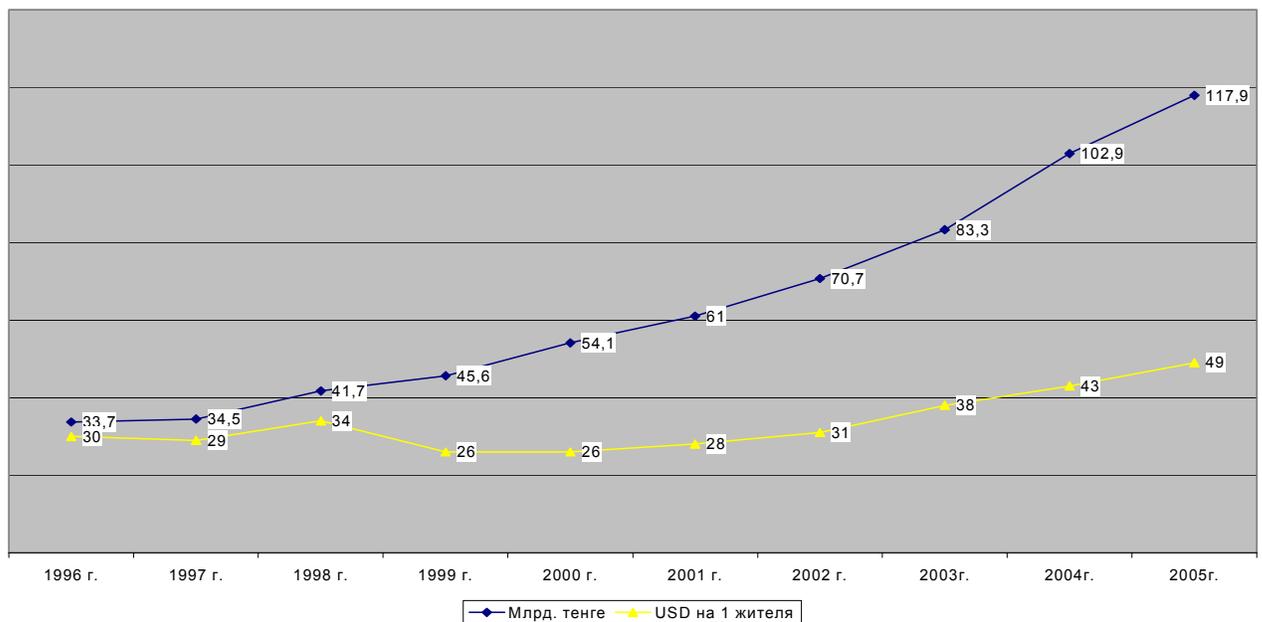
During a period of MHIF existence, the state budget financing still existed. Ministry of Finance (MOF) provided financing of the guaranteed volume of health services via MOH. This volume was revised several times

during three year existence of MHIF trying to find out relations between two programs. As a result, health care facilities that were paid according to fixed line item budget suffered the most, because total volume of financing was reduced.

Development of voluntary private health insurance is at its initial stage in Kazakhstan. Population can't afford to pay services extra to the free of charge guaranteed volume of health services. Fee for services approved by authorized bodies are identified for expensive health services that are not fully accessible to the population, and their weight in health system financing is no more than 5-6%.

Currently major source of financing is the state budget. Unfortunately current allocations to health sector do not reflect its real needs. They are determined by economical possibilities of the country. The dynamics health expenditures in real terms, as well as per capita (in US\$), portrays an increasing trend starting form 1996. It means that there is a stable growth of budget resources allocated for healthcare.

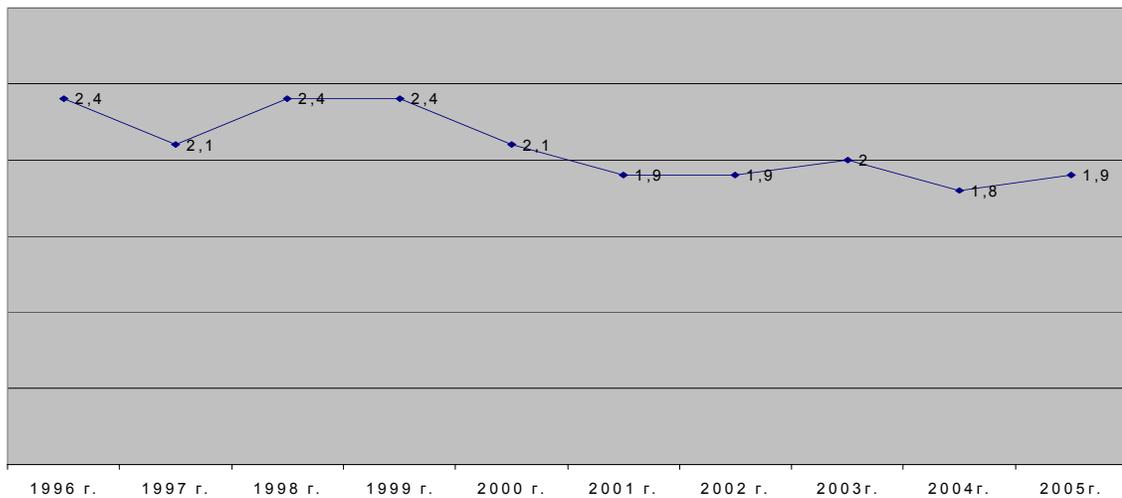
Health expenditures in the Republic of Kazakhstan



Government of the Republic of Kazakhstan decided that health expenditures should be increased by 40 billion KZT during the period of 2003 – 2005. This money will be used for balancing guaranteed volume of free of charge health services. However it will not influence on financing levels in terms of portion of GDP (graph).

As any other country in transition, Kazakhstan has significant gap between available resources and expenditures that effects functioning of existing system which suppose to satisfy both patients and health professionals. A key problem in our country is a gap between guaranteed free of charge volume of health services and its financial support. For example, in East Kazakhstan Region health expenditures covered just 61,4 % of needs in 2002. Total health expenditures per capita were 26.96 USD (4173 KZT), including allocation for free of charge guaranteed volume of 22.4 USD (3464 KZT). This is a growth of 14% compared to 2001. In 2003 health expenditures per capita planned as 31.56 USD (5081 KZT), including 25.43 USD (4094 KZT) for guaranteed volume, that is higher than previous year by 21%.

Healthcare financing as a portion of GDP



Deficit of public financing is covered by personal out of pocket payment of the patients.

One of the current issues is decentralization of the budget at the level of oblast. At oblast level there is no full independence of the budgets at different levels of government. The schemes of vertical and horizontal financing had not worked out. The decentralization of financial flows led to high administrative costs, difficulties in managing a system, limited access of the patients, unequal opportunities for health facilities, and irrational distribution of resources. This raises an urgent need in consolidation of healthcare budget at oblast level.

This also presents an opportunity to manage healthcare resources independently and efficiently while redistribute them according to priorities and use them rationally, as well as to have unified administrative and

methodological activities, create unified system for planning, and financing via balancing tariffs.

However there are some negative aspects of consolidation such as responsibility of local executive authorities and independent decisions in operational situations. Another problem is existence of a variety of budgetary programs that do not have unified tariff, not motivating resource saving and limit redistribution of resources between the programs. In order to solve this problem, there is a need to consolidate healthcare budget vertically, which means joining budget programs under one budget classification in healthcare. This will allow reallocation operational healthcare resources and will create conditions for implementation of effective financing mechanisms. It will also be possible to set unified basic tariffs for financing and health services delivery to population, which in turn will expand competitive environment and introduce resource saving technologies. Generally, it will provide fairness of resource allocation and will improve access to health services out of residential area, which means principle of free choice and “money follow the patient”.

Based on current situation in Kazakhstan there are two approaches:

Guaranteed volume should be reduced by the amount of budget deficit, or it's financing should be increased by the same amount. In order to achieve this, the health system model should be based on general tax and social insurance.

Identification of health financing level should be transparent and standardized. Continuous process of monitoring and quality management improvement system should be established, and satisfy international requirements, norms and standards.

Most optimal approaches are:

- 1) Implementation of state mandatory health insurance system,
- 2) Identification of minimum guarantees of the Government on free of charge health services provision to the population,
- 3) Development of other financing mechanisms,
- 4) Implementation of effective resource allocation,
- 5) Solving a problem of limited resources,
- 6) Staged planning of health system development,
- 7) Integration of health policy into general socio economical policy,
- 8) Efficient health services delivery system,
- 9) Implementation of resource reinvesting mechanism within a sector,
- 10) Legislatively set percent of local budget income (or per capita tariff) allocated to health. It will allow implement internal reserves of

economy and protect health sector from despotism of a number of local executive authorities,

11) Implement legislatively consolidation of the healthcare budget and budget programs.

Health system development will be implemented under correct planning, effective resource allocation and knowledgeable health services management.

General Practice and its Implementation in Healthcare System.

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One of the priority areas of healthcare reform is changing Primary Health Care (PHC). It is very important to consider all strengths and weaknesses of existing PHC system while transferring to PHC provision by autonomous or independent GPs, that became a justification for selecting an Institute of General Practice to be implemented to healthcare system.

Goal of this article is to discuss GP practice implementation mechanisms in Ili district of Almaty oblast.

Literature data and personal experience gained in Ili district pilot show that GP activities are based on long-term health service provided to healthy and ill patients, despite their age and gender paying attention to comprehensive study of individuals and their family and social environment, considering clinical, psychological and social aspects of ill health.

There is no doubt that GP faces diseases related to different specialties/ That is why GP should know how to combine elements of these specialties in his/hers reasoning. However, specialty of GP is something different, comprehensive, i.e. somatic, mental, and socially cultural service to people both healthy and ill, for whom GP is a point of primary contact with healthcare system.

General medicine provides continuous service to healthy and ill patients using wide, but not deep knowledge. Moreover, GP competences also include lots of non-clinical problems of patients.

Healthcare system of Kazakhstan possesses a wide network of polyclinics that can be used at every stage of General Practice service development. In majority they belong to municipalities and a problem of placing there GPs should be resolved at local authority levels.

Decentralization reform can be conducted only under appropriate legal framework. Before that GP can have a status of legal entity that will let him/her to be organizationally independent and have bank account. At the same time GP can work at state owned healthcare facility and have direct relations with health insurance organizations having these relations legally identified by a contract. Currently privatization of PHC facilities is prohibited by the Law, and GP can't privatize a part of polyclinic that functions as general practice service.

Local authorities lend polyclinic facilities to GPs and it solves organizational problem of their independence in their practice. GP need physical autonomy, separate office space for each doctor. Under the conditions of outpatient clinic 2-3 doctors can unit in one of the polyclinic sections having common facilities, like waiting room, reception, room for staff, bathrooms. Doctors themselves determine internal relations. They should have contract relations with polyclinic administration or local authority if a part of polyclinic is alienated for general practice service. Later an issue of privatizing of this part of a polyclinic with equipment can be resolved. Placing GP service inside polyclinic enables keeping potential of diagnostic and clinical equipment that will significantly support a GP that starts independent practice.

Implementation of this scheme will be bothered by wide spread opinion that there is no need to hurry with changes in a familiar and well functioning system of polyclinic. Chief doctors of the polyclinic might also argue that there is no need to split integral healthcare facility, even though some sections of polyclinics are transferred to commercial entities. That's why it is a responsibility of local authorities to decide how fast PHC should be transformed into GP service.

Polyclinic is a point of first contact with healthcare system for patients. It has lots of functions of providing qualified and specialized health services. These functions after transformation of polyclinic into GP/FP will be slightly changed. GP will perform major volume of PHC services, rest polyclinic department will have to satisfy population needs in additional diagnostic examinations, conduction of a number pf preventive measures, rehabilitation care as well as consulting.

During transition of entire polyclinic to GP/FP its departments might be abolished. However functions and staff schedule of para-clinic facilities will not be drastically changed. Increasing volume of PHC services will reduce loading of the specialist doctors. It should bring to reduction of a number of specialists and transfer of their functions to diagnostic center or inpatient facilities.

In a GP/FP development process GP will be needing consultations of higher levels, and released polyclinic facilities can be used for these purposes. It is important that only most qualified specialists would be selected as consultants to GP, not those specialists that worked in that polyclinic before. Released specialists will be retrained as General Practitioners, specialist consultants to group practices. Remaining facilities of the polyclinic can be used for joint renting (reception, clinical diagnostic divisions, etc). Moreover, released facilities can be lent to healthcare

organizations that provide day care, long-term care, rehabilitation care services.

Evaluating Effectiveness of the Health Care Reform in Tajikistan

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After gaining independence in 1991, the Republic of Tajikistan has headed towards the radical social-economic reforms in all spheres. Transition from the centrally planned economy to market relations turned out to be the most difficult due to the need to rehabilitate the economy that has suffered from the Civil War. Political and social-economic instability in the country, fluctuation of the national currency, negative demographic processes have affected the health of the people.

This resulted in the drastic decline of major performance indicators, particularly in poor health care situation as compared against other average income countries. In particular, negative trends in the health care system itself, were due to such important factors as the lack of the development concept in real conditions, financial constraints, poor planning and management, strengthening structural disproportions, lack of medical personnel training, as well as funding based on a residual principle (1).

Climatic and geographic factors (hypoxia, high temperatures) as well as man-made factors (pesticides, mineral fertilizers and industrial waste) affected the health of Tajikistan population. By all means, such factors as inadequate financing, irrational use of available resources, lack of regulatory framework to meet the new economic conditions, lack of developed data bases, reduced medical and sanitary aid to the population, high turnover of healthcare workers determined the need for the healthcare sector reform. It is therefore extremely vital to restructure the healthcare workers training system (2).

Currently most CIS and non CIS states have embarked upon or continue the healthcare sector reform in order to decrease costs, improve quality and broaden the range of services. To achieve this, we should give more attention to various organizational activities geared towards

optimization of the physical infrastructure, creation of data bases and incentives for personnel, which link their salaries to performance.

From the viewpoint of standard measures, reforms in the sector started back in 1993 through its restructuring and the intention to improve healthcare delivery for the poor in the primary healthcare. The idea was to make a transition from the budgetary norms system to redistribution of resources in favor of primary healthcare, to eliminate monopoly as well as to improve human resources policy and medical training (3).

The main activities by the Ministry of Healthcare (MoH), including restructuring the number of beds and introduction of family doctors institute, were reflected in the 1996 “Program of healthcare reform in Tajikistan until 2001”

One year later the National strategy of the Republic of Tajikistan on healthcare until 2005 was developed. This was based on the structural approach to problem analysis with an indication of its objectives and priorities. Disease prevention and interagency cooperation were declared to be of highest priority. However, by 2002 this document was annulled as the one that did not meet the current needs, and a new Healthcare Strategy until 2010 was developed to take into account the new WHO objectives on Health for All in the 21st century (4).

In the years of independence the Republic of Tajikistan has substantially expanded its international ties and cooperation with international governmental and non governmental organizations, such as WHO, UNICEF, USAID, UNFPA, MSF, etc. They assisted in improving clinical and epidemiological diagnosis, stabilizing infectious disease incidence and eliminating their outbreaks, stabilizing socially significant diseases incidence, as well as provided a major contribution in the healthcare sector reform.

International organizations were involved in the development of dozens of national and sector programs to prevent and stop tuberculosis, iodine-deficiency, diarrhea, tropical diseases, sexually transmitted diseases (STD), hepatitis B, iron-deficiency anemia, including reproductive health and reproductive rights programs, etc. All of them contribute to improving the health status of the population and envisage standard approaches to prevention and treatment.

The significance of the adopted programs cannot be underestimated. The goals and objectives of the above programs are compatible with the international practices, which helps to receive funding by international organizations and donor countries. However the implementation of the programs is not efficient and doesn't meet the expectations.

Once priorities were identified, the primary care reform started through pilot projects in 5 areas (Bokhtarskiy, Dangarinskiy, Varzobskiy, Leninskiy and Kulyabskiy). In Dangarinsky and Varzobskiy raions the project is funded by World Bank loan, in the others funding came from the joint WHO and MOH project, supported by the European Community Humanitarian Office (ECHO).

Later when this experiment proves effective the reform can be launched all over the country.

Despite the measures taken healthcare sector failed to improve activity of medical treatment and prophylaxis facilities in new economic conditions. Moreover access to medical services reduced for poor sections of the population by dozens.

So it is impossible for the healthcare sector surviving crisis to deliver medical services to 2-2.5 million citizens of the country.

The poverty that the republic faces now covered more than 80% of the population mainly in rural parts of the country. That accounts for poor health of the population. Thus incidence of respiratory and acute intestinal diseases (including dysentery, typhoid, virus hepatitis), parasite diseases like malaria), TB, anthrax, STDs and some others. Anyway according to sociology surveys 2001 medical services are accessible 22.5 raions of in Sogdiyskaya oblast, in 20 raions reportable to the central government and to 57% of the population in Hatylon oblast.

Basically that as the result of mismanagement and incorrect decisions due to lack of actual data on health status of the population, operation of medical facilities that disregarded amounts of funds allocated for development of different medical services. The sector reform prolonged for years due to doubtful recommendations and models that didn't respect regional features and current economy situation. The damage inflicted to the healthcare sector is considerable. All that deteriorated access to qualitative medical services making it nearly impossible for the most part of the population.

Mostly basic medical and demography data are available. It is clear that the sector has to be taken out of the crisis. First of all that regards the role of the first medical aid service which is one of the critical in the country.

First medical aid service should become the basis of the entire healthcare sector since 74% of the population reside in rural parts of the country. The second and the tertiary medical aid are supplementary components of the service.

Today only 16% of total government spending on education is allocated to first medical aid facilities. Epidemiology stations are funded twice as less.

That's why various centers were established to support First medical aid service which are funded by the state budget, international and non-government organizations.

Structural changes, financial and technical assistance are supposed to improve activity of medical facilities in rural parts of the country.

Management structure of the healthcare sector have been reorganized several times. That was implemented without any detailed study of the problem, situation and forecast. Such approach that used doubtful and not true information failed to provide implementation of numerous programs directed at the population health strengthening and did not facilitated achievement of the healthcare reform objectives.

In conditions of insufficient provision of the sector investments are not used efficiently.

The previous orientation to public healthcare excluding development of other medical assistance services failed to provide proper operation of the sector.

It also should be noted that rural healthcare workers face lack of information, scientific literature, methodology recommendations, and have difficulties to be retrained. Thus only 19% of doctors, 5.4% of paramedics and pharmacists have qualification categories. For the last 5 years only 8,5% of doctors and paramedics have been retrained in medical retraining institutions.

These indicators are lower for first medical aid service due to reluctance of the Healthcare Ministry regarding organization of regular field cycles and payment for finishing retraining courses under the Tajik Institute of Medical Workers Postgraduate Training.

Such facts that 70% of children have post-natal injuries, intrauterine suffocation and hypoxia point out low qualification of the specialists. 49,6% of infants died at home 77,2% of them could avoid lethality. It was found out that 39% of newborns with insufficient weight (up to 2500 gram) didn't receive proper reanimation services (5). Despite the developed network of gynecology institutions the number of births at home is growing year by year. In 2000 42,1 children were born at home. Lack of proper patronage and poor registration are considerable part of children have not been vaccinated against dangerous diseases including TB. That was not done properly even in the capital of the country where not more than 50.7% of

kids have to be vaccinated (6). Infant and maternity death rates increased during last years. Actual rates exceed the official statistics by few times (7).

Long-term policy of the healthcare is supposed to assist establishment of new structures and revise normative and legal acts, design mechanisms of individual patient funding, enhancement of access to medical services for the population according to recently adopted concept of the Healthcare reform up to 2010.

Conclusions

1. Social and economic instability and deterioration of the population health necessitated the healthcare sector reform in 1993.

2. Numerous diseases prophylaxis and control programs have been designed at national and oblast level according to the identified priorities.

3. Low efficiency of the programs implementation funded by international donors failed to attain the primary goal – development of the first aid medical service.

4. The healthcare sector crisis have to studied and ways to get out of it are to be found.

SUMMARY

The necessity of the sector reform and its efficiency are being assessed. Many programs have been designed in accordance with international practice. Insufficient human resources and inadequate financing, poor information provision and low quality of some events resulted in poor efficiency.

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Healthcare For All in Tajikistan: Some Aspects of the Problem

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Transition to market economy and implementation of social and economic reforms, instability of the national currency and other negative processes impacted the poverty profile and nature including the health status and epidemiological indicators.

The transition is characterized by downturn, decrease in jobs, unemployment. In 2000 the rate of the unemployment accounted for 2.7%. Idle facilities resulted in growth of incomplete employment whereas the hidden unemployment rate makes up 11-15% and up to 30% when seasonal jobs have less demand. In our country poverty is typical for rural areas and covers more than 80% of rural inhabitants. Rural poverty accounts for poor health of the residents (1,2).

Tajikistan is one of the poorest countries in the world. Its human development index is one of the lowest. According to UNDP the country is number 112 on the list of 174 states that includes Central Asia as well (1.3).

At the same time little attention was paid to first medical aid. Thus, expense on medical facilities amounted to 2% of the government total spending on healthcare. Funding of rural ambulance stations was next to nothing. Moreover during some years local expenses on disinfection stations, healthcare centers and medical education was not planned at all. That resulted in self-treatment or unconventional treatment of more than 50% of the population. Over 30% of them consider medical services inaccessible due to their expensiveness. Insolvency of the most population deprives them of medical services. It should be noted that the number of first aid medical workers reduced.

Considerable unemployment and economic status of many children families aggravated deteriorating health condition of its members, first of all

that regards children and women who compose the majority of the population. This category of the population, disabled persons, old ones need additional social protection. They suffer more than other residents due to current trend of medical services' expensiveness.

Thus up to 60% of poor women consider payment for hospital to be a problem. Patients have to pay for everything: examination, consultations, medicines and care. People apply to medical facilities more and more seldom though many children need medical treatment of acute respiratory and intestinal diseases.

Real market cost of medical treatment and medicines is rather high for the most population and budgetary allocations for medical services have not been increased. Improvement of medical services requires considerable investments. In 2001 the government allocated 3.44 somoni per year.

Low salary of medical workers is evident. Sometimes they are forced to demand payment for their services what creates a problem of accessibility to medical services. So common poverty reduction strategy should include health component as well. In this aspect control of infectious and iodine deficiency diseases as well as infant and maternal death rates, family planning, reproductive health and accessibility of first medical aid are of primary importance.

In 80% of all cases poor groups of population need this aspect in particular. It is necessary to upgrade knowledge and skills of medical workers as well as the quality of the services.

Anyway rural first medical aid facilities are not able to perform their functions. Particularly more than 50% of them do not comply with official medical norms. Their medical staff is 2-3 times less than in urban areas. It should be noted that only 28% of government spending on hospitals is allocated for first medical aid facilities (4).

First medical aid should be the core of the entire healthcare system since 74% of the population reside in rural parts of the country. Secondary and tertiary medical services are supposed to be its supplementary components.

Health status of the population and development of young generation include such aspect as nutrition. 47% of the population suffer from malnutrition. Some children have developmental problems due to malnutrition (5).

34.4% of the children (i.e. every third one) aged 0-4 are shorter than their contemporaries. During 1990-1999 consumption of meat and dairy products reduced by 3.3 times, consumption of eggs decreased by 9 times so the proportion of carbohydrates in nutrition of families amounts to over

70%. Only 20% of the population consume iodined salt, 80% of the people suffer from iodine deficiency. As it is known iodine deficiency accounts for mental problems.

In 2000 the population was provided with drinking water from centralized sources by 46% (by 87% in urban areas and by 35% in rural parts accordingly). Almost 40% of the population take water from surface reservoirs and only 8% had access to sewage (5.7). So all that accounts for such acute intestinal diseases as diarrhea, dysentery, typhoid, virus hepatitis and some others.

Anyway during last decade prophylaxis direction in medicine has been declining. Such facilities of the sector as epidemics stations, scientific divisions, medical education houses were shut down as unnecessary ones.

Accordingly the number of healthcare workers engaged in prophylaxis of infectious and non-infectious diseases and counter-epidemics surveillance reduced. That regards current and prevention epidemics surveillance in particular.

Presently the population has limited access to medicines due to the high prices in private drugstores. The demand in such supplies haven't been studied properly since there is no actual picture of diseases nature. At the same time healthcare workers are preoccupied with insufficient supply of medicines against TB, oncological and endocrinological diseases and anaesthesia.

Healthcare restructure programs are supported by international, governmental organizations and NGOs. Anyway the government spending on education is decreasing from year to year. The allocations are used improperly and that impedes to provide population with efficient and accessible medical services. The third level of medical services is hardly accessible to poor sections of the population since they can't afford it and therefore postpone their visits to doctor jeopardizing their health.

Correction of the mistakes made during the reform implementation might result in creation of optimal conditions to avail poor sections of the population of medical services. In line with this broad access to standard medical services should be the primary goal of the healthcare. Achievement of this goal is conditioned by economic development of the state what will require complete understanding of basic regularities of poverty expansion, its differences between urban and rural areas.

Poverty reduction process can be more efficient if we use knowledge and experience of various sections of the society including vulnerable ones and women.

Strategy and design of programs directed at poverty reduction is an internal business of the country itself. Anyway quality of such programs and strategies identify terms of funds allocated by the World Bank and the International Monetary Fund for development of all economic sectors including healthcare the priority of which is to preserve and improve healthcare of poor sections of the population.

Another important aspect is identification of diseases causes and design of measures to decrease their incidence, improvement of planning and disbursement of budgetary allocations between healthcare services, healthcare workers retraining, extension of training programs and courses on family medicine in education institutions of the sector.

Additional sources to fund promotion of healthy life style can be generated by increase of taxes on such goods as tobacco and alcohol which cause damage to health as well as by patient's payment for the services and medicines based on legal system as well as by funds of insurance companies in future.

New approaches to solve issues of medical services delivery, its efficiency enhancement provide organization of the healthcare first level according to the principal of family doctor who is authorized to deliver medical services to patients regardless their age, gender or incomes.

Thus today the healthcare of Tajikistan is not able to solve its medical problems and assist achievement of sustainable development without support from international organizations and donors.

Conclusions

1. Most population of Tajikistan can be regarded as poorest, socially unprotected sections who need their healthcare improvement via efficient development of the healthcare first link.

2. Increase of budget allocations on healthcare and enhancement of their targeted use are critical measures of poverty reduction activity.

3. Implementation of family medicine via treatment and prophylaxis facilities require to seek additional sources of finance, adequate human and material resources management.

SUMMARY

The paper points out the weakness of the material base and human resources of the first medical services required by most population of the country. We note poor budgetary allocations disbursement in the country during the transition. The healthcare should focus its efforts on achievement of broad access to standard medical services for the population via efficient use of available resources.

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REVIEWS

Male supermortality: myth or reality (Abstract)

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Report presented is dedicated to revelation of supposed “male supermortality” phenomenon (MS) in Kazakhstan based on statistical data of 2000 year, and if that occurs, its causes studying. Author has calculated crude mortality rates of male and female parts of population and then their difference validity was stated. Further calculations and comparison of age-specific mortality rates of males and females were completed. Besides, the age structure of both subpopulations was defined.

Gaining the aim of mortality levels comparison the adjustment by direct and indirect methods was implemented, the appropriate indices (standardized rates and standardized mortality ratio) were calculated. Author has computed and compared proportionate mortality rates for male and female parts of population. To define a causes of relatively high level of male mortality the adjustment of disease-specific rates was completed. Also, the relative risk values of death for male persons were calculated. As a result, some groups of death causes, which have many-time exceeding of male mortality level were marked out. Furthermore, author has distinguished the main cause groups formed the revealed difference between crude mortality rates of male and female parts of population.