Tackling social inequality through the development of health policy in Lithuania

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Abstract: The major aim of this study was to assess existing inequalities in health of Lithuanian population and to present the process of health policy development as a major tool for reducing inequalities. The objectives were to present life expectancy and mortality trend analysis in comparison with other European countries; to demonstrate risk profile of Lithuanian population to major noncommunicable diseases related to social inequalities and inequities in health; and to present the process of National health policy development as potential for effective reduction of inequalities in health of Lithuanian population.

Methods: Information about demographic, general health situation and inequalities in health was obtained from Lithuanian Department of Statistics, National Health Information Centre and research studies performed at Kaunas University of Medicine.

Results: Considerable demographic, social and territorial inequalities in health were disclosed in Lithuania. Large proportion of them might be related to social inequalities in the society. Substantial improvements in health status of Lithuanian population could be expected if due attention was paid to social determinants of health.

Conclusion: Implementation of balanced national health policy involving all sectors of the society is the solution.

Keywords: inequalities, health policy, Lithuania.

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INTRODUCTION

Tackling social inequalities and inequities in health has been identified as a major challenge in reforming health systems in both industrialized and developing countries (1). Problems related to inequalities in health are of particular importance in countries undergoing social, economic and political transition.

Lithuania is one of the three Baltic states situated on the south-eastern coast of the Baltic Sea. It regained independence from the Soviet Union in 1990 and has experienced tremendous social, political, and economic changes since then. The population has been exposed to new and unfamiliar social circumstances, along with the social stress caused by such fundamental changes. The Soviet regime did not consider inequalities in health to be a problem. Although population-based research in Lithuania in the last two decades demonstrated social inequalities and inequities in health, more systematic research started first in 1988, when the public and researchers gained access to information held in statistical bureaus.

More and more studies have been initiated on different aspects of inequalities in health. In 1997, Lithuania joined a collaborative project on inequalities in health under the auspices of the World Health Organization (WHO) (2, 3). The WHO initiative aimed to support and promote research, methodological development, and ongoing monitoring activities by national researchers designed to lead to action aimed at reducing social inequalities in health and healthcare. The database constructed for this project included data sets from the National Health Information Centre and the Ministries of Education, Health, Social Welfare, and Labour, combined with the data sets from a number of research projects, such as CINDI (Countrywide Integrated Non-communicable Diseases Intervention), the FINBALT Health Behaviour Monitoring in Adults, the Health Behaviour in School-Aged Children Study, the Household Survey and the Newborn Register. Based on combined analysis done at the Kaunas University of Medicine and in collaboration with and funded by the WHO Regional Office for Europe and the Swedish International Development Cooperation Agency, Equity in health and health care in Lithuania: a situation analysis was published in 1998 (3). The existing inequalities have been analysed using a wide spectrum of social and health indicators. Some of these data have been gathered for the purposes of this article,
the major aim of which is to describe the existing inequalities in health and the process of developing health policy as a major tool for reducing inequalities. The more specific objectives of this article are:

- to present life expectancy and mortality trend analysis in comparison with other European countries;
- to demonstrate the risk profile of the Lithuanian population for major non-communicable diseases in relation to social inequalities;
- to draw attention to social inequalities and inequities in health;
- to present the process of developing national health policy as a potential way to effectively reduce inequalities in health among the Lithuanian population.

METHODS

Information about demographics and the general health situation was obtained from the Lithuanian Department of Statistics, the National Health Information Centre and the FINBALT Health Behaviour Monitoring in Adults. The FINBALT Health Behaviour Monitoring in Adults is a joint system for monitoring health behaviour in Estonia, Finland, Latvia, and Lithuania. Lithuania joined the project in 1994. Since 1994, three national health behaviour surveys have been carried out in Lithuania (the last one in 1998). A random sample of 3000 Lithuanians aged 20–64 years was taken from the National Population Register. The study material was collected through a postal survey (4).

Research performed at the Kaunas University of Medicine provided information on existing demographic, social, and territorial inequalities in mortality and life expectancy (5). For these studies, information on deaths, the characteristics of the deceased people (gender, age, place of residence, cause of death, level of education, and marital status), the size of the population, and the demographic structure was derived from the computerized database of the Lithuanian Department of Statistics. The distribution of population according to level of education and marital status was derived from 1989 census data. Only the population over 25 years of age was included in the analysis of mortality and life expectancy by education and marital status, as data for younger ages was not likely to be reliable. The data were statistically analysed at the Department of Social Medicine of the Kaunas University of Medicine.

RESULTS

Lithuania has 3.7 million inhabitants, of whom 80.2% are Lithuanian, 9.1% Polish, 8.2% Russian, and 2.5% other nationalities (1999). More than two-thirds of the population lives in urban areas. The birth rate has been gradually decreasing during the most recent decades and was 10.2 per 1000 population in 1999. Since 1994, the natural population growth has been negative (−0.9 per 1000 population in 1999).

Figure 1 presents the trends in overall mortality compared with Latvia and Estonia and the averages for the Nordic countries and the European Union (EU). Mortality increased slightly in the Baltic states until 1985. In 1986 it started to decline but then unfortunately increased, especially in the 1990s, peaking in 1994. Since 1994, overall mortality has declined. Mortality in Lithuania was systematically lower than that in Estonia and Latvia but was considerably higher than the Nordic and EU averages.

Infant mortality in Lithuania has been gradually decreasing since 1992 but is still higher than that in the Nordic countries (8.6 per 1000 live births in 1999) (6). After decreasing dramatically from 1991 to 1994, life expectancy started to increase gradually and reached 67.1 years for males and 77.4 years for females in 1999 (Figure 2). Male life expectancy is about seven years shorter and female life expectancy three years shorter than the average of the Nordic and EU countries.

As in most countries, the life expectancy of Lithuanian females exceeds that of males. The greatest difference between the life expectancy of males and females was registered in 1994 (12.1 years). The difference has decreased recently because the life expectancy of males has increased more rapidly than that of females. Nevertheless, this difference is still 10.5 years, which is considerably higher than in the Nordic or EU countries. Although the total life expectancy of females is longer than that of males at all ages, healthy life expectancy does not differ significantly. Healthy life expectancy at birth is 52.7 years for males and 52.6 years for females (Figure 3). Healthy life expectancy as a proportion of total life expectancy is 79.8% at birth among males and 68.4% among females. This proportion remains smaller among females than among males in all age groups, until age 80 years.

As in other European countries, cardiovascular diseases (55.0%), cancer (18.0%), and external causes (13.0%) are the most frequent causes of mortality.

Mortality from cardiovascular diseases has followed the trends in overall mortality, being lower in Lithuania than in Estonia or Latvia but still considerably higher than in the Nordic or EU countries. The same is true for cancer mortality and mortality from external causes of death. However, the problem of suicide is of particular importance in Lithuania. Lithuania has continued to have the highest suicide mortality in Europe and the world during the last decade. Although suicide mortal-

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ity has declined since 1995, it remains very high: 73.8 per 100,000 males and 13.6 per 100,000 females in 1999. Analysis according to place of residence clearly demonstrates considerable inequalities in mortality and life expectancy. The age-standardized overall mortality rates of the rural population have exceeded those of the urban population during the last three decades. In 1999, the difference in mortality between urban and rural populations reached 36.2% among males and 24.6% among females. People 15–30 years old had the largest differences: the death rate was about twice as high in rural areas. Trends in life expectancy differ considerably among urban and rural populations. During the campaign to restrict alcohol use (1986 compared with 1985), the life expectancy of the rural population increased more than that of the urban population, whereas after independence the life expectancy of the rural population declined substantially more rapidly than that of the urban population, especially among males. Since 1995, life expectancy has increased in both rural and urban areas; this increase is greater in urban areas. The greatest difference between the life expectancy of urban and rural populations was reached in 1999: 5.8 years for males and 2.8 years for females (Figure 4).

Mortality from external causes of death contributed most to the inequalities in life expectancy for urban and rural males, while for females cardiovascular diseases had a major impact.

Lithuania has considerable territorial inequalities in the health of the population. Administratively, Lithuania is divided into 10 regions and 56 municipalities. The highest territorial age-standardized overall mortality rate is about twice that of the lowest rate.

Fig. 1. Crude death rate per 1,000 population in Estonia, Latvia, Lithuania, and the averages for the Nordic countries and the EU countries, 1970–98.

Fig. 2. Life expectancy (years) in Lithuania, 1970–99.
The average life expectancy of males in the municipalities varied from 59.3 to 70.1 years in 1994-96 versus 72.9 to 78.3 years among females. The differences in mortality from external causes of death among males and cardiovascular diseases among females contributed most significantly to the regional inequalities in life expectancy.

Mortality and life expectancy differed considerably in relation to some social variables, such as education, marital status, income, and lifestyles. As in most countries, health is associated with the level of education. For example, university graduates had significantly lower mortality than did those with other levels of education, and especially those with only primary education. People aged 25-35 years had the greatest educational differentials in mortality, especially males (Figure 5). Among the major causes of death, the most considerable differences according to educational level were noted for mortality from external causes among males (up to 4.4 times). The life expectancy of males with primary or lower education was 11.7 years shorter than that of males with a university education, and 4.3 years shorter among females.

Health is strongly associated with marital status. The married population has the lowest age-standardized mortality; single females and widowed males have the highest rates (Figure 6). Marital status was associated with mortality from all major causes. The greatest differences were in mortality from external causes; the mortality of divorced men was 2.6 times higher than that of married men and 3.3 times higher among male widowers. For cardiovascular diseases and external causes, single
women had 1.7 times higher mortality than married women. Marriage apparently had strong protective power in preventing suicide. Mortality from suicide was 3.3 times higher among widowed men than among married men and 2.6 times higher among divorced women than among married women. The married and widowed men differed in life expectancy by 12.6 years and the married and single women by 7.6 years.

In modern society, health status is strongly influenced by social stress and by lifestyles, which are associated with the socioeconomic status of the population. In 1998, 48.5% of men and 12.5% of women smoked daily. Strong alcohol was used at least once per week by 27.1% of men and 6.7% of women. Beer drinking was even more popular: 48.9% of men and 12.9% of women consumed beer at least once a week. Only 6.9% of men and 16.8% of women have never drunk alcohol. The health behaviour of the urban and rural populations differed. The prevalence of daily smoking among men was 53.4% in rural areas versus 45.2% in urban areas. Urban and rural populations differed substantially in nutritional habits. The urban population more often used oil for cooking at home and consumed more fresh vegetables.

Lifestyles varied by educational level. The prevalence of daily smoking was strongly associated with the level of education (Figure 7). The population with the highest level of education had about half the proportion of smokers compared with those with the least

* - p<0.05, if compared with the married

Fig. 3. Ratio of mortality in Lithuania between people with primary or lower education and people with university education (set at 1) according to age (years) and sex.

Fig. 6. Age-standardized overall mortality rates per 100,000 population in Lithuania according to marital status and sex.

Note: 'p<0.05 compared with married people.
education. Paradoxically, the smoking prevalence was significantly higher among those with low family income compared with those with the highest family income (Figure 8). The same trends were observed for alcohol consumption. Most people with higher education used oil for cooking and consumed more fresh vegetables, whereas those with a lower educational level did so significantly less frequently.

DISCUSSION

The results of this study add to the growing evidence on inequalities in health in relation to socioeconomic status and place of residence. Unlike many other studies performed in industrialized countries, our period of investigation covered unique, dramatic changes in the social and economic situation of Lithuania and revealed huge inequalities in health in a relatively homogeneous country.

The validity of the mortality statistics must be considered in interpreting the data. The quality of death certification is one of the key issues. Data derived from death certificates containing diagnostic errors complicate the ensuing analysis. Although death rates may vary as a result of coding practices, our previous studies of the validity and reliability of mortality statistics...
in Lithuania demonstrated that unreliable death certificates cause only a small part of the differences in death rates (7).

A solid research database providing information on demographic, social, and territorial inequalities in health in Lithuania served as an integral component of formulating national health policy. Further, the ongoing projects provide an opportunity to monitor inequalities in health at the national and regional levels in the future. Based on the research data available from population-based studies and national statistics, a new national concept of health was developed as a response to the resolution adopted by the re-established Lithuanian Medical Association in 1989. After a nationwide dialogue this concept was approved at the highest political level by a specific parliamentary decision in October 1991 (8), thus becoming a policy document (White Paper) for the reform of Lithuanian health system. Largely influenced by the long-lasting collaboration with WHO, this concept was based on Health for All principles, giving due importance to equity in health, community participation, intersectoriality, and balance in healthcare aspects.

In practical terms it has set the process of health policy implementation based on new health legislation, a participatory process including the health profession, politicians, and the public at large, which culminated by bringing all interested parties together at National Health Policy Conferences with international participation in 1993, 1996 and 2000, followed by preparation of the National Health Programme (9). However, numerous social and economic problems and even political instability related to frequent changes of government resulted in delays and deviations from health policy implementation. The Lithuanian Health Programme was first adopted by parliament in 1998, with specific objectives and targets on equity in health and healthcare (10). Also in 1998, the National Board of Health, which is the highest-level institution coordinating health policy and accountable to parliament, presented the first annual report to parliament, focusing on inequalities in health (11). This means that the problem of inequalities in health is finally on the political agenda. In 2000, during the annual address to the parliament, the President of Lithuania stated that “The growing number of people whose health deteriorates because of worsening living conditions should cause our concern. Therefore the healthcare reform should not lose touch with reality and must be coupled with social policy. In transforming the system we should take into consideration the interests of the most vulnerable groups in society” (www.president.lt). Nevertheless, economic constraints, lack of intersectoral cooperation, and frequent changes in government have not allowed more structured development and implementation of strategies aimed at systematically reducing inequalities in health.

CONCLUSIONS

The study disclosed various aspects of the considerable demographic, social, and territorial inequalities in health of the population in Lithuania. Middle-aged people, people with the least education, unmarried people, and those living in rural areas are the most disadvantaged population groups. The health of the Lithuanian population started to improve after the transition period. However, the social and economic differentiation of society is increasing, and a large proportion of the inequalities in health might be related to social inequalities. Rapid development of a country is inevitably associated with an initial increase in inequalities in health. As a society enters a higher level of social and economic development, inequalities in health should begin to level off. Substantial improvements in the health status of the Lithuanian population could be expected if due attention were paid to social determinants of health. The period of health reforms is a most challenging time to develop and adopt new approaches and directions of action, paying due attention to the most vulnerable groups in the population. Implementation of a balanced national health policy involving all sectors of society is the solution.

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