



HEALTH STATUS AND MAIN DEMOGRAPHIC TRENDS OF GEORGIAN POPULATION

Over recent years the situation in the health status of the Georgian population has been so complex and unprecedented that it provoked quite reasonable concern not only on the part of national health workers and medical scientists, but also on the part of state institutions and the broad public.

Indeed, during the short space of time, the birth-rate as compared with the sufficiently satisfactory levels of the previous years has dropped twofold and henceforth practically preserved this rate without changes.

During the same period of time, mortality increased by 1.5 times and also remained without significant changes. The natural increase of the population has been developing in the opposite direction, and for the first time during the entire post-war history the state of the depopulation was registered (Fig.1). It should be stressed that population losses through the natural decrease are aggravated by the dramatic rise in flows of external emigration to foreign countries and, first of all, to Turkey, Ukraine, Belorussia, Israel, Germany, United States of America. Everything this places the problem of medico-demographic processes on the level of national security.

The drop in the birth-rate and the rise in mortality were registered everywhere, but particularly low levels of births were registered in the North-Western, Central and South- Eastern regions of the country. For example, over recent years in regions Racha, Kakheti, Imereti on the average, three cases of death were registered systematically per one case of births, and in another 11 regions the number of deaths persistently exceeds the number of births in 2.5 times (see Figure 1).

One should take into consideration that these changes were connected not only with the crisis phenomena in the national economy and social and political life of the country in the nineties, as it is often customary to think, but also with the long-term tendencies of population processes which happened to occur during that period of time in the history of our country. Among these population processes one should include the consequences of losses suffered by our country in the course of the two world wars and the civil war (1991-1992), the movement of the country and its separate regions along the general historical way towards a modern method of human reproduction which to a certain extent was overcome by all developed countries. Its main point lies in achieving a stable and invariable size and structure of population through a consistent reduction and approximation of birth and mortality indicators with their final stabilization at the level of their dynamic balance or simple reproduction.

The dynamics of the birth-rate, mortality and natural increase of the Georgian population corresponds to a classical scheme under which the processes of transition to a modern method of human reproduction in the countries of Europe have been developing. At the same time, it is evident that the present socio-economic crisis in our country has affected the relatively smooth development of population processes.

It must be admitted that problems in population's health emerged not only during the last decade. Facts evidencing the ill-being began to show up already at the beginning of the 1970's.

In the dynamics of the natural movement of the Georgian population, special importance is attached to the period between 1940's and 1960's when against the drop in births a swift 1/3 reduction of mortality rates were registered with reaching its most satisfactory indicators - 7.4 per 1000 population in 1960.

The reduction of mortality was most dramatic during 1940-1950's when its indices experienced exactly a two-fold decrease: from 20.5 per 1000 population to 10.1 accordingly, which might be explained by a substantial decline in the share of infectious and parasitic diseases as causes of death with shifting them from the first rank place in the mortality pattern to the sixth level as the consequence of the wide application of sulfanilamide's, antibiotics, immunotherapy and immune prophylaxis. Almost three-fold reduction of mortality during this period resulted in the unprecedented rise in life expectancy by almost 25 years: from 42.9 years in 1939 to 68.7 in 1961, including from 43.9 to 63.7 years in men and from 46.6 to 72.3 in women.

However, it was possible to avoid the further catastrophic decline in birth-rate during 1970's-1980's, and the demographic behavior of women was found to be broken by measures of incentive nature in 1980's when the next childbirth was accompanied by new bonuses and the reproductive plans were realized earlier than it was projected. That is why, when these measures ceased to work, the dramatic decline in the birth-rate became inevitable.

The movement of population along the demographic shift was also accompanied by the restructuring of pathology and, in particular, causes of death, which consists in the successive decline in the level and proportion of exogenous causes and the corresponding increase of endogenous causes. As a consequence, the mortality pattern is characterized by the prevalence and a gradual shift towards diseases of circulatory system and neoplasm taking the first rank places (Table 1).

Age-adjusted mortality indices in economically developed countries continue to decline due to the fact that in the modern civilized world the reappraisal of values has occurred, with health ranking first. It has become fashionable to be healthy, to look well, never be ill and, as a consequence, and as a rule, highly effective mass programs aimed at the control of arising diseases, find great response.

The socio-economic crisis going on in Georgia has affected the mortality among able-bodied population whose indicators rose dramatically over a sufficiently short period of time. The rise in mortality was mainly due to causes the etiology of which is beyond the responsibility of public health and is the sphere of activity for social services, law protective bodies, etc. (homicide, suicide, motor vehicle traffic accidents, accidental poisoning by alcohol, etc.).

At the same time there is a need for more thorough analysis of mortality causes. In some territories of the country causes of death are simply not analyzed as far as the entire spectrum is concerned, and beginning with the age of 60 and even before, are being attributed to old age. Over recent years there were cases when the frequency of such diagnoses (senility without mention of psychosis) not only dramatically increases but its magnitude corresponds to levels of mortality from injuries and poisonings (in women). Our indicators by the level of mortality from senility exceed those in foreign countries by dozens.

The problem of mortality in able-bodied population is first of all the question of prematurity and preventability. Against this background of particular significance is the problem of super mortality in men. It is known, in particular, that the difference in the length of life among men and women in the country at large is 6 years which is 2 times higher than in other developed countries. The crisis that broke out in our country only aggravated this problem. It is worth mentioning that in a number of Georgian regions the length of life in men does not, on the whole, exceed the age of 65-66. There is an excess of mortality in men over the mortality in women by all classes of diseases.

The super high mortality of the able-bodied population from un-natural causes (its level is the same as it was in Georgia 100 years ago, and exceeds the corresponding indicators in the developed countries by 2.5 times and by 1.5 times in the developing countries), and also the high level of mortality of able-bodied population from cardio-vascular diseases (by 4.5 times exceeding the similar indicators from the European Union) largely determine the drop in the mean life expectancy.

At the same time the experience gained indicates that medicine can cope with many emerging diseases and put off death. The whole point is that current, including the high-technological methods of treatment, should become accessible for the mass medical practice to save the life of ordinary citizens. It is no coincidence that one of the latest WHO reports states that the highest effect in relation to health might be achieved by the performance of health institutions providing adequate treatment.

The super mortality of the population from diseases in young working ages can be reduced and the medicine is the factor that determines the result by 80-90%. The change for the worse in the life conditions of the largest population strata in the hardest period of crisis everywhere regularly led to the rise of such universally recognized indicator of social well-being as the

infant mortality. The mortality of the infants of the first year of life in Georgia is twice or three times higher than in the economically developed countries of the world.

The level of maternal mortality remains high. As the result of complications of pregnancy, deliveries and postnatal period almost 60 women are dying in Georgia annually. The maternal mortality rates in Georgia are higher than those in the economically developed countries of Europe.

The crisis provoked also a sharp change in the direction and intensity of the population migratory flows and that has the most direct consequences for the population health status in Georgia.

Having available data on the population birth-rate, mortality and migration, the specialists of statistical bodies in Georgia and in foreign countries made quantitative projections of Georgian population. According to the data of the Georgian State Department of Statistics, the reduction of Georgian population by 2020 will be on the average 0.8 -1.1 million.

The extreme variants even assume that the population reduction will reach about 1.2 to 1.9 million. The projections made up by the United Nations demographic service show the reductions in the number of Georgian population by 0.9 million up to 2025 and by 1.6 million up to 2050.

These data are very approximate and they depend on many factors. Therefore, it is possible to speak about the trends for the future using only the approximate parameters within the limit of scientific scenarios for short and middle terms. As a platform in that case must be the vision of prospects within the limit of moderate optimism and it must not be the place for too dramatic evaluations that now and then disturb the public opinion.

In case of sufficiently favorable development and by the influence of long term regularities and with weakening of social and economic crisis manifestations in the country during the next 5 years, the birth-rate will assume a trend to the low manifested rise and by 2016 it will reach 14-16 per 1000. At the same period of time, the mortality rate will slightly drop and will reach 12-13 per 1000. The natural decrease of population will be at the all-European level, i.e. within the limit of 2-3 per 1000.

As a consequence of social and economic hardships, the number of visits of the population to the curative and preventive services on the occasions of acute diseases has been falling. On this basis the chronic pathology is rising and the course of diseases becomes graver and longer, the number of complications increases and patients more often apply for medical care with neglected and complicated diseases and also in a state of nervous and emotional tension.

The majority of the main classes of diseases are characterized by the rise in morbidity rates (Table 2). It refers to neoplasm, diseases of endocrine system, disorders of nutrition, metabolism and immunity, diseases of blood and blood-forming organs, diseases of circulatory system, digestive and genitor urinal systems, the Osseo muscular system and connective tissues, congenital anomalies, perinatal pathologies and mental disorders.

Traumas, mental disorders especially those connected with neuroses, alcoholism and drug dependence were on the rise.

The analysis of information on disease prevalence makes it possible to believe that the data of interviewing and medical examinations of population are the most comparable sources of information on separate diseases prevalence in different countries. The information on morbidity rates received on the basis of the data on applications for medical care does not reflect the real level of morbidity. The mortality rate given by official statistical records is lower than the real rate and actually does not reflect the real scope of pathology prevalence under which the practical health services are working now.

In the last quarter of the century the evolution of the population morbidity is going under the conditions of decline in standards of life, ecological hazards and local wars. With the comparably stable indices of general morbidity, its structure was dramatically changed. The number of the alcohol and drug dependent patients was on the rise. With the worldwide trend of tuberculosis morbidity rising, in Georgia it acquired the particularly dangerous scale with grave neglected and non-curable, resistant to medicines forms of this disease.

At the same time the lower level of some diseases morbidity in comparison with that in several foreign countries and in front of it the significantly higher level of mortality caused by the same diseases is arousing certain concern.

The rise in disease detection, noted recently, is due to the development and potentials of the modern medicine. This makes it possible to forecast the further rise in the prevalence of several diseases which were not widespread before, e.g. diseases of blood and blood-forming organs, hepatitis, herpes infection, neoplasm's, diseases of digestive organs, etc.

As the result of the prolonged process of health system reforming which, as stated above, may produce the greatest effect on the population health, the population strata with sharply different wealth levels and opportunities for treatment and the maintenance of their health have been formed. In the framework of the latest investigation, the analysis was conducted to measure the health care accessibility depending on the levels of material income of the different groups of the population (Fig. 2).

At the same time, increasing difference in the subjective and objective evaluations of health status by the population depending on the level of material well-being was noted.

The situation in the health system is characterized as complicated; it is in the state of the delayed reforming and restructuring which are in need of economic support. The irrational use of expenses is noted, and the differentiation of medical services is delayed depending on the patient health status, the necessary expenses from the budget and the material well-being of the patient.

The interview-surveys of physicians and team leaders carried out in 11 regions of the country reveal their dissatisfaction with the existing health system.

About 80% of the respondents believe that it is necessary to make cardinal transformations in the health system largely aimed at strengthening of the state responsibility for carrying out the measures for health protection and provision of medical care to the population.

The processes occurring now in the health system suggest rather of the necessity of the significantly higher governmental influence on the regional health services than it was during the last years.

Thus, evaluating the negative dynamics of demographic processes and the population health status as the threat for the society and the state, it is considered a priority in the first place to strengthen the state role in solving the problems of the population health protection and promotion primarily by social and economic stabilization as an indispensable condition for the population health forming.

On the other hand, more detailed elaboration of the possibilities for moderating the influence of the factors and conditions forming the population health is necessary. Their realization will be manifested in decreasing the level of the different causes of death and morbidity and also in increasing the effectiveness of treatment in separate groups of patients.

In this respect for improving the prognosis it is important to have the interdisciplinary cooperation of the clinical physicians of different specialties, the associations of the physicians-specialists who had proved the effectiveness of their works in the large national programs of a number of foreign countries.

Giving a high appraisal of the role and significance of the Georgian Ministry of Trade, Health and Social Security in solving the practical targets on health protection it appears possible to create such system in the country as well with the purpose of elaborating the most accessible and effective technologies to ensure the high level of public health for population.

Fig.1



Table 1

The Mortality of the Georgian Population from main classes of death causes (per 1000 population)

<i>Causes of death</i>	1998	1999	2000	00/98 in %
All causes	1361,1	1472,4	1530,4	+21,4
Infectious and parasitic diseases	19,0	25,4	24,8	+30,5
- Tuberculosis	15,4	20,1	20,4	+32,5
Neoplasma	202,5	205,0	204,9	+1,2
Diseases of circulatory system	748,8	815,7	844,0	+12,7
- hypertonic disease	11,7	18,8	18,0	+53,8
- ischemic heart disease	350,5	382,3	398,1	+12,1
- cerebrovascular diseases	281,4	306,7	318,8	+13,3
Diseases of respiratory system	57,2	64,9	69,7	+21,9
Diseases of digestive system	38,1	41,9	44,3	+16,3

Injury and poisoning	187,5	206,1	214,3	+14,3
- traffic accidents	23,0	26,2	27,2	+18,3
- accidental alcohol poisoning	17,8	20,5	23,5	+32,0
- suicide	35,4	39,3	39,0	+10,2
- homicide	23,0	26,2	28,0	+21,7

Table 2

**The General Morbidity of Georgian Population
(per 1000 population)**

<i>Classes of Diseases</i>	1989	1995	1999	99/89 in %
Total	1093,0	1150,6	1261,1	+15,4
Infectious and parasitic diseases	52,4	62,7	61,8	+17,9
Diseases of endocrine system, nutrition disorders, metabolism and immunity disorders	19,2	26,9	35,7	+85,9
Diseases of circulatory system	97,6	106,4	131,0	+64,2
Diseases of respiratory system	401,0	341,2	350,4	-12,6
Diseases of digestive system	88,4	101,8	103,5	+17,1
Disease of genitourinary system	43,1	59,2	74,9	+73,8
Diseases of musculoskeletal system	56,1	69,5	82,1	+46,3
Diseases of skin and subcutaneous tissue	45,0	58,8	53,1	+18,0

Fig.2

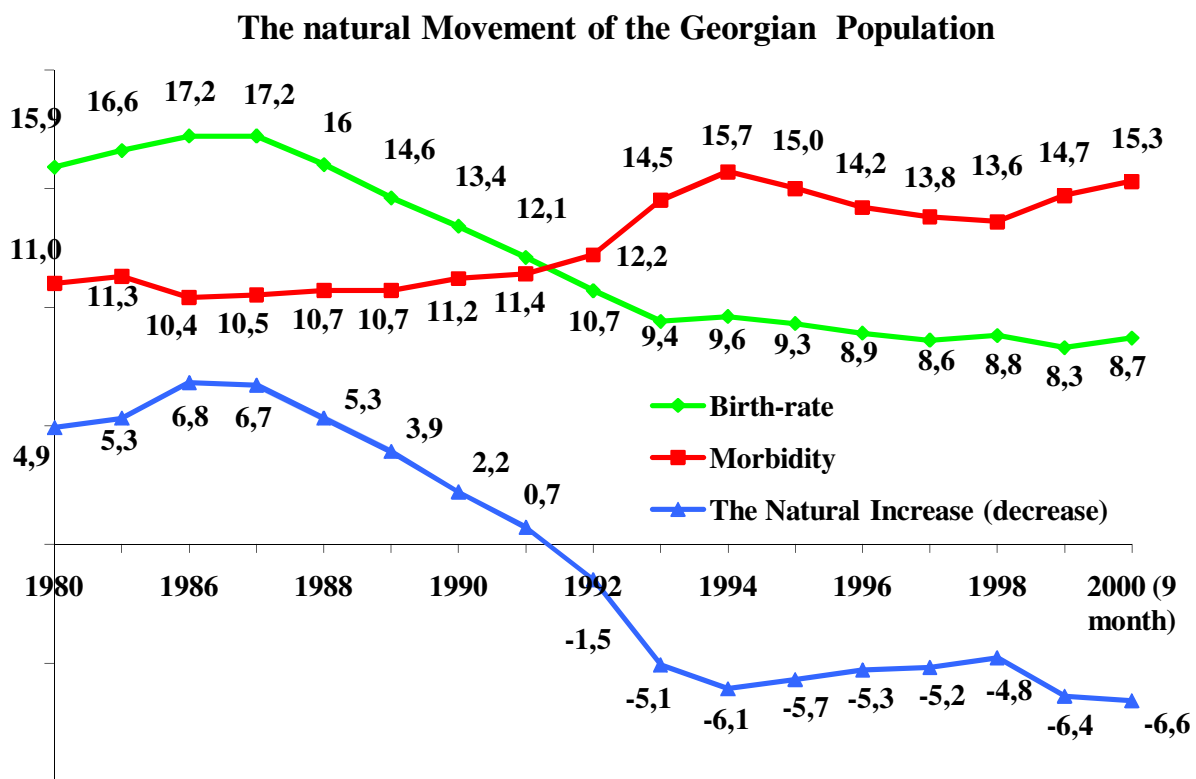
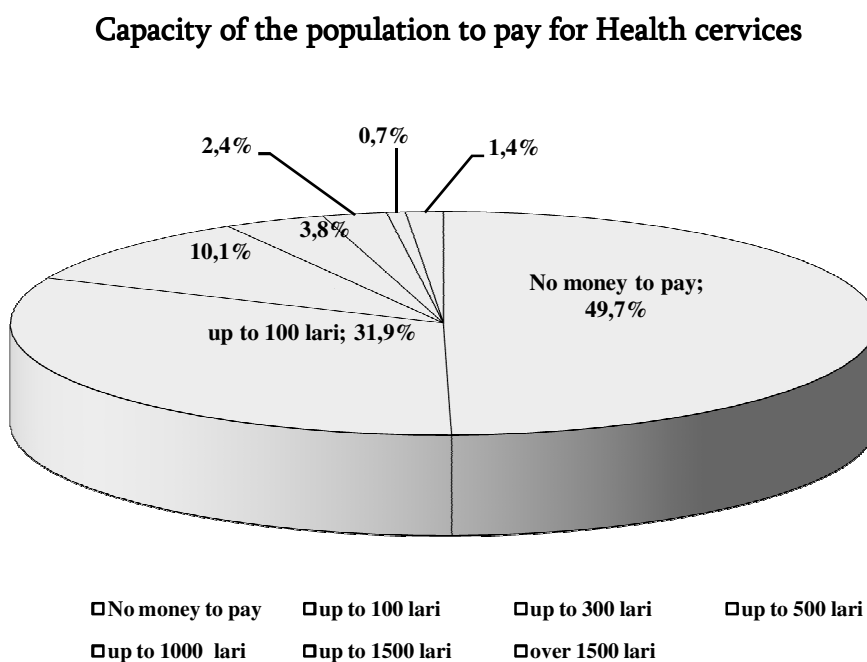


Fig.3



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