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Elimination of social inequalities as a prerequisite for reducing the risk of infectious diseases**Abstract**

The health of the population is one of the key factors in the development of society. Apart from the personal responsibility of individuals for their own health, the latter is also the responsibility of the state, not only in relation to its citizens, but also within the context of globalization and in relation to other international communities. The basic determinants of an individual's health and that of the whole of society include in addition to lifestyle, the genetic basis of health and socio-economic conditions. It is hard to find a society in which all its members were to have optimal living conditions and equal access to social resources. The result is social inequalities, as well as the emergence of inequalities in the health status of the population. Some diseases have already been labelled social diseases (especially infections), as they have been most prevalent in countries with a low standard of living. Social conditions and lifestyle affect the health of individuals while increasing the risk of infectious diseases in these social groups. Therefore, even in the 21st century, widespread infectious diseases typical for the past century exist, for example tuberculosis, which is considered the best-known and most prevalent infectious disease. There is a link between the health inequalities of individuals and public health, because the greater the inequality, the worse the health of the population as a whole. The article deals with social inequalities and their removal aimed at reducing the risk of the spread of infectious diseases with emphasis placed on tuberculosis. The basic method was content analysis of the available subject literature, and the analysis and synthesis of statistical data.

Key words: society, social inequality, health, infectious diseases, tuberculosis

Introduction

Despite the fact that Slovakia is a country with an increasing number of cases of infectious diseases, with currently existing infectious diseases that are prevalent among population groups with low social status and low standard of living, tuberculosis, which had previously been the most widespread disease, transmitted even today in the world, in Slovakia is widespread among the homeless, refugees, as well as anti-social elements and members of the Roma ethnic group. In the past period compulsory vaccinations against TBC were abolished, sparking concern among the majority population, especially from those regions of Slovakia with a large Roma population.

According to recent data from the Atlas of Roma Communities: in the Banská Bystrica region 25% of the total population are the Roma, in the Prešov region 23%, and in the Košice region 24%, compared to Bratislava and the Žilina region, where the Roma make up only 2% of the population (MV SR 2013). The high concentration of the Roma in those regions also means the increased risk of the spread of infectious diseases; confirmed in the case of tuberculosis where most cases of the disease are amongst the Roma population from the Prešov and Košice regions. For these reasons, most activities within the EU-wide fight against TBC develop in these regions, and the state should take measures to prevent the spread of TBC. For example, the children of these risk groups are continually vaccinated against TBC and take such measures within social policy to prevent a further decline in living standards, as well as increasing the risk to the public health of the population.

Tuberculosis

Tuberculosis (TB) is caused by bacteria (*Mycobacterium tuberculosis complex*, which includes *M. tuberculosis*, *M. bovis* and *M. africanum*) transmitted from an infectious source to susceptible persons primarily through the air (e.g. through coughing). Most infected persons do not experience the clinical illness, but are usually asymptomatic and non-infectious. Infection can persist for years, and infected persons can remain at risk of developing clinical TB, especially if the immune system becomes impaired (Miškovská 2009).

The first reports on tuberculosis come from the times when people created the first permanent settlements. The earliest reports on the existence of tuberculosis were adequately proved by K. Pfaff in 1904, when a skeleton of the late Stone Age (6000 to 2000 BC) appeared in Heidelberg, revealing pathological changes to the upper thoracic spine, which were called spondylitis tuberculosis. It was to take many centuries before the first comprehensive picture of “ftisis” (the former term for tuberculosis) was provided. Before this, physicians had referred to Hippocrates Corpus Hippocraticum, which gives a description of the symptoms of the disease such as coughing, coughing up blood, fever, sweating and explains the genesis of the tuberculosis humoral concept. Galen defined “ftisis” as pulmonary ulceration and was convinced of its infectivity. In Galen we encounter the first description of the hygienic- dietary measures used for many centuries in the treatment of this disease. The first country to legislate for the suppression of a communicable diseases such as tuberculosis was Italy at the end of the 17th century. Legal regulations related to the mandatory reporting of tuberculosis, its isolation, disinfection of apartments and objects which had come into contact with a sick person.

In the late 19th century Robert Koch, in his famous speech “About Tuberculosis” at a Berlin meeting, reported on his discovery of the tubercle bacillus. His work on the nature of infectious diseases became one of the greatest discoveries of humanity. After Koch’s discovery it was possible to confirm that the drought (a term which at that time was used for tuberculosis of the lungs), bowel, brain, joint and gland tuberculosis, were all infections caused by the same bacillus. In 1857 tuberculosis was listed among infectious diseases. In the last third of the 19th century, 80,000 people died from among approximately 400,000 patients with tuberculosis in Slovakia,

while the mortality rate was among the highest in Central Europe. In the 20th century, TB was considered endemic in the working class, the most socially vulnerable population stratum, where it was also reported to have had the highest mortality rate. Thereby, tuberculosis ranked high among the so-called social diseases (Solovič 2008).

Tuberculosis prevalence

The 21st century global incidence of tuberculosis is a disquieting fact. It is assumed that 32% of the world's population (approximately 1,86 billion) is infected. The causes of the rise in the incidence of tuberculosis worldwide are: extension of the infection of the Human Immunodeficiency Virus (HIV), the emergence of multi-drug resistant tuberculosis migration from countries with a high prevalence of tuberculosis, a persistent poor socio-economic situation, population explosion, poor and uncontrolled treatment, an increase in the number of immune-suppressed persons and the lack of antitubercotics in some countries (Melter et al. 2012). More than 8 million new cases per year are reported worldwide, while 2.8 million people die from diseases directly or indirectly related to tuberculosis. Estimates from the World Health Organization (WHO) for the period 2000–2020 suggest that if health care is not improved, a subsequent billion people will be infected with tuberculosis, 200 million will get sick and 35 million will die (Solovič 2008).

Social inequality

Man cannot live as an isolated individual, but exists in relation with others. It is in these relationships that a human person is called to live in society, which is a reference to the social character of human nature. The importance of clusters, derived from the dual nature stems from:

- a) the need for mutual aid, because an individual on his/her own is normally not able to meet even his/her most basic and necessary needs; therefore, society is a necessity;
- b) the need to communicate with each other, by which a person learns the same nature and the same requirements, which helps them develop common good.

Society as we know it today has undergone many changes and along with these changes the social structure has evolved. From natural biological differences have also developed social differences, i.e. social inequality, which is gradually manifested in the fact that men and women have been allocated unequal rights and responsibilities and this has led to an unequal evaluation of their work and status. These inequalities were fixed habitually, religiously and legally while the current process of modernization eradicates them. Currently, we encounter various forms of social inequality, manifest in various types and forms of relationship, ones deepening the sharp conflicts, but also looking for a social consensus and resolving the social conflicts arising from inequality (Buocová 2006).

Social inequality is an indisputable fact of every human society. It can be regarded though from various standpoints. On the one hand, it is considered to be a natural

and necessary part of every society, on the other hand, it is regarded as an obstacle in the way to social justice. Efforts aiming for perfect equality for all citizens (which the Communist regime was fighting for) ended in failure, therefore, we are confronted with inequality in different forms on a daily basis.

Social inequality is usually considered in three dimensions:

- income and wealth,
- power,
- prestige or fame.

People can be then “up” or “down” in all of these dimensions. All world cultures are specific for different kinds of inequality. When we put the system of social inequalities into a hierarchy of groups, we can talk about the so-called social stratification. Stratification is considered to be an ordered sequence of social groups, which periodically reach different economic rewards and different access to power within a given society. These differences influence the way in which social inequalities are passed onto the next generations. It means the establishment of groups of people integrated into a specific social hierarchy.

The most common inequalities are:

- income inequality, or wealth inequality,
- consumption inequality,
- status inequality,
- skills inequality, knowledge inequality,
- labour market inequality,
- life conditions inequality and its risks.

The existence of inequalities can be perceived as an inevitable consequence of the social arrangement and the specific political and economic conditions. Alternatively, it can be considered to be the result of an individual’s personal culpability, and it is clear that life chances are influenced by several factors, in particular the innate characteristics of the individual, the social factors of the family, but also as a result of the environment they live in, their nationality or gender (Stanek 2005).

The most visible form of inequality (not only in Slovakia) is income and wealth inequality. Income inequality we can divide into:

- interpersonal inequality at a given moment in time – this means differences of income between different people at the same time,
- interpersonal inequality over the life course – this means difference in the income of the same individual in different parts of his/her life.¹

The income situation of the household members depends on the household’s size, the composition of the family and also on the phase of the life cycle. Young families, families with many children, unemployed families and pensioners belong to the category of the lowest income and are exposed to a high risk of poverty. To evaluate the income situation objectively it is important to distinguish between households composed of single individuals, and households run by more than one person. Important is also the form of income and its stability. Part of the population is moving between income categories, both individuals and whole groups. Individuals and

¹ J. Karpiš, R. Ďurana, M. Jelenčíak (2006). *Analýza sociálneho systému SR*. [online:] http://www.iness.sk/themes/Milo/texty/INESS_Analyza%20socialneho%20systemu%20SR.pdf, accessed 4 January 2014.

families are getting poor and rich, or stay poor and rich according to the stability and changes of their income. They can become poor even if they receive a regular income if the incomes rise in general or if the expenses are higher. In Slovakia there already exists a group of people who are employed but with their income they belong to the group of poor people with work. Poverty can be understood as an expression of extreme inequality, as an exclusion of a specific part of the population not only from the rich but also from the rest of the population.

In the contemporary world the gap between the rich and the poor is widening on the global and national scale. Slovak citizens who have a low income which is not sufficient to meet their basic needs, are entitled to help from the state. This help depends on the term "life minimum" which "divides" citizens into those whose income is higher than the life minimum, and they do not need help from the state, and those whose income is lower than the life minimum and they are in economic stress. When the life minimum is the distinguished upper borderline of the income we accordingly distinguish two levels:

- 1) **Existential minimum as a borderline of poverty** – this is the lowest acceptable borderline of life level. When this is not achieved health and life are in danger. This is the minimal level of incomes that allows for the elementary existence of a human.
- 2) **Social minimum as a borderline of poverty** – this is the low level of an acceptable living standard (in developed countries two thirds of the average net income per person). This is the existential minimum plus activities connected with culture, transport, education, health protection and leisure activities.²

In Slovakia the life minimum is coordinated by Act 601/2003 Coll. where life minimum is understood as the borderline of a socially accepted personal entity income. Income below this borderline causes economic stress. A minimal income should cover expenses for basic needs and minimal social contacts. This income does not include expenses on shopping, repairs etc. It is possible to live for only a limited period at this level. The life minimum is always adjusted on July 1st. Nowadays the life minimum is 198.09 € per month for one adult person; 138.19 € per month when another adult person is taken into consideration and 90.42 € per month for any minor provided for.³

Another form of inequality is inequality of life conditions that closely relates to the income inequality. Interactions between environment and poverty are complex. Gradual deterioration of the environment in the country and in the city touches the poor first. Deterioration itself results from poverty. The socio-economic level of Slovak regions leads to inequalities that also result from the chosen way of social reproduction in the past, ecological problems and the non-adaptation of companies into the market conditions. In regions and cities, there are areas where the poor live. Citizens are endangered by social risks such as higher probability of becoming

² Ministry of Labor, Social Affairs and Family. Návrh Koncepcie životného minima. (2010). [online:] <https://lt.justice.gov.sk/.../vlastny%20material.doc?instEID...1>, accessed 14 February 2014.

³ Ministry of Labour, Social Affairs and Family. Životné minimum. (2013). [online:] <http://www.employment.gov.sk/sk/rodina-socialna-pomoc/hmotna-nudza/zivotne-minimum/>, accessed 4 February 2014.

unemployed, lower income, criminality etc. (Laluha, Ošková, Stanek 2005). It is evident that the financial situation of individuals can change; the poor can become better off financially and consequently also their life conditions will improve. However, this does not mean that the differences between the poor and the rich will be removed. It is more real that the differences between individual groups will persist.

Inequalities in health

Inequalities in health are described by health differences between social-economic groups, which result from their position within the social stratification, ethnic groups, and people living in various geographical areas, and sex. They are perceived as unfair and unnecessary. It is possible to avoid them and generally they are perceived as unacceptable. This means that it does not refer to differences in health that result from natural and biological variations or the health consequences of voluntary chosen risk behaviour. Inequalities in health arise from the uneven distribution of health determinants in society – income, employment, education, living quality, health care, social support. Inequalities follow agricultural and social policies, they are not natural and therefore it is possible to avoid or reduce them. The health of members of an individual social group is evaluated as better in comparison to a lower social group and worse in comparison to a higher group. The risk groups that are mostly endangered are: unemployed people, the old, homeless, migrants, physically and mentally handicapped people, ethnic minorities (Madarasová, Gecková 2005).

In Europe, for example, discrepancies between those living in lower and higher socio-economic positions are manifested via differential death rates from chronic diseases, such as cardiovascular and cerebrovascular diseases, as well as alcohol- and smoking-related diseases. Similar discrepancies also exist for communicable diseases. A comprehensive literature review demonstrated that in every European Union (EU) member state, vulnerable groups (those with low educational or income levels, migrants, persons engaged in high-risk lifestyles) have a disproportionately higher incidence of communicable diseases (Suk, Manissero, Büscher, Semenza 2009).

Endangered groups

In Slovakia, among the social groups which are mostly at danger from tuberculosis and other infectious diseases are the homeless; their social inequality is shown most clearly. We consider individuals who are for very various reasons in a situation without fixed accommodation, without the possibility to obtain basic hygienic needs and regular food because of being homeless. Individuals who are not adapted to social norms, people returning from jail, alcoholics, drug addicts and long-term or temporarily unemployed are the people most endangered by homelessness. We can divide them into three groups:

- **Visible homeless** – people living on the street, finding accommodation in winter hostels, asylum houses, in hostels established by the city or charity organizations.

- **Hidden homeless** – people without shelter who do not ask for help of the public or charity. These people usually sleep in cellars, houses due for demolition, old cars, containers, tents.
- **Potential homeless** – persons who live in unstable conditions in flats, often in unsatisfactory houses constituting health risks as a result of the sanitation, in digs, without electricity, water or heating. People forming mass emigration and migration groups are included in this group (Tvrdoň, Kasanová 2004).

Such a homeless life style results in a higher risk of tuberculosis, worse treatment and higher mortality. In many developed countries, tuberculosis amongst the homeless is 20-times higher than in the majority population. Hospitalizations are more frequent and longer resulting in a greater burden on public finances (I-Munoz, Ramon-Pardo 2012). In Poland, research on tuberculosis occurrence has been conducted on 7380 people living in poverty, including 243 adult homeless aged from 18 to 96 years. Results showed that the homeless are the most significant danger group. 163 homeless were examined and 7 of them were diagnosed as infected with tuberculosis (Romaszko et al. 2008). The idea that the homeless would disappear from our society is unreal and therefore it is necessary to minimize the risks connected with their life style by chiefly providing social services. In Slovakia non-governmental organizations started their activity which provides the homeless with social and medical services to fulfil their basic human needs. Their main goal is to integrate the homeless into society.

Migrants and exiles

The next group with a low social status is that of migrants and exiles. Before accession to the European Union, Slovakia was a transit country for migrants. Today it is the final destination for many foreigners. Migrants and exiles who usually came from poor countries with a low level of medical care are infected with tuberculosis or other infectious diseases. According to the Office of the United Nations High Commissioner for Refugees, the number of asylum applicants in the Slovak Republic is falling. States of the EU recorded 365,600 applications for asylum in 2011. In Slovakia the number was 225, constituting a fall when compared to previous years. Applicants still come from countries with a very high incidence of tuberculosis, such as India, China, Bangladesh, Pakistan, the Russian Federation, Vietnam and Afghanistan. 23.6% of tuberculosis cases in the European region were foreigners not born in the country where the tuberculosis was diagnosed and treated. We can classify them as risk groups (Petrová, Solovič, Lauková 2011).

The Roma

In Slovakia, tuberculosis is widespread among members of the Roma ethnic group (Gypsies), which results from the manner of their lives. The culture, values and social specificities of this ethnic group with multiple family households without basic standards of hygiene and a lack of education means an increased risk of disease, particularly in young children. 89,920 citizens registered themselves as Romanies in

the 2001 population census. In 2011, it was officially 105,738 citizens who make up 2% of the whole Slovak population (Statistical office SR 2012). This number does not represent the real state of affairs, as follows from the results of mapping the Romani communities in Slovakia – the ATLAS of Romani communities 2004. According to the results of this mapping, the number of Romanies living in Slovakia is 320,000. The predictions of the Slovakian Demographic Research Centre talk about 440,000 Romanies living in the area of Slovakia in 2011, which is approximately 2% of the whole Slovak population. Social exclusion is maintained by the fact that Romanies live in unequally situated, isolated and socially excluded communities in highly sub-standard villages or towns (Fabian 2009b). In Slovakia, there were identified 1,575 settlements of various type where the Romani communities exist. These communities are integrated with the majority of the population living in 772 villages or towns. More than half of all Romani households lived in detached brick houses while 21% of households in 2010 lived in flats. 16% of households lived in non-standard forms of settlements, 10% of them in cottages and 5% in wooden houses or other non-standard types.⁴ Romani settlements have increased progressively from 2000. In 2010, 620 settlements were registered, by 2010 their number had increased to 691 and more than 280 settlements are considered to be segregated.

Spreading of tuberculosis in this marginalized group is influenced by these factors:

- high level of unemployment,
- bad social-economic conditions,
- traditional multigenerational cohabitation in settlements without basic hygienic standards,
- non-cooperation with medical workers,
- frequent illiteracy,
- impossibility of conducting a comprehensive examination of contacts,
- non-compliance to medical regimes and misunderstanding the sense of future medical controls.

The number of new cases of tuberculosis in the Romani ethnic group has been between 8–14% in the last 10 years. Finding that many of them are children under the age of 14 (60–70%) is a serious matter. According to the NRT, the number of Romani children with tuberculosis was 92.86% in 2008. Children aged from 15 to 19 constituted 55.56% (Solovič et al. 2011).

Measures to reduce TB

According to WHO data, **95% of infected people in the world are from developing countries**, where they have limited economic and technical resources. In these countries, tuberculosis is the cause of death for more than 98% of adults. The disease occurs in people of working age in up to 75% of cases. 80% of the global burden of tuberculosis is in 22 countries identified as countries with a high burden

⁴ Vláda SR (2011). Stratégia Slovenskej republiky pre integráciu Rómov do roku 2020. [online:] <http://www.ksuza.sk/doc/metodika/bozp/20012012.pdf>, accessed 8 February 2014.

of disease, for example: India, China, Indonesia, South Africa, the Philippines, Vietnam, Thailand and others. In 2011, 8.7 million new cases of TB were recorded and 1.4 million people died from the disease. Poor and vulnerable groups are the most affected, but the air is a risk for everyone. Tuberculosis is among the top three causes of death for women aged from 15 to 44 years. Children have been recorded with 500,000 cases and 64,000 deaths.

The prevalence of TB in the European Region in 2013 was estimated at 56 cases per 100,000 inhabitants (about 500,000 prevalent cases). TB mortality was 4.9 deaths per 100,000 (around 44,000 in total). The incidence of TB in the European Region varies among and within countries; from a range of less than one TB case per 100,000 to over 200 TB cases per 100,000 in others. 53 countries of the WHO European Region recorded around 4.4% of the world's cases, representing an estimated 380,000 individuals with a new episode of TB (or relapse), or 42 cases per 100,000. Since 2005, TB notifications have decreased by almost one quarter, from 41 to 33 cases per 100,000. In 2011, the countries of the WHO European Region detected 295,968 new TB cases and relapses. Overall, there were twice as many male cases reported as female cases, however, a large variation was observed for male predominance in the gender distribution of TB cases. In 2011, most of the new TB cases registered in the European Region were in the 25–44 years age group (41%). Over the last five years, region-wide trends in overall TB notification among children (age group 0–14 years) have decreased by 23%, from 8.7 to 6.7 cases per 100,000, accounting for 11054 cases in 2011. However, the average percentage of patients within this age group in the Region has remained stable at around 6% over the same period (European Centre for Disease Prevention and Control/WHO Regional Office for Europe 2013).

In 2012, 345 cases of tuberculosis, which is 6.35/100,000 of population, were reported to the National Register of Tuberculosis in Slovakia. The number of new cases was 292 in 298 cases of pulmonary tuberculosis and 47 cases of Extrapulmonary tuberculosis. The relapse of tuberculosis was recorded in 53 cases. In the paediatric population, tuberculosis occurred in 19 cases.⁵

WHO has developed a new six point Stop TB Strategy which builds on the successes of **DOTS** (direct observation of treatment, short course) while also explicitly addressing the key challenges facing TB. Its goal is to dramatically reduce the global burden of tuberculosis by 2015 by ensuring all TB patients, including, for example, those co-infected with HIV and those with drug-resistant TB, benefit from universal access to high-quality diagnosis and patient-centred treatment. The strategy also supports the development of new and effective tools to prevent, detect and treat TB. The Stop TB Strategy underpins the Stop TB Partnership's Global Plan to Stop TB 2006–2015.

The strategy has the following objectives:

- Achieve universal access to high-quality care for all people with TB.
- Reduce the human suffering and socio-economic burden associated with TB.
- Protect vulnerable populations from TB, TB/HIV and multidrug-resistant TB.

⁵ I. Solovič, J. Švecová (2013). Svetový deň TBC 2013. [online:] <http://www.hagy.sk/view.php?cisloclanku=2010030001>, accessed 14 February 2014.

- Support the development of new tools and enable their timely and effective use.
- Protect and promote human rights in TB prevention, care and control (World Health Organization 2006).

The **European Centre for Disease Prevention and Control (ECDC)** was created in 2005 to strengthen Europe's defences against infectious diseases. ECDC gathers data from its member countries on approximately 50 key infectious diseases. Working with Member States and the European Commission to improve the reliability and comparability of data across Europe is a key strategic objective for ECDC. ECDC produces an Annual Epidemiological Report, which compiles and analyses data on all the diseases it covers, as well as reports on the state of specific diseases such as HIV/AIDS and tuberculosis (European Centre for Disease Prevention and Control 2009).

TB has been classically associated with poverty, overcrowding and malnutrition. Low income countries and deprived areas, within big cities in developed countries, present the highest TB incidences and TB mortality rates. These are the settings where immigration, important social inequalities, HIV infection and drug or alcohol abuse may coexist, all factors strongly associated with TB. In spite of the political, economic, research and community efforts, TB remains a major global health problem worldwide. Moreover, in this new century, new challenges such as multidrug-resistance extension, migration to big cities and the new treatments with anti-tumour necrosis alpha factor for inflammatory diseases have emerged and threaten the decreasing trend in the global number of TB cases of the last few years. We must also be aware of the impact that smoking and diabetes pandemics may be having on the incidence of TB. The existence of a good TB Prevention and Control Programme is essential to fight against TB. The coordination among clinicians, microbiologists, epidemiologists and others, and the link between surveillance, control and research should always be a priority for any TB Programme (Millet et al. 2013).

Tuberculosis provides a good case study for further analysing the correlations between communicable diseases and wealth distribution. Historically, the decline of TB incidence in Europe preceded the advent of anti-TB drugs and coincided with a rapid improvement in the quality of life. Earlier studies carried out after the resurgence of TB in the late 1980s in North America and in Europe indicated that, along with HIV infection and drug resistance, socio-economic factors were a major determinant in acquiring TB. The 27 EU member states, with a wide distribution of TB notification rates (4–138/100,000 population/year), as well as diverse levels of wealth as measured by gross domestic product (GDP) in purchasing power standards (PPS) per capita (8,600–63,100), represent an optimal setting in which to analyse whether a correlation can be detected between wealth, social cohesion, and TB (Suk, Manisero, Büscher, Semenza 2009). WHO's commitment to the promotion of equity and pro-poor policies in its disease prevention and control activities is based on the recognition of poverty as a major barrier to health and health care. In the case of tuberculosis (TB), the links between poverty and disease burden have been documented for many years. This document addresses the integration of national TB control programmes on the practical issues involved and options for action. The following six principal steps are recommended and described in the document.

Step 1 – Identify the poor and vulnerable groups in the country/region served by the national TB programme.

Step 2 – Determine which barriers prevent access of the vulnerable groups to services that provide TB diagnosis and treatment.

Step 3 – Assess potential actions to overcome the barriers to access.

Step 4 – Review the situations and population groups requiring special consideration.

Step 5 – Explore possibilities for harnessing additional resources.

Step 6 – Evaluate the impact of pro-poor measures.⁶

European Union (EU) citizens live, on average, longer and healthier lives than previous generations and health levels in the EU have improved continuously in recent decades. At the same time, there exist large and perhaps increasing inequalities in health both between and within EU Member States. Life expectancy at birth can give some idea of health levels amongst the population as a whole and in this, there are substantial differences between EU regions. In 2006, the difference between the Member States with the highest and lowest life expectancies was 8 years for females and 14 years for males. For several countries, the gap between national life expectancy and the EU average has increased in the last two decades. There are also differences of up to 20 years in the number of years lived in good health, with people living in the Central and Eastern part of the EU, especially men, living on average fewer years in good health. Aside from differences between Member States, a social gradient in health status has been identified. People with lower education, a lower occupational class or lower income, as well as some ethnic minorities in many Member States tend to die younger and suffer from a higher prevalence of most types of health problems. Differences in life expectancy at birth range from 4–10 years for men and from 2–7 years for women between the lowest and highest socio-economic groups.

All EU Member States have committed themselves to reducing inequalities in access to health care and health outcomes as an objective of the Open Method of Coordination. The Structural Funds and the Cohesion Fund EU are important tools for structural and regional policy. Their primary mission is to tackle inequalities between the economically strong and lagging regions. These are public funds derived from the taxation of EU citizens, decided by public institutions. In the financial year 2000–2006 as a whole accounted for a third of the entire EU budget (213 billion €). On 20 October 2009 the Commission adopted the Communication “Solidarity in health: reducing health inequalities in the EU.” Key actions set out in the Communication include:

- Integrating equitable distribution of health within overall economic and social development. Consideration could be given to whether sound monitoring of health inequality indicators would also help to monitor the social dimension of the future Lisbon Strategy.
- Improving ways of working with Member States, stakeholders and regions.
- Enhancing EU support for research into health inequalities.
- Audits of policies to ascertain their impact in reducing health inequalities.
- Encouraging Member States to make better use of the possibilities under the EU Cohesion Policy, structural funds and the CAP rural development policy for addressing determinants of health inequalities.

⁶ World Health Organization (2006). The Stop TB Strategy. [online:] http://www.who.int/tb/strategy/stop_tb_strategy/en/, accessed 4 February 2014.

- Activities targeting certain vulnerable groups, such as ethnic minorities, migrants and the Roma.
- Exploring possibilities for synergies between the Commission's development aid and work on health inequalities (European Commission 2010).

The most vulnerable and disadvantaged population group in Slovakia is demonstrably the Roma community living in segregated settlements. They are the poorest of the poor. Low income is usually the main indicator of poverty, but the Roma also experience poor educational opportunities, lower chances of employment, a poor state of health, and social exclusion. The poor state of health among the Roma community, compared to that of the general population, contributes to higher costs of medical treatment, an incapacity to work, hospitalization and disability, and social marginalization. Members of the Roma community who are integrated into mainstream society are able to participate in public health support programmes intended for the whole population. With regards to TB, the role of the Roma health assistants is to work in communities to: assist in the investigation of contacts; help compile lists of who should be investigated; initiate TB contact examinations; conduct physical examinations; and provide transportation to the doctor. After a patient is released from hospital care, Roma health assistants help them during examinations at the regional pulmonologist, provide them with drugs through public pharmacies, directly observe the daily ingestion of drugs, keep patient records, and conduct daily interviews with the patient. Roma health assistants are trained to be able to judge the possible side-effects of treatment. They have the role of educators, supervising the observance of basic hygiene standards.

The Health Support Programme for the Disadvantaged Roma Community is based on the results of a pilot project: Improving Accessibility to Health Care for Marginalized Roma Communities in Slovakia, implemented by the Ministry of Health in 2004–2006, and on a health education project: The Health of the Roma. The long-term objective of the programme is to achieve the following for disadvantaged communities in Slovakia by 2015:

- enforcement of equality and justice in terms of health,
- improvement in the state of health,
- increase personal responsibility for health.

As a result of the systematic work of Roma health assistants, 80% of adult Roma people with TB have been successfully treated. In addition, the Roma health assistant programme helps to insure that high-risk Roma communities are under constant TB surveillance and every outbreak of TB is immediately identified and contained. Those affected are brought to hospital for examination and treatment, which is afterwards controlled through DOT by Roma health assistants in the community (Solovič, Sedláková 2013).

Social policy towards the Roma ethnic group includes many measures which are aimed at solving their unfavourable social situation. It should be said, however, that assistance provided by the state is viewed in a vastly different way by the majority of the Romani population and the state. The Roma style of life, their philosophy of life made them beneficiaries without rights, refusing cooperation and participation in finding solutions to their bad situation. Many social policy instruments – notably the financial contributions – are made for beneficiaries abusing alcohol and lead to a raising in living standards and an improving social situation. Recently community

centres have been formed in Roma settlements, where advice and other social services are given not only to adults but also to children. Social workers and health assistants for Roma families act in their natural environment, and in a way help in addressing the social situation of the Roma, but also ensure the protection of public health. Any measure of social policy will never be effective enough until the beneficiaries themselves decide to take responsibility for their life and social situation. In response to this alarming problem, the authors of this article established a special project in 2011 to prevent and combat M/XDR-TB with a health system focus for better health outcomes. In consultation with the Member States, civil society organizations, communities and partners, a Consolidated Action Plan was developed as a roadmap for Member States, the WHO Regional Office for Europe and partners to scale up the comprehensive response and to work towards the prevention and control of M/XDR-TB. In September 2011, all 53 Member States with unprecedented support and commitment joined the Consolidated Action Plan to Prevent and Combat Multidrug- and Extensively Drug-Resistant Tuberculosis in the WHO European Region, with implementation in 2011–2015. This plan takes account of new diagnostic techniques, patient-centred models of care and tailored services for vulnerable populations. Full implementation of the plan is projected to avert the emergence of 250,000 new MDR-TB cases and 13,000 XDR-TB cases and save US\$ 7 billion.⁷

The aim of combating TB is to achieve an incidence of 10/100,000 inhabitants by 2035 and to reduce the incidence to 1 case per 1 million inhabitants by 2050. Other objectives follow: to ensure the equal access of all countries' populations to quality diagnosis and treatment; to save 14 million lives; to develop a new safe, effective and affordable vaccine by 2015; to reduce the global burden of TB by 50% compared to the level in 1990. It greatly reduces the incidence of the disease to 155 or less per 100,000 population, reduces the deaths of 14 or less per 100,000 population per year, including people infected with TB and HIV.

To achieve this objective, it is necessary to provide sufficient financial resources. Currently insufficient funding is a major factor resulting in a continuation of problems. In the area of R&D funding, 1.4 billion USD was lacking in 2010. More than 8 billion USD yearly is needed especially in countries with low and middle incomes for the period from 2013 to 2015. Every year, however, there is 3 billion USD available. International donors provide more than 60% of current funding in 35 low-income countries. To obtain sufficient funds to treat tuberculosis and other infectious diseases requires the cooperation of all EU Member States, as the spread of diseases in one country is a risk to all other states.⁸ Here opens the way for the non-profit sector activities as well as the use of social marketing to improve social conditions and increase the standard of living of citizens, which will result in reducing the incidence of infectious diseases along with excellent health care.

⁷ World Health Organization (2013). World TB Day. 24. March 2013. [online:] http://www.who.int/mediacentre/events/annual/world_tb_day/en/index.html, accessed 6 January 2014.

⁸ World Health Organization (2012). Global Tuberculosis Report 2012. [online:] <http://www.who.int/tb/publications/factsheets/en/index.html>, accessed 11 February 2014.

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Eliminacja nierówności społecznych jako warunek zmniejszenia ryzyka chorób zakaźnych

Streszczenie

Stan zdrowia ludności stanowi jeden z kluczowych czynników przyczyniających się do rozwoju społeczeństwa. Poszczególne jednostki ponoszą odpowiedzialność za swój stan zdrowia, jednak

za ten ostatni odpowiedzialne jest także państwo, nie tylko wobec swoich obywateli, ale także w kontekście globalizacji oraz relacji z innymi wspólnotami międzynarodowymi. Podstawowe determinanty jednostkowego stanu zdrowia, jak również stanu zdrowia całego społeczeństwa, stanowią – obok stylu życia – czynniki genetyczne oraz warunki społeczno-ekonomiczne. Nie istnieją społeczeństwa, w których wszyscy członkowie mieliby zagwarantowane optymalne warunki życia oraz równy dostęp do zasobów społecznych. Skutkiem są społeczne nierówności, jak również nierówności pod względem stanu zdrowia ludności. Warunki społeczne oraz styl życia wpływają na zdrowie jednostek, powodując jednocześnie ryzyko zachorowania na choroby zakaźne w niektórych grupach społecznych. W rezultacie w XXI wieku wciąż powszechne są choroby zakaźne charakterystyczne dla poprzedniego stulecia, takie jak na przykład gruźlica, uważana za najlepiej poznaną i najbardziej powszechną chorobę zakaźną. Istnieje związek między nierównościami pod względem stanu zdrowia wśród poszczególnych jednostek oraz zdrowiem publicznym, ponieważ im większe nierówności, tym gorszy jest stan zdrowia całej populacji. Artykuł omawia zagadnienia nierówności społecznych oraz ich usuwania, mającego na celu zmniejszenie ryzyka rozpowszechniania się chorób zakaźnych, w szczególności gruźlicy. Podstawową metodą wykorzystywaną w tekście jest analiza treści dostępnej literatury przedmiotu, jak również analiza danych statystycznych.

Słowa kluczowe: społeczeństwo, nierówności społeczne, zdrowie, choroby zakaźne, gruźlica