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Original Contribution

INEQUALITIES IN HEALTH: DOES THE OLD PROBLEM HAVE NEW DIMENSIONS?

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ABSTRACT

The inequalities in health between and within societies are enormous and constantly increasing. This old problem has gradually turned into a priority issue rising up the modern policy and research agendas. Tracing the historical development of the changing dimensions of health inequalities and the respective policy responses, this paper aims to outline their current trends. The social determinants perspective of the inequalities in health is crucial as well as their policy implications. Reducing health inequalities both between and within countries is a challenging task for the modern societies - stimulating researchers, decision-makers, public health actors and advocates.

Key words: health inequalities, dimensions, social determinants, policy implications.

INTRODUCTION

The gross and constantly increasing inequalities in health within and between countries present a great challenge to the world today. A burgeoning volume of research identifies social factors and disparities at the root of much of these inequalities [1]. The modern understanding of the social inequalities in health has two historically significant prerequisites. The first relates to the political and economic rights of the individual – heralded and legally stated during the French and the American revolutions. Along with the proclamation of the individual rights, the essential and irreversible right to health and health care has been increasingly recognized. The second prerequisite is based on the Enlightenment ideas for the society's duty to all its members, not only to the privileged ones.

The idea for diminishing disparities and the pursuit of equality in health among the members of any society become an impetus for developing adequate public policies in all countries. This is also an incentive for the growing scientific interest on the determinants of health inequalities and the respective policy implications.

PURPOSE AND METHODS

This paper aims to trace the historical developments of the different dimensions of health inequalities, and to identify and outline their current trends. The case of Bulgaria, an Eastern European country having made a remarkable progress over the recent years on its way to European integration, has been specifically emphasized as a notable example of the West-East health divide.

The method applied is an overview of the 'health inequalities' concept development and policy responses, based on content analysis of major research publications and related documentation.

RESULTS AND DISCUSSION

Although, the relationship between the social status and the health of the individual has been assumed for a long time, sufficient evidences have been collected to prove it on a population level just only in the second half of the 19th century with the application of epidemiological and statistical methods. The Chadwick's and Shattuck's observations (1848-1850) have documented the

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relationship between poverty, poor housing, bad sanitary and living conditions in the cities with the increased mortality rates in highly urbanized areas [2]. Infant mortality in deprived areas in Paris has been drastically higher compared to the more affluent regions of the city. Grounding on the established close relationship between the socio-economic conditions and people's health, R. Virhov, an eminent German pathologist and a founder of the socio-medical philosophy, calls for political reaction to the public health and hygiene problems. The research performed at that time brings to the understanding that "social inequality leads to inequalities in health", which can be formulated as the 'axiom' of the 19th century. Sanitary and social reforms were assumed as the remedies for dealing with the inequalities in health.

In the 20th century, the major solution to this problem is seen in the increased well-fare of the individual and the introduction of universal health care system. Social reforms aimed at improved access to health care either through introduction of health insurance systems (Germany, Holland) or through establishment of National Healthcare Systems (Britain) can be indicated as the main 20th century responses to the inequalities in health. Such reforms along with the progress of medical science and the rising living standards, especially after the Second World War, have substantially contributed to improving the population health in the developed countries.

Indeed, studies highlight the beneficial influence of health care services in addressing health inequalities with regard to equity of access, affordability and responsiveness [2]. The differences in access to health care can reinforce existing inequalities, however, improving the health system and the free access to healthcare services do not eliminate them. The need for identifying other determinants and formulating respective responses gives new incentives for the scientific interest and provokes a new wave of investigations.

The main research directions in this area are:

- comparisons between countries and groups of countries (classified by income);
- comparisons within countries between diverse population clusters (differing in income, education, occupation, ethnicity, etc.).
- The social inequalities in health are usually measured by comparing some health indicators among different countries or among different social groups within a country. The most often applied indicators are:
- life expectancy (at birth or at certain age);
- health adjusted life expectancy (HALE);
- standardized brute and specific death rates;
- infant and child mortality rates;
- maternal mortality rates;
- GDP per capita and GNP devoted to health.

The main possible explanations of the health inequalities that have been brought forward by the research investigations are the following:

- inaccuracy in the social class classification;
- illness-caused drop into lower social class;
- unequal distribution of the risk factors for disease;
- generalized susceptibility to diseases of people from lower social classes;
- higher social classes privileges expansion;
- inequality in income distribution.

'Poverty' is considered as a main factor linked to most of the other explanations of health inequalities. Poverty, relative deprivation and social exclusion are proved to have a major impact on health and premature death, and the chances of living in poverty are loaded heavily against some social groups [3]. 'Poverty' has been defined it as: "life conditions limited by poor nutrition, deprived environment, high infant mortality and low life expectancy" [4]. 'Absolute poverty' – a lack of the basic material necessities for life ($450 annual income per capita) – continues to exist, even in the richest countries in Europe. The unemployed, many ethnic minority groups, guest workers, disabled people, refugees and homeless people are at particular risk. 'Relative poverty' means being much poorer than most people in society and is often defined as living on less than 60% of the national median income. It denies people access to decent housing, education, transport and other factors vital to full participation in life. Being excluded from the life of society and treated as less than equal leads to worse health and greater risk of premature death [3]. It is estimated that 3/5 of the world's population lives in the poor countries with 50 times lower annual income than the rich

countries. This clearly reveals the magnitude of the poverty problem.

Although it might be obvious that poverty is at the root of much of the problems associated with inequalities in health, income poverty provides an incomplete explanation of differences in mortality among countries or among subgroups between countries. There are many examples of relatively poor populations with similar incomes but strikingly different health records [5]. Kerala and China, famously, have good health despite low incomes [4].

Variations in life expectancy between many countries have been investigated in relation to income [6]. The results reveal that health is not a direct liner function of well-fare. Greece for example, with a GNP at purchasing power parities of just more than US$17 000, has a life expectancy of 78.1 years; the USA, with a GNP for more than $34 000, has a life expectancy of 76.9 years. Costa Rica and Cuba stand out as countries with GNPs less than $10 000 and yet life expectancies of 77.9 years and 76.5 years. For rich countries, the association between GNP per capita and life expectancy is weak, in contrast to the strong association observed for the poorer countries with a GNP per capita below $5000 a year [1]. Life expectancy in richer western countries is however, strongly associated with the extent of income disparity within countries. In countries with more equal income distribution, there is a tendency for lower mortality rates and higher life expectancy. Examples could be Great Britain and Japan with health indicators - similar at the end of the 1970s and substantially differing at the end of the 1990s [4].

It is, therefore, obvious that the economic development and income increase are not sufficient to overcome the inequalities in health. The health standards are very much dependent on the income distribution within the country and the effectiveness of the public policies in this direction. It is important to ensure that the policy action taking place to relieve poverty is having the desired effect not only on average incomes but also on income distribution and hence on the poorest people.

Health inequalities affect not only the poorest and most deprived members of society, but go across the whole societal spectrum. Within societies, health and ill-health follow a social gradient: lower socio-economic position, worse health [7]. Life expectancy is shorter and most diseases are more common further down the social ladder in each society. People at the bottom of the social ladder usually run at least twice the risk of serious illness and premature death as those near the top [3]. This gradient can be found in the industrialized world, although the strength of the relationship varies somewhat between different countries, for different age groups, by the health measures used, and for men and women [8]. Data from the Whitehall studies show that the social gradient in morbidity and mortality exists across employment grades in British civil servants, none of whom is poor by comparison with people in developing countries, suggesting that there are factors operating across the whole society [9]. Brute and cardio-vascular mortality rates for the lowest job status category (clerical and office support) staff is four times higher than the rates for the highest job category (the administrators).

In the numerous studies the inequalities in health are most often examined within the following categories:

- Inequalities between the poorest and the richest countries in the world;
- Inequalities within Europe - between the Western and Eastern European countries;
- Inequalities within countries - between the different social strata subgroups.

There are demonstrative evidences for the great health disparities between the richest and the poorest countries in the world. Life expectancy at birth, to take one measure, ranges from 34 years in Sierra Leone to 81.9 years in Japan [10]. Under-5 mortality varies from 316 per 1000 live births in Sierra Leone to 3 per 1000 live births in Iceland, 4 per 1000 in Finland, and 5 per 1000 live births in Japan. Within countries, too, there are large inequalities. For instance, there is a 20-year gap in life expectancy between the most and least disadvantaged populations in the USA. UK is also one such example. Recent evidence from research into inequalities in health, shows that variations in life expectancy by social class continue to be found and are in fact widening. People from social class V (the lowest in the social ladder) have two times higher brute and specific mortality rates compared to those from the social class I (the highest one) [9,11].

The inequalities in health are very starkly shown by comparing countries of Western with Central and Eastern Europe (CEE) [12]. Within Europe, differences in health between East and West have varied in magnitude. The advantage in the West increased through the 1970s and 1980s. Although similar in their trends up to 1989,

the CEE countries have diverged quite sharply subsequently. Disparities re-emerged as life expectancy increased in the West while stagnating in the East. It is likely that changing social and economic fortunes account for these trends. On Figure 1 it can be seen that there is a life expectancy gap of about 8 years for the people at the age of 15 between some affluent European countries in comparison to some CEE countries [13]. Examining the data for the male population, this gap becomes even wider - over 10 years difference. This clearly correlates to the gross national product statistics for these same countries – presented comparatively on Figure 2 [13].

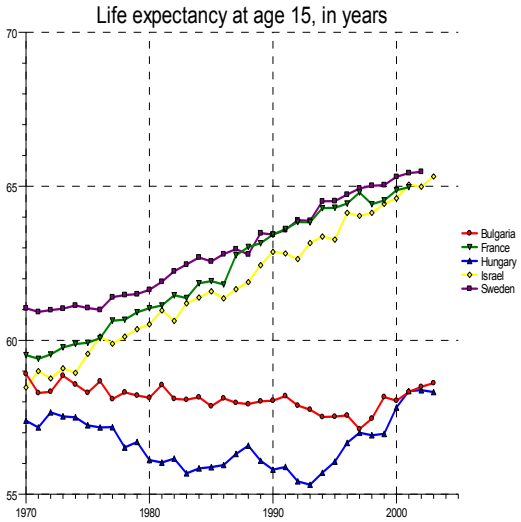

Figure *1. Life expectancy at age 15, comparative data, 1970 – 2003*

Source: *WHO HFA database, 2005*

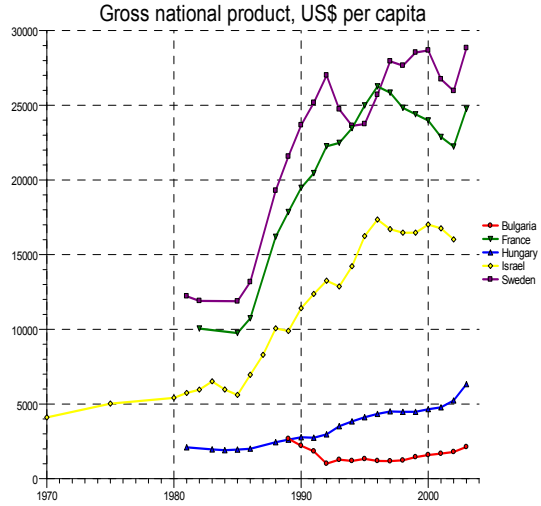

Figure 2. *Gross National Product per capita, comparative data, 1970 – 2003*

Source*: WHO HFA database, 2005*

The case of Bulgaria can be taken as a notable example of the West–East health divide. The Bulgarian population has about 7 years lower life expectancy at birth compared to the EU countries, and about 1.5 years lower life expectancy compared to the new Central European members of the Union. The health-adjusted life expectancy of the Bulgarian male population is 7 years lower than the old EU member states, and for the female population – this difference rises up to 9.6 years. The infant mortality rates in Bulgaria (12.3%o, 2003) is much higher most of the European countries, and this difference is fourfold compared with the countries having reached the lowest rates (3%o for Iceland and 4 %o for Finland) [10].

The last 15 years of socio-economic and political transition in Bulgaria are characterized by insufficient research on the inequalities of health, and in particular, by a deficit of studies investigating their determinants. The existing surveys in this field are fragmented and non-systematic. They do not comprehensively and profoundly explore the issue and its roots. Attention has been paid to the social determinants and health related behaviours. For instance, the high prevalence of smoking among the Bulgarian population and the poor diet habits, especially in rural areas [14, 15] have been related to socio-economic factors, such as education, residence, and income. There is data available on crude and specific mortality and morbidity rates by age, gender and place of residence. Data is also routinely collected on income distribution and population expenditures, including expenditures on health. However, there are some barriers for obtaining this data by social and ethnical affiliation. The regionally based studies are fragmented and poorly laid, and the few national surveys are not sufficiently representative.

The lack of scientific interest and a comprehensive research on the inequalities in health and its major social determinants, as well as their impact on the different social groups within the society is a substantial barrier for adequate policy action and pre-determines their inefficiency. In the case of Bulgaria, a country struggling on its way towards accession to the EU, the substantial health inequalities existing both with the other European countries and within the country between the different social groups is a challenge for new research directions and adequate policy strategies.

CONCLUSION

The magnitude of socio-economic differences in health varies between societies, and over time within societies. Not only are these differences an important social injustice, they have also drawn scientific attention to some of the most powerful determinants of health standards in modern societies. They have led in particular to a growing understanding of the remarkable sensitivity of health to the social environment and to what have become known as the social determinants of health. This suggests that identification of factors that influence socioeconomic status and health, and the pathways by which they operate, is an important public health task that could lay the basis for a reduction in inequalities in health.

Reducing the social inequalities in health between and within countries is a challenging task for both decision-makers and public health actors and advocates. The focus on the role public policy can play in shaping the social environment in ways conductive to better health is a research direction that could substantially contribute to diminishing the inequalities in health.

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