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Health status of Romanies (Gypsies) in the Slovak Republic and in the neighbouring countries

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Abstract

Romanies belong to Indo-European race. The ethnography and anthropology locate their original home to Central Northern India. The highest concentration of Romanies in Europe is in the Balkan and Carpathian regions and they are the second most numerous minority in the Slovak Republic. The inner structure of Romanies shows clear marks former ancestry creation, which they brought from India. Their natural increase of population is 21—33 per mille, but their reproductive health is worse than in majority of Slovak population.

Among Romany children there is generally a higher prevalence of infectious diseases, injuries, poisoning and burns caused by environmental hazards, to which they are often exposed. Total premature mortality in the Romanies are probably three times higher than in the total Slovak population. The main causality of a bad health status consists in long-term bad economical situation, low educational level and incorrect lifestyle of the Romany minority. Western authors and politicians claim that at the beginning of 21th Century it is not conceivable for European governments to ignore health needs of a great number of their citizens. The aim of this review is to react to this notice with an analysis of present situation and with presentation of data of our epidemiological investigation on health status, nutrition and lifestyle of Romanies. *(Fig. 4, Ref. 35.)*

Key words: Romanies, Gypsies, life expectancy, morbidity, mortality, life style, nutrition, smoking, alcoholism, atherogenic index.

Romanies belong to the Indo-European race. The ethnography and anthropology locate their original home to the Central Northern India. The oldest information about existence of Romanies in Slovakia is from 1322 when they lived in surroundings of the Spisska Nova Ves. In the last centuries Romanies were often pursued because of their differences but the worst situation was in 20th century when a half million of them were exterminated in Nazi camps.

During socialist regime in Czechoslovakia, Romany population had many social advantages that brought them to the passive stage in social state care. This policy of state markedly failed and increased their social passivity.

An estimate of the number of Romanies in Slovakia and neighbouring countries

According to data of the international organisation Minority Rights Group (MGR), the highest concentration of Romanies in Europe is in Balkan and Carpathian regions, especially in reformed states of Austro-Hungary and Osman Empire. Data from official statistics (e.g. last census in former Czechoslovakia 1991) are unrealistically low (1, 2). Demographers currently estimate the range of 480—520 000 Romanies living in Slovakia (3). Romany population is the second largest minority in the Slovak Republic. Concerning to the total population, Slovakia is one from the states with highest concentration of Romanies in the world. More than 5 million of Romanies inhabitants now live in countries of former Eastern block and they create one of the most important minorities especially in Slovakia, Romania, Bulgaria and in Hungary. Romanies are not spread homogenously in Slovakia. The highest density is in south regions from district Velky

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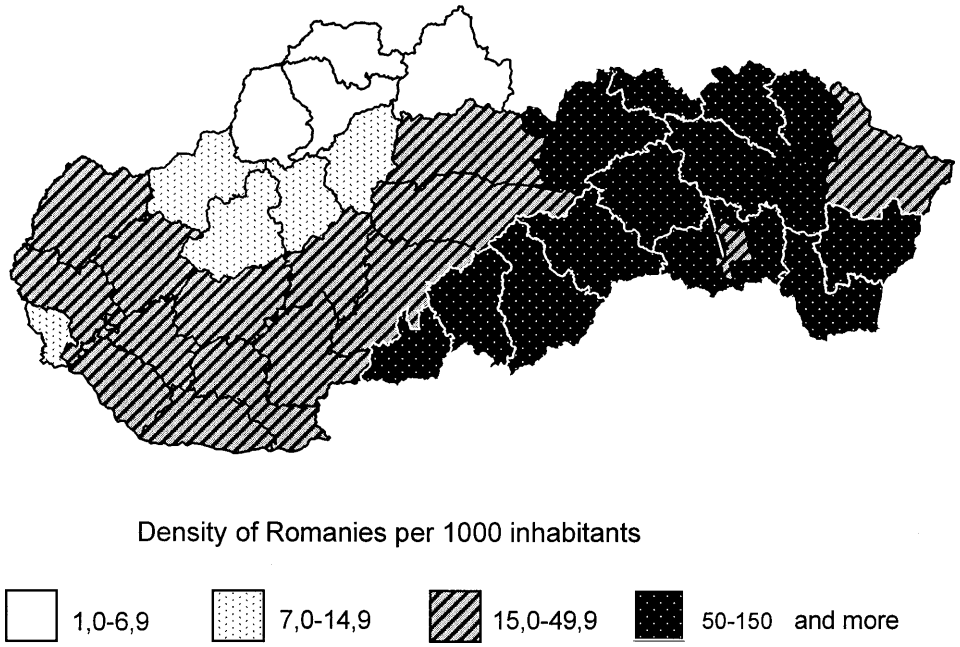

Fig. 1. Density of Romanies in Slovakia in 80's (6).

Krtis towards the north and east (5). The highest regional values exist in former East Slovakian regions except of district Humenne. Data presented in Figure 1 should be treated with reserve, but it seems they represent a realistic concentration of Romanies in the Slovak Republic territory. The lowest regional values are in northwest regions followed by former districts: Bratislava—city, Trencin, Topolcany, Prievidza and Martin. Relatively high density of Romanies settlements is in the districts Senica, Bratislava—province, Trnava, Nitra, whole area of Zitny ostrov, Ziar nad Hronom, Zvolen, Banska Bystrica, L. Mikulas, Kosice—city and Humenne. Two thirds of Romany live in the south central and east part of Slovakia (3).

Reproductive behaviour of Romanies in Slovakia

Inner structure of Romanies show clear marks of former patronymic creation, which they brought from India. They create sexual partnership coexistence in very young age, what consequently leads to the fact that mean age of partners (especially woman) is lower than 18 years of age. For Romany woman high fertility is a characteristic and they are usually sexually active this whole period.

A proportion of children up to 14 years of age among Romanies are 43.4 % in the Slovak Republic (1, 3) (data from 1991). Figure 2 shows the age structure of Romanies and total Slovak population (6, 18) and proves that in Slovakia, besides themselves, live two completely different populations, if demographic indicators are taken into consideration. Romanies are mainly in progressive type of age structure characterized by high density of the child population and low density of older people. Their age pyramid is close to the age structure of populations in developing countries. Number of children per Romany woman is 4.2 in the SR what is two times more than in non-Romany woman population in the SR (1.5 per mother) (3, 4). Recent data from the Czech Republic report that average number of children per mother is 3 (34). In not as developed Romany settlements — the number of children is rising nearly to 8 children per mother. Such high fertility was not found in any other state on the world (according to WHO data from 1999), except of Uganda where it is 7 children per mother (7). The large basis of an age pyramid for

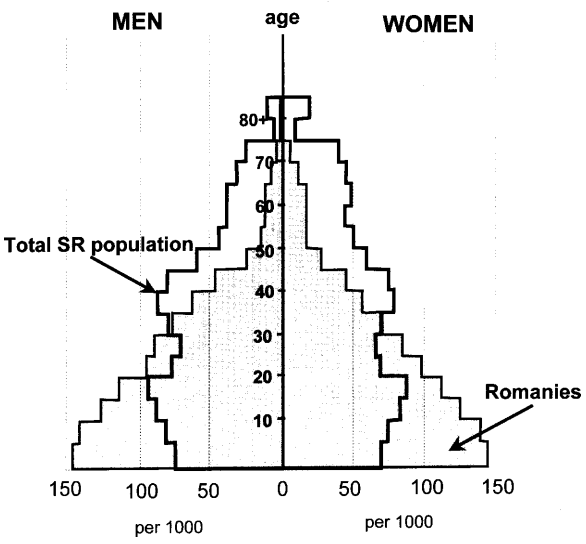

Fig. 2. Age structure of Romanies and total population in Slovakia in 1991. Source: Census 1991 (1).

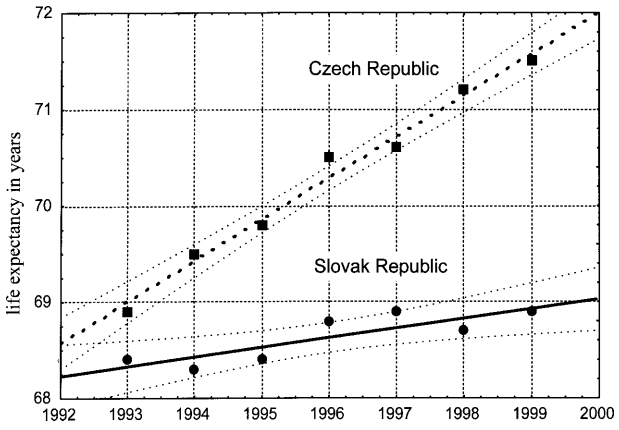

Fig. 3. Different trends in male life expectancy in the Slovak and Czech republics (30).

the Romany population has been rapidly reducing, since the mortality rate of Romanies is high in a young age group.

Proportion of Romanies in the age interval of 30—40 years is only 17 % among Romanies, in Slovak or Hungarian populations it is 22—23 %. Thus the width of the age pyramid for total Slovak population is from the age 35 and continually exceeds the age pyramid of Romanies (Fig. 2). Top of the Romany age pyramid ends at the age of 75 years, because the mean life expectancy of Romanies is very short. However the exact life expectancy of Romanies was not yet determined. On the basis of a census from 1970 and 1980, Kalibova estimated that the mean life expectancy for Romanies is only 55.3 for men and 59.5 years for women (18). WHO data (7) report such short life expectancy of men for very poor developing countries, for example for Ghana (54.6 years). The mean life expectancy for men is even higher in many developing countries, e.g. Banglades (57.5 years), India (59.6 years) and Pakistan (62.6 years). Estimated life expectancy of Romany women is similar to Gambia (58.9 years) and lower than in India (61.2 years) or in Pakistan (64.9 years). In comparison with data of total Slovak population, Slovakian Romanies have been living 13 years shorter and Romany woman even 17 years shorter (3). Therefore, it is not surprising that already in 1991(1,3) Romanies above 60 years of age represents only 3.6% of total population, while for the total Slovak population it was 14.8 %. It is necessary to stress however maternity hospitals in the Slovak Republic are in relatively good condition and the infant mortality of Romanies is lower than in developing countries, what means that their short life expectancy is mainly caused by extremely high mortality in seniority (Fig. 3). Today in the Czech Republic, only 4 % of Romanies live above retirement age (about 60 years) in comparison to 25 % of ethnic Czech (6).

Health status of Romanies in the Slovak Republic

Health status of children population

Reproductive health for Romanies is worse than for majority of the population in the Slovak Republic. Infant mortality in 1985 in particular regions of former Czechoslovakia was only 1.4 times higher in South Czech region and in South Moravian region 2.8 times higher in comparison to the Czech average (18). At the same time the infant mortality was in the West Slovak Region only 1.6 times higher than in the total population, but in Eastern Slovakia Region even 2.6 times higher (18). A study in the Roznava Region performed in 1996—1997 found that the neonatal mortality rate among Romanies was from 1.5 to 2 times higher than among non-Romanies. Although Romanies have been living in Central Europe for many centuries they hold strong specificity from anthropometrics and genetic aspects. Czech and Slovak authors found significant deviations in the development of body height and weight if compared to non-Romany population (8, 9). In the recently published excellent monograph Bernasovsky and Bernasovska (10) described significantly lower values of birth weight, of head length and of breast circumference in Romany newborns. Romany preschool-age children were lighter, had lower head and breast values, lower breast depth values and manifested trends to the lower T4 concentration. Similar results were found in Romany chool-age children. Romany children had lower percentage of fat occurrence, fat weight and active body weight (10). In Hungary, Romany infants were twice as likely to be born prematurely and there was a significant excess of births under 2,500 g (6). Ferak et al. (11) presented data indicating that Slovakian Romanies has the highest coefficient of inbreeding in Europe, which increases the probability of recessive genetic diseases. High prevalence of congenital glaucoma might be caused by high consanguinity of parents — in 46 % of the cases (28). In East Slovakia is a significantly higher incidence of congenital hypothyroidism in Romany newborns (22). Among Romany children a high prevalence of diabetes mellitus was found (6).

Prevalence of mental retardation among Romany children aged 6—14 years in the district of Banska Bystrica was 21.5 % and only 0.9 % among non-Romany children (23). The authors report that in about a third of the affected Romany children, there was an evidence of genetic aetiology (monogenic disease or chromosomal aberration). Other authors found higher incidence of congenital anomalies and genetic diseases among Romanies including glaucoma and fenylketonuria (24—29).

Among Romany children is generally a higher prevalence of infectious diseases, injuries, poisoning and combustions caused by environmental hazards, to which they are often exposed. In the Slovak Republic, the worst situation is in Romany settlements, where infectious and parasitic diseases occur among children, which do not commonly occur in majority population. The prevalence of parasitic, bacterial and viral diseases in Romany children in the age group 6—16 years was significantly higher than in Slovak children in the same age group (12). Mocova (13) reports increased proportion of Romany newborn in the Roznava district, that were treated and hospitalized in a sorely high number than is their proportion in population. The increased proportion of hospitalized Romany children (respiratory infections and dyspepsies) was also observed in paediatric ward in Presov in 1982 (14). Prevalence of meningitis is also spreading.

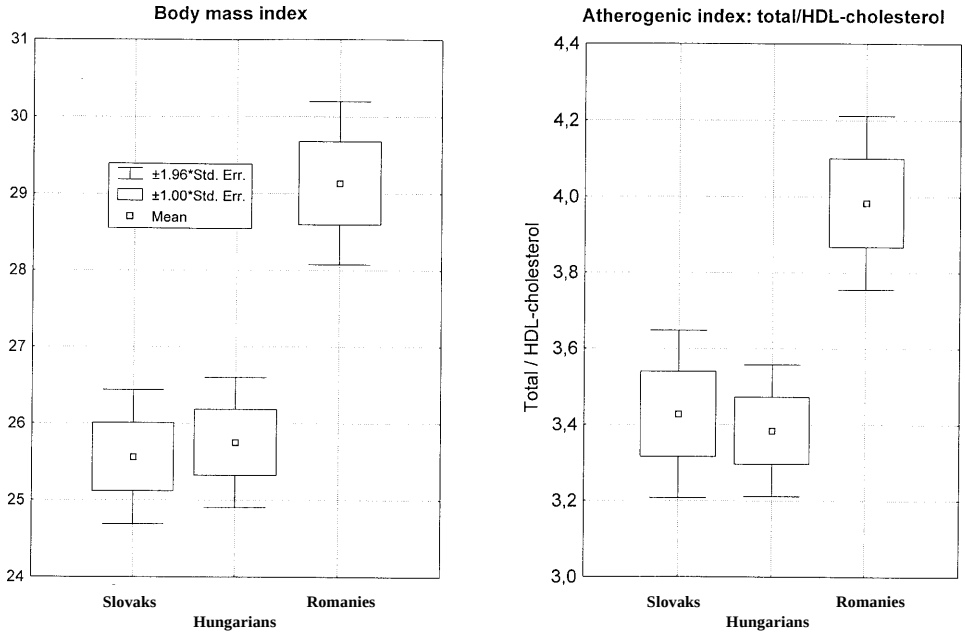

Fig. 4. Higher values of body mass index and atherogenic index in Romanies (131 persons), Hungarian (114 persons) and Slovak population (98 persons). The differences between Romanies and non-Romanies are highly significant (p<0.001).

Health status of adult population

Health status of Romanies in the Slovak Republic is substantially worse than in the majority population. Most published papers are concerned on increased prevalence of infectious and sexually transmitted diseases. During the 1960s, tuberculosis incidence sharply decreased in Czechoslovakia. Investigation in West Slovakia showed that the prevalence of active pulmonary tuberculosis was significantly higher, and decreased more slowly among Romanies (15). Serological investigation in pregnant women showed high prevalence hepatitis A and B (6). In the Czech Republic prevalence of infectious diseases, especially enteritis, salmonelosis, scabies, smallpox, viral hepatitis A, B and C, and lues are significantly higher than in the majority population (34). In Hungary increased frequency of suicides among Romanies was observed (21).

Bernasovsky and Bernasovska described in their monograph (10) details of their anthropogenetical studies of Romanies. According to these authors the gene pool of the present Romany population is significantly different from the majority of European populations. The differences between gene frequencies in Romanies and other populations support an assumption of Indian origin of Romanies. They found high value of inbreeding coefficient (F) which may have expressive influence on wide production of homozygotes in Romanies. This can considerably increase the frequency rate of recessive hereditary diseases in Romanies (10).

There is little data in literature about morbidity and mortality caused by the two most wide-spread chronic diseases in the Slovak Republic and the whole Europe — cardiovascular and cancer diseases among Romanies (6, 16, 17). Nozdrovicky (19) reported that in Romany community in the village of Rakusy cardiovascular diseases were the most common cause of death and proposed that the most important causes were extremely high prevalence of smoking, very high consumption of alcohol, obesity, high consumption of animal fat and low consumption of fruit and vegetables. In small sample of 58 American Romanies 73 % were found to be hypertensive, 46 % had diabetes, 80 % hypertriglyceridaemia and 67 % hypercholesterolaemia. There was a high frequency of lifestyle related risk factors for cardiovascular diseases in the sample of patients investigated: 86 % were cigarette smokers and 84 % obese. Of this small population, 39 % had occlusive vascular disease and 20 % chronic renal failure (20).

With respect to very short mean life expectancy very high number of Romanies probably died at a young age due to cardiovascular diseases, cancer, environmental causes and other diseases (e.g. cirrhosis, respiratory diseases, infectious diseases and others). Because this field doesn't exist in Slovak, nor in the world's literature any data we try to perform their hypothetic analysis. Our analysis came out from a surprisingly different development of male life expectancy in the Slovak and Czech Republic after splitting the Czechoslovakia in 1993 (Fig. 3). Male life expectancy in 1999 of the Czech Republic achieved 71.5 and in Slovakia 68.8 years and according to WHO data 67.4 years only (30). Reasons of this significant difference (about 4 years) are not known but might be related to the size of minorities in the Slovak Republic and their shorter life expectancy. Since we do know the male life expectancy in Hungary (66.4 years) and estimated life expectancy of Romany men in the former Czechoslovakia (55.3 years) as well as the approximate propor-

tion of both minorities in the Slovak Republic (about 10 %), we calculated from this data by a weighted mean average life expectancy just for the „pure“ Slovak population. The result was surprisingly similar to the Czech Republic: male life expectancy for just the Slovak population was 71.0 years (for the whole Czech Republic 71.5 years). In the same way we also calculated the data for premature mortality of Romany men by major causes of death (cardiovascular diseases, cancer, external causes). Results achieved are only informative, because it was not possible to standardize them to the specific age structure of Roma. Furthermore data of Czech men for the calculation of Slovak mortality were applied. Results show essentially higher premature mortality rate (i.e. mortality in age interval 0—64 years) in male Romany population in the Slovak Republic. Total premature mortality from all causes is in Romanies nearly threefold higher than for total population of the Slovak Republic and twice as high than for the total Hungarian population. Hypothetical premature cardiovascular mortality of Romany men exceeds more than 2.5-times average of total Slovak men mortality. Cancer mortality is 1.8 times higher than the Slovak population and mortality due to external causes (injuries, poisoning, homicides, suicide and other) approximately twice as high than for the Slovak men. None of the European countries achieved mortality rate calculated for Slovak Romanies, except of some reformed countries after splitting of the USSR. In the hypopthetically calculated total premature Romany male mortality there is markedly high proportion of „other causes“ that are probably caused from infectious diseases, cirrhosis of liver (combination of hepatitis and alcoholism), respiratory diseases (extremely high prevalence of smokers) and diseases of digestive tract. Very high cardiovascular mortality probably relates with high prevalence of diabetes and high incidence of chronic infections. According to the latest knowledge induction of inflammatory processes and auto-immunity is a new relevant risk factor of cardiovascular disease (35).

Our first unpublished results on Romany community near Bratislava show very high incidence of obesity and very high values of atherogenic index (total/HDL cholesterol) both in Romany males and females in comparison to Slovak and Hungarian males and females living in the same district (Fig. 4). This confirms the claims on very high cardiovascular mortality of Romanies.

There is evidence that the health status of Romanies is essentially worse than the health status of the average population of the Slovak Republic and it is similar to the health status of the citizens from some regions of the former USSR in a period of crisis in 1994 (30). Major cause is in long-term bad socio-economical situation, low educational level, and incorrect lifestyle of Romany minority. There is a paradox that in time of the totality regime health status of the „proletarian Romany community“ was improved, expressed in a decrease of infant mortality and partial elimination of most infectious diseases, whereas the democratic upset after 1989 induced deterioration of health status of the Romanies. Experts from West countries observed those trends. Martin McKee claims in a paper published in the prestigious BMJ (17), „that in the end of XX. Century is not receivable for European governments to ignore health needs of great number their citizens“ and also criticizes scientific institutions of countries with high number of Romanies for the little attention to the analysis of health problems for the Romanies.

Our aim is to react to these critical views with an epidemiological investigation of the health status, nutrition, lifestyle, biochemical and immunological parameters of Romanies. The first data received in cooperation with Czech authors has been already published (31—33). In Slovakia, we found very high prevalence of obesity, low levels of HDL-cholesterol, high concentration of triglycerides and very high values of atherogenic index in Romany men and women.

The key problem is in order for the Government of the Slovak Republic and Ministry of Health and Ministry of Education to be aware of political and social consequence of these kinds of research projects. Too sceptic of attitude on the impossibility of approximation of the Romanies and majority population is not correct. It is admirable that the Romanies for centuries of very strong social strain have been upkeeping their language. The rise of their educational level depend on regular elected attitude. Little advancement in the educational level of the young Romanies has been already reached (6).

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