Health-related Quality of Life of the Unemployed in a Disadvantaged Micro-region of Hungary Densely Populated by Roma People in Relation to the Quality of Life of the Country. A Mini Review.

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ABSTRACT

Following the change of social, political and economic system in Hungary (1989), the authors'working group, in a series of studies, analysed the quality of life of Hungarian and Roma unemployed living in one of Hungary's most disadvantaged areas, in the Ózd micro-region of Northern Hungary, based on their national studies of three decades on unemployment and the living conditions of the Roma people, taking into account the health-related quality of life parameters defined by the WHO.

It was found that according to the values of the health-related quality of life indicators analysed by the working group (physical and mental health, social situation, relationship to the environment, relationship with the majority society), the quality of life of the micro-region's unemployed was almost beyond foreseeable distance from even the average quality of life in Hungary, which in some respects (e.g. life expectancy at birth, social conditions, social relationships) was also criticized by the international organizations (OECD, FRA).

It was also found that, regardless of their ethnicity, in the Ózd micro-region, the age-dependent physical and mental health of second-generation unemployed, and their fitness for light physical work was significantly better than that of the first-generation unemployed; the in-door and out-door environmental health situation of the second-generation unemployed and their relationship with the majority society, independently of their age, was worse than that of the first generation unemployed.

It was identified as a significant and positive change that Hungary had eliminated the mass unemployment appearing at the time of the collapse of the so-called socialist world system, and today it ranks 4th in the unemployment rate of EU28. As a result, the frequency of single-factor and/ or polyaetiological direct health damaging effects connected to the stressor effect of unemployment proved by the authors' team has been minimized.

[1] *Last work place*

In the authors' country-wide studies performed in the early 2000s, combined with family visits and hygiene inspections, in contrast to well-known national or international analyses, the in-door and out-door environmental health situation and the quality of life parameters of public health safety were identified and concluded that the Roma community was differentiated among three population groups of significantly different quality of life. The worst was the quality of life of the Roma living in colonies, then of those living in colony-like arrangements, and the best quality of life was found among the Roma living integrated with the majority society. The age-pyramid of Roma living in colonies and colony-like arrangements was pyramidal, similar to that of the population of the poorest developing countries and differed from the stack-formed age-pyramid of the aging population of the developed countries. The estimated life expectancy at birth of the Hungarian Roma lagged 5-7 years behind that of the European countries of worst position in this respect.

It was also found that, compared to the housing conditions of Roma people living in Roma colonies or colony-like arrangements in the early 2000s, there was little or no progress observed during the study performed between 2010 and 2015 in the similar parameters of the Roma unemployed in the Ózd micro-region.

In conformity with the spirit of the 2011 programmes elaborated during the Hungarian EU Presidency, the Hungarian Government's National Social Convergence Strategy and its 2014 update, the authors, based on their own study results, put forward recommendations for immediate corrections of housing conditions and educational level of the people (including the majority of Roma) living in deep poverty (e.g. - based on a hygiene-respected prioritization - elimination of the Roma colonies) as well as for providing school advancement and proper learning conditions (all-day school education, dormitory accommodation on teaching days, closing-up education, and where appropriate, employing Roma speaking teachers). The compulsory kindergarten engagement under realization is considered to be very important in terms of a proper socialization that helps to close up.

Key Words: quality of life, unemployed, first and second generation, Roma, social differentiation, Roma colonies, disadvantageous situation, micro-region, closing up

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INTRODUCTION

Following the change of social, political and economic system (called also "transition") in Hungary (1989), based on our national studies on unemployment and the living conditions of the Roma people (Ungváry, 1993; Ungváry et al., 2005), and practically as their continuation, in a further series of stud-

ies we analysed in detail the health-related quality of life of Hungarian and Roma unemployed living in one of the most disadvantaged regions of Hungary, in the Ózd micro-region of Northern Hungary.

The Ózd Micro Region (further: micro-region) is located in the western part of the county of Borsod-Abaúj-Zemplén (BAZ) in the region of Northern Hungary. The micro-region and its centre, Ózd, are located near the Slovak border. The micro-region developed dynamically until the end of the 1970s, reaching 100,000 inhabitants. During the decades of the so-called socialism, Ózd developed into an industrial town, a metallurgical citadel of the "country of iron and steel", the population and territory of which increased significantly by new settlers and the annexation of several smaller settlements. At the same time, the declining and narrowing operation of the unreally oversized metallurgy and the related economic entities, from the 1980s onwards, the population of both the micro-region and the town Ózd began to decrease and following the change of regime a mass unemployment emerged in the region. At the beginning of the 1990s, the decline of the population temporarily stopped. In December 1997, Ózd was the second largest town in BAZ county and the 22nd largest town in the country (42,826 people lived in Ózd). Due to the continuing economic recession, the population of the town fell to 38,506 in 2000 and 34,361 in 2012. (Dobossy, 2001; 2003; TÁMOP, 2008; KSH, 2013A; Hegedűs, 2015). In 2015, altogether 72,000 people lived in the three towns (Ózd, Borsódnádasd, Putnok) and 26 villages of the micro-region. The proportion of Roma people was 28%. Most of them (2011-2015 data) lived in Ózd, where about 6,000 Roma people (16.5% of the town's inhabitants) lived in 6 Roma colonies and so-called colony-like arrangements. Between 2010 and 2013, according to the data of the Debrecen University (Pénzes et al., 2018), the proportion of Roma inhabitants in Ózd was 37.8%. In parallel with the elimination of the metallurgy formerly employing 14,000 people, the number of jobseekers increased; it was 5,000 between 1990 and 2000, 6,300 in 2008, 8,170 in 2011 and 7,806 in 2012 (Hegedűs, 2015). Of the 174 micro-regions of the country, Ózd was the 13th most underdeveloped one. Note: Based on several indicator parameters determining the quality of life, the classification of this micro-region is more disadvantageous. At the time of the financial and economic world crisis starting in 2008, the disadvantageous situation of the micro-region and its centre was characterized not only by the mass of the unemployed, but also by the huge uncultivated brown fields remaining as a socialist heritage (Hegedűs, 2015).

Taking into account the World Health Organization's definition of quality of life[2], the situation of the micro-region's unemployed was partly (and emphatically) analysed with respect to the indicator parameters of the quality of life (physical health, psychological state of health, degree of independence, social relationships, relation to the environment). Given the WHO's health definition[3], we paid special attention to the social situation of the unemployed in the micro-region.

By recalling our results, similarly to the aims of our mini-review, we aim, first and foremost, to briefly summarize the level of quality of life in which Hungarian and Roma unemployed in the micro-region live, and the quality of life that Hungary has achieved and the unemployed of the micro-region want to catch up to. On the other hand, with a brief summary of our results, we want to show that the studies conducted in the Ózd micro-region have also revealed the knowledge that can help to solve the problem of globally appearing unemployment and the problem of

[2] *The World Health Organization defines quality of life as „ ...It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment."*

[3] *The 1948 Constitution of WHO defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."*

Roma living for centuries in extremely disadvantaged living conditions. Finally, in our overview, with only one hint, we indicate the average EU parameter values that Hungary has set to achieve.

RESULTS AND DISCUSSION

Values of the WHO-defined quality of life parameters in the micro-region and Hungary Physical and mental health.

27-50% of the micro-region's unemployed declared to feel healthy; within this, the second generation unemployed felt healthier than the first generation unemployed; the average age of the second generation unemployed was significantly lower than that of the first generation; their health status data were age-dependent (Ungváry et al., 2019). (Only) 56% of the Hungarian population declared themselves to be in good health (The Lancet, 2018). According to the results of occupational health specialist examinations, the health status of the unemployed fell short of the self-assessment results (Morvai et al., 1999; Hegedűs, 2015). In summary, the health status of the micro-region's unemployed was worse than the national average[4] not being at a level of appreciation, either.

Direct health damaging effects of unemployment. The mental, then the somatic health-damaging effects of unemployment – based on different experiences and concepts – have been demonstrated by a series of international researchers (Jahoda et al., 1933; Martikainen and Valkonen, 1996; Mathers and Schofield, 1998; Paul and Moser, 2009; Inoue et al., 2007; BMJ, 2009) and also by our working group (OMI, 1990-1996; Ungváry, 1993; Ungváry et al., 1997; 1999; 2002; Morvai et al., 1999; Grónai et al., 2004). According to our experience, the mass unemployment occurring after the collapse of the so-called socialist world system[5], connected to the Hungarian change of regime was characterized by parameters different from those of usual global economic crises, thus we suggested that the direct health-damaging effect was the consequence of the stressor effect of unemployment (Ungváry, 1993). Distress induced by unemployment as a stressor (primary aetiological factor) and the health damaging effect associated with distress have been demonstrated by our working group in a series of studies among unemployed confirmed by medical specialist examinations carried out partly in the whole country and partly in the micro-region (Ungváry, 1993; Ungváry et al., 1997; 1999; 2002; 2014A; 2014B; Hegedűs, 2000; 2003; 2015; Hegedűs et al., 2003; 2014A, 2014B). The proportion of different stages of depression among the unemployed in the micro-region was 70% (Morvai et al., 2016; Ungváry et al., 2019); while the severe depression rate in the general population was 13% (Kopp and Skrabski, 2002-2006). The chances of be-

[4] *When comparing self-statements about health it has to be taken into consideration that: i) the proportion of people complaining of illnesses increases with age, - those complaining the most are above 65 years; ii) all the unemployed examined by us were younger than 65 years; iii) employability of the unemployed depends on their health status, their fitness for work*

[5] *The mass unemployment created by the collapse of the so-called socialist world system differs from the one produced by the global economic crises. i) In the Central and Eastern European countries, in spite of the internal unemployment in the factories, it was not only compulsory to be employed but its avoidance was also penalized. ii) the emerged unemployment threatened the dismissed people independently of their qualification and health condition.*

ing unfit for light physical work among the unemployed of the micro-region were 20 times higher among the first generation unemployed and 10 times higher among the second generation unemployed than those among the active employees (Hegedűs et al., 2014B; Hegedűs, 2015; Morvai et al., 2016; Ungváry et al., 2018A). Illnesses caused by the stressor effect of unemployment, direct health-damaging effect of poverty (Tomatis, 1997; Gwatkin et al., 1999), lack of education (Faragó, 2007; Szakmáry et al., 2007), housing conditions directly threatening public health and epidemiological safety in Roma colonies and among Roma and even very poor Hungarian unemployed living in colony-like arrangements, the poor in-door environmental health conditions (see later for more details) and depression causing unfitness for work in itself, inevitably cause irreversible unfitness for work (Hegedűs et al., 2014A; 2014B; Ungváry et al., 2014A; 2014B).

We do not want to compare the proven physical and mental health effects of unemployment to the health of the general population. However, there is no similar data for the total population of the unemployed in Hungary. As this type of health damage affects only the unemployed, the health damage caused by unemployment can be considered the health-related quality of life indicator of unemployment. The unemployment rate depends on the current economic situation. At the time of our investigation – between 2011 and 2015 – the Hungarian rate, together with the rate of Northern Hungary, decreased, but in the latter it remained above the national average all the time (Hungary: from 11.1% to 6.8% and Northern Hungarian Region: from 16.5% to 8.7%, respectively, KSH, 2019A; 2019B).

Education, qualification. During our study period the proportion of Roma unemployed with completed 8 classes increased, and so did the Hungarian unemployed with completed vocational school. In all of the examined groups, high proportion of people with incomplete (less than 8 classes) elementary school education was typical, and in the analysed groups hardly any individuals completed secondary or higher education. The data presented in Table I indicate that the education and qualifications of the micro-region's unemployed are not only behind the total population of Hungary, but also far behind the total unemployed population of Hungary. This statement is especially true for the Roma unemployed. The Roma people living in colonies are even less educated than those living in colony-like arrangements (Table II; Szakmáry et al., 2007; 2012; Hegedűs et al., 2014A; 2014B; Hegedűs, 2015; Ungváry et al., 2018B). The lower the level of education, the worse the in-door living conditions are, the lower the level of personal hygiene is, and the worse the behavioural decisions directly affecting the quality of life are.

Education just like 1-2 grades higher than 1-3 elementary classes significantly improve the quality of life - e.g. number of artificial abortions (Szakmáry et al., 2018). School education is a parameter of prominent importance of the negative impact of unemployment and the specification of Roma inclusion (Szakmáry et al., 2007; 2018; Ungváry et al., 2018B).[6]

[6] *backwardness in education is especially worrisome because in Hungary after the change of regime education level spectacularly increased; it was especially worthy of attention among the graduates of secondary schools and higher education institutions (KSH, 2014B)*

Table I.

Education level of the unemployed in the Ózd Micro-region and Hungary, as well as of the total population of Hungary

Education level / region	Roma unemployed in the micro-region (%)	Hungarian unemployed in the micro-region (%)	Total unemployed in Hungary (%)	Total population of Hungary (%)
Proportion of people without completed elementary school education (< 8 classes)	39. 6	26.7	3.8	0,7 (KSH, 2001)
Proportion of people with completed maximum 8 classes of elementary school	46.0	25.4	49.4	~20 (KSH, 2009)
Proportion of people with secondary or higher education			46.8	80
Proportion of people with vocational school education / skilled workers	13.6	41.8	12.6	30
Proportion of people with final examination (completed secondary school education)	0.0	3.4	9.3	31
Proportion of people with higher education (college, university)	0.0	0.0	8.2	19

The greatest change in the education during the half century preceding the 2011 census was observed during the 1990s, i.e. the period after the change of regime, the education level of the population continuously increased, which was most spectacular in the increasing number of the graduates from secondary and higher education institutions (KSH, 2014B). Unfortunately, the unemployed of the micro-region were not part of this, their education level did not reach the final examination or even higher steps considered as a turning point in their inclusion procedure. Note: We observed advancement only in the proportion of Roma unemployed with completed 8 classes of elementary school, and the proportion of Hungarian unemployed skilled workers. Source: Hegedűs et al., 2014A; KSH, 2013B; 2014B.

Table II.

Education level of men and women living in Roma colonies and colony-like arrangements (2002-2003)

Settlement type	Men living in Roma colonies		Men living in colony-like arrangements		Women living in Roma colonies		Women living in colony-like arrangements	
Maximum level of education	**number of people**	**%**	**number of people**	**%**	**number of people**	**%**	**number of people**	**%**
< 8 classes of elementary school	368	34.6	167	20.7	578	45,7	334	35,7
8 classes of elementary school	604	56.7	490	60.9	590	46.6	503	63.8
Vocational school	84	7.9	125	15.5	49	3.9	66	6.0
Secondary grammar school	5	0,6	7	0.9	11	0.9	12	1.3
College, university	4	0.4	2	0.2	0	0.0	3	0.3
No data	-	-	13	1.6	36	2.8	25	2.7
Altogether	1065	100.0	803	100.0	1266	100.0	936	100.0

Data of 1065 men and 1266 women living in Roma colonies and 803 men and 936 women living in colony-like arrangements, respectively are presented in the Table. Source: Data collection in 2002-2003 in collaboration with the State Public Health and Medical Officer Service (ÁNTSZ). References: Ungváry et al., 2005; 2014A; 2014B; Szakmáry et al., 2007; 2012; 2018)

Table IIIA.

Proportions of parameters determining the in-door health-related quality of life of the unemployed in Ózd micro-region

Compared parameters	Hungarian unemployed proportion (%) of dwellings	Roma unemployed proportion (%) of dwellings
Building material		
• panel, concrete	17.4	9.3
• adobe	2.9	7.7
• mud wall	0.0	5.2
Flooring of dwellings		
• stone, concrete	21.8	35.2
• wood, parquet	55.1	42.0
Dwellings with one „room”	12.9	48.1
Piped water supply in the dwelling	79.8	46.4
Drinking water supply from public tap	14.0	22.8
Traditional stove heating	51.2	64.3

Table IIIB.

Other parameters determining the in-door and health-related quality of life of the unemployed in Ózd Micro-region

Compared parameters	Hungarian unemployed	Roma unemployed
Number of individuals living in the dwelling	3.1 ± 0,1	4.6 ± 2,1
Average floor space per inhabitants (m^2)	26.0 ± 17.9	9.7 ± 7.0
Number of seats per inhabitants	1.9 ± 2.1	1.2 ± 1.1
Number of beds per inhabitants	1.5 ± 1,0	1.0 ± 0.6

Source: Hegedűs, 2015; Hegedűs et al., 2014A

Concerning the national comparison, we refer to the text. Publications about housing conditions of the Central Statistical Office (KSH 2014A; 2017), in order to exclude the risk of subjectivity, do not keep record of the majority of parameters considered by us. Our representative hygienic-oriented site visits have reduced the subjectivity of our observations.

Residential and in-door environmental health status as a health-related, health-damaging quality of life indicator. The in-door environmental health situation of Hungarian and Roma unemployed in the micro-region is hardly comparable with the Hungarian population *(Table IIIA,B)*. The reason for this is not only (and primarily not) that the available national data cover only a small part of the parameters studied by us[7], but rather the set of parameters presented by our working group which make it obvious that the in-door living conditions of the Roma unemployed (and in part the Hungarian unemployed of the micro-region) threaten public health and epidemiological safety and are totally unsuitable for relaxation, harmonious family life and learning. Data of the micro-region fall outside a foreseeable distance from the national average (Hegedűs 2015; Hegedűs, et al., 2010; 2011; 2014A; 2014B; Szakmáry et al., 2017). The residential and in-door environmental health situation is a parameter of prominent importance of the quality of life of the micro-region's unemployed, and the Roma inclusion. We especially emphasize the fact that the Roma live in the worst conditions in the so-called overcrowded dwellings. 78.3% of all overcrowded dwellings have piped water supply (KSH, 2016B). The ratio of piped water supply in the homes of people living in Roma colonies is 0%; the inhabitants of the colonies take home water from public taps (Ungváry et al., 2005; 2014A; 2014B). The housing conditions of both the Roma living in colonies or colony-like arrangements and the Hungarian and Roma unemployed living in the Ózd micro-region are out of conceivable distance from the national average.

[7] *Based on the 2011 census data, the KSH stated that 4.4 million homes and other dwelling units were recorded in the country, while the number of households hardly exceeded 4.1 million. I.e. there is no quantitative housing shortage in Hungary. Of the most important features we highlight: in 2011, among the inhabited residential units the ratio of one-room dwellings was 9.1%, that of two-room dwellings 37.0%, three-room dwellings 21%, and four or more room dwellings also 21%. By 2016, the ratio of one-room dwellings fell to 6.6%, that of the four or more room dwellings increased to 28.6%. The average floor area of dwellings was in 2001 75 m^2, in 2011 68 m^2 and in 2016 84 m^2, respectively. Piped drinking water supply was provided in 96% of all dwellings in 2001, 98% in 2011, and nearly 99% in 2016. In 2011 51.4% and in 2016 66% of the dwellings, respectively, were equipped with all modern conveniences, while in 2011 4.9% and in 2016 3.3% of the dwellings lacked conveniences at all. Inhabitant density (number of people living in 100 inhabited dwellings) was 248 in 2011 and 249 in 2016. (KSH 2013D;2017B).*

The Roma colony, as the critical indicator ("extreme value") of the quality of life of the Roma. In the years of the millennium (2002-2003), the State Public Health Medical Officer Service (ÁNTSZ) set out to search for "public health white spots" (among other things, the public health problems of homesteads, small villages, small farmers, Roma). We found that Roma lived in three types of settlements in Hungary: Roma colonies[8], colony-like arrangements[9]and integrated with the Hungarian population. In Hungary, altogether 301 Roma colonies (among them 203 in BAZ county) and 1033 colony-like arrangements were counted (Ungváry et al., 2005).

Similar nationwide survey with the same objectives has not yet been repeated up to now The colonies are not listed by our working group as housing options providing average living conditions in Hungary. We call the Roma colonies critical indicator parameters ("extreme values") because the term colony, the concept of colony (see definition in footnote 7) in itself is an in-door environmental health anomaly that threatens the health of its inhabitants and their public health and epidemiological safety. There is no piped drinking water system in the colonies, drinking water supply is provided by public taps (this is the biggest health hazard of a colony); tight and inadequate living space, bed number and seat, unsuitable conditions for learning, relaxation and for a harmonious family life, worrying building structure [roofing, flooring, wall surface] and heating facilities. Based on our findings, we considered it unworthy of human beings (*Table IV*; Ungváry et al., 2005; 2014A; 2014B; 2019; Szakmáry et al., 2007; 2017; Morvai et al., 2016). The prerequisite for Roma inclusion is the elimination of Roma colonies and the relocation of their population by providing them with acceptable in-door quality of life. Note: after the completion of our investigations (after 2016) two Roma colonies of Ózd were partially renovated and supplied with piped drinking water system (Roma Self-Government of Ózd, verbal communication, 2019).

Social situation. It is obvious that the social situation of the unemployed of the micro-region is significantly behind the average social situation of Hungary, especially its expectable level. We refer, on the one hand, (and above all) to the classification of the micro-region as one of the most disadvantaged micro-regions. The economic and social situation of the micro-regions of Hungary were determined and rated by scientific analyses using measurable parameters [five so-called complex (economic, infrastructure, societal, social, employment) parameters consisting of 31 sub-indicator parameters]. Based on this, out of the 174 micro-regions of the country, the Ózd micro-region was rated as – one of the most disadvantaged micro-regions - the 13th least developed micro-region (ÖTM and KSH, 2008). On the other hand, we refer to the above-mentioned situation (especially the in-door environmental health conditions)

[8] *Roma colony: consists of at least four houses, which are separated, outside the settlement. Their arrangement differs from the one of the settlement (different street arrangement); with the exception of electricity there are no public utilities; drinking water is available from public taps, the inhabitants are almost without exception of Roma ethnicity. This definition has already been introduced as a public utility- and settlement structure-related definition in one of our earlier papers (Ungváry et* al., *2005)*

[9] *Residential area with colony-like arrangement: streets, settlement parts and quarters inhabited by Roma communities. Its hygienic situation does not differ significantly from that of the colonies, but the street arrangement and the original building structure and form are similar to those found in other streets, parts and quarters of the settlement inhabited by Hungarians. Public utilities (electricity, piped drinking water, less frequently: canalization) are generally fully available. The definition of colony-like arrangement was presented earlier (Ungváry et al., 2005)*

Table IV.

Proportions of parameters determining the in-door health-related quality of life of the Roma living in coloniesand colony-like arrangements

Compared parameters	Living in Roma colonies	Living in colony-like arrangements
	Proportion (%) of dwellings	Proportion (%) of dwellings
Building material		
• brick	40.2	68.4
• adobe	30.7	18.2
Flooring of the dwellings		
• stamped	15.5	4.9
• concrete	47.4	37.9
Dwellings with one „room”	44.7	1.
Number of individuals living in the dwelling		
• 4-6	51.2	52.1
• 7-9	18.1	18.4
Less bed than inhabitants	69.6	60.6
Less seats than inhabitants	55.6	43.0
Piped drinking water supply in the dwelling	0.0	84.0
Drinking water supply from public tap	100.0	0.0
Traditional stove heating	96.2	88.4

The average floor space per inhabitants is between 4.0 and 19.5 m^2 in the colonies and between 6.2 and 26.5 m^2 in the colony-like arrangements. In the colonies between 1.5 and 6.0 persons live together in one room and in the colony-like arrangements between 1.0 and 5.0. In the majority of dwellings there are three, four or even more children. Publications about housing conditions of the Central Statistical Office (KSH 2014A), in order to exclude the risk of subjectivity, do not keep a record of the majority of the parameters considered by us. Data collection of the State Public Health and Medical Officer Service (ÁNTSZ) was performed by the district nurses being in regular contact with the families, and the experiences collected during the hygiene-oriented site visits, reduced subjectivity of our observations, on our opinion, to an acceptable level. The parameters presented in the Table definitely influence the quality of life. Source: Ungváry et al., 2005; 2014A; 2014B

and thirdly to our further publications dealing with the issue in more detail (Ungváry, 1993; Ungváry et al., 2002; Szakmáry et al., 2012; Hegedűs, 2015; Morvai, et al., 2016). The executive summary written for the presentation of the programme prepared during the Hungarian Presidency in 2011 described the situation in Hungary as: “today every third person (about 3 million) lives below the poverty line in Hungary; 1.2 million of them in deep poverty”. The majority of the Roma (between 500-600 thousand, estimated at a total of about 750,000) are the poorest among the poor (KIM 2011). The poorest Roma people live in colonies and colony-like arrangements, respectively (Ungváry et al., 2005; 2014A; 2014B).

In 2016, the OECD noted that income inequalities and relative poverty rates had increased in Hungary since 2007. The social disadvantage had increased, 35% of Hungarians were financially deprived, of which 19% were severely deprived, compared to the EU average of 17% and 10%, respectively. These people in lower social groups are more likely to be exposed to adverse effects due to worse living and work environment, greater distress and unhealthy lifestyles (OECD, 2017). The social situation of Roma people living in colonies and colony-like arrangements in the micro-region or anywhere else in the country is far away even from the unfavourable level of the Hungarian social situation (Hegedűs, et al., 2014A; 2014B; Szakmáry et al., 2007, 2017; Ungváry et al., 2005; 2014A; 2014B; 2019).

Social connection. As regards the relationship between the micro-region's unemployed people and the surrounding 'majority society', we pointed out that the attitudes of the members of the 'majority society' experienced by the unemployed at the place of residence, in offices, at shopping or in medical consultation rooms are a cause for concern. Discrimination against the studied unemployed was invariably found at the mentioned places, which in many cases was a racist manifestation related to Roma ethnicity of the unemployed (Ungváry et al., 2019). If we take into account the years of data collection for the mentioned publication (2011-2015) and the annual report of the EU Fundamental Rights Agency (FRA) of June 2013, the worrying opinion of the unemployed in the Ózd micro-region is not surprising. The report noted that the general presence of crimes, extremist ideological elements, political and social dialogue motivated by racism, xenophobia and related intolerance as well as ethnic discrimination in health care, education, employment and housing could be observed throughout the EU. The FRA (2014) noted that all these phenomena were continuous; in two countries - Greece and Hungary - parties[10] with extreme rhetoric being unique in the EU appeared in the national parliaments. Summing it up, it can be stated that on the one hand, the quality of life of the unemployed in the Ózd micro-region determined by the values of the WHO's health-related quality of life indicators analysed by our working group (physical and mental health, unfitness for physical work due to health reasons, education, housing conditions, social situation, social relations) is considered very bad, or more precisely, it is in an unacceptable distance from the average quality of life values of Hungary which in some points have also been criticised by international organizations (FRA, 2014; OECD, 2016; 2017) and scientific fora (The LANCET, 2018). On the other hand, it can be established that, compared to the recorded Roma population living in Hungary's Roma colonies and colony-like arrangements at the beginning of the 2000s, the housing conditions of the Roma unemployed in the Ózd micro-region examined 10-14 years later were hardly better; and as far as their education was concerned, with some very few exceptions, they did not come near to the final examination, as a dividing line in the quality of life, or even to higher qualifications.

Country-wide experiences gathered during the mass unemployment associated with the change of regime and by the investigations conducted in the Ózd micro-region. The issue of unemployment.

Unemployment is an economic and social phenomenon leading people /unemployed to bad social situation; it has repeatedly occurred since the industrial revolution and it is not free of extreme emotional manifestations, destructions (machine wrecking, luddism, football hooli-

[10] *FRA named Jobbik Hungary (FRA, 2014)*

ganism). In addition, it has been proven that unemployment is a direct health hazard; therefore, it is obvious that the health-related quality of life of the unemployed is necessarily worse than the quality of life of the given country's general population.

Ensuring proper work and avoiding unemployment are known and accepted by professional, political and social leaders. This is evidenced by the fact that the first international professional organization, the International Labour Organization (ILO), founded in 1919, emphasizes in its Constitution (1919A; 1998) that universal and lasting peace can only be achieved on the basis of social justice, which is highly dependent on the appropriate working conditions (among other things, regulation of working time, fixation of maximum length of working day and working week, adequacy of the wage, safe and healthy workplace, etc.). The Constitution pays special attention to the problem of unemployment. The ILO dealt in detail with the issue of avoiding unemployment and its compulsory solution possibilities already in the year of its establishment in its Convention No. 2. (ILO, 1919B). The ILO expects its member states to keep the conventions ratified by them. Hungary as one of the oldest member states of the ILO (1922) ratified the ILO Convention No. 2.

The importance of avoiding the serious social burden of unemployment is indicated by the fact that the first of May has been a Catholic Church holiday indicated to Saint Joseph, the patron saint of workers, since 1955. At the time of writing this report, during his general audience held at St. Peter's Square on May 1st 2019, His Holiness Pope Francis spoke for those who lost their job and those looking for work, and called unemployment a worldwide tragedy (MTI, May 1st, 2019).

The post-change governments were practically not able to do away with the mass unemployment caused by the collapse of the so-called socialism and the "country of iron and steel" (see footnote 4 for detailed characteristics) when the financial and economic global crisis started in 2008, due to which the unemployment rate rose again to above 10% in 2009 (Bánfalvy, 1989; KSH, 2019A; 2019B).

Nowadays, however, as we have already mentioned, Hungary is one of the countries with the lowest unemployment rates. In 2017, it ranked 4th among the 28 EU member states at an unemployment rate of 4.13%. This result was better than that of the neighbouring Austria (5.2%), Slovakia (7.6%) or the EU-28 (7.7%) and the Eurozone countries (9.1%) (Eurostat, 2017).

This is a very important result. Its significance is rather confirmed than somewhat reduced by the conclusions of the analysis of the following two issues.

– *Permanent, chronic effects caused by unemployment.* The unemployed becoming unfit for work for health reasons cannot take up work again. The health damage caused by past mass unemployment, including the increase in the prevalence of depression demonstrated by our study conducted in the micro-region, as well as the poverty and the low level of education of the micro-region's population, is transformed into polyaetiological diseases causing severe, irreversible unfitness for work (Ungváry, 1993; Morvai et al., 1999; Hegedűs, 2015; Hegedűs et al., 2014A;

2014B; Ungváry et al., 2016B; 2018A; Szakmáry et al., 2017). The resulting so-called burden of disease, which further increases the disadvantageous financial situation of the micro-region, will inevitably be ceased only when this generation will be replaced by a new generation (appropriately qualified, trained, healthy and fit for work) capable for entering the labour market.

– *First and second generation unemployed*[11]. Based on our previous studies we concluded that the difference in the quality of life between the first and the second generation unemployed required more detailed studies and analysis (Ungváry et al., 2016A). Between 2010 and 2015, we conducted a three-part study series. On the one hand, we proved that the quality of the in-door and out-door environmental health situation of the second-generation unemployed was worse than that of their first-generation unemployed parents. The differences did not depend on age or ethnicity (Szakmáry et al., 2017). On the other hand, we found that the educational level of Roma unemployed and the professional qualifications of the Hungarian unemployed were higher than those of the first generation (the proportion of those who completed 8 classes of primary school and that of the skilled workers was higher). However, the backlog was still huge; the professional qualifications of the Roma (especially of those living in colonies) did not reach those of the first generation. Secondary school final examinations were passed by 5% of the first generation and only 1.4% of the second generation unemployed (Ungváry et al., 2018 B). We also found that the rate of fitness for physical work was significantly higher among the second than the first generation unemployed; this difference was age-related. However, we emphasize that the frequency of unfitness for physical work due to health reasons among both the first and second generation unemployed significantly exceeded the value of active physical workers (20.6 vs. 9.4) (Ungváry et al., 2018B). In our third study series, we found that the state of physical and mental health of the second-generation unemployed was better than that of the first generation, but this difference was age-related. The prevalence of depressed cases caused by the stressor effect of unemployment was significantly higher among the first than the second generation unemployed. Both the first and second generation unemployed - irrespective of their ethnicity and gender - rejected their current status (unemployment) and were mentally prepared to carry out adequate activities (Ungváry et al., 2019). On the basis of all this, we repeatedly emphasize that it is very important that the potentially second generation unemployed receive the appropriate training and health promotion support by the time they reach working age and become able to work (Szakmáry et al., 2017; 2018; Ungváry et al., 2018B; 2019).

Experiences collected during the national surveys and the analysis of the Ózd micro-region. Quality of life of the Roma ethnic group.

Our working group, after comparing the quality of life of Hungarian and Roma unemployed of the micro-region using a variety of parameters, almost inevitably concluded that the Roma unemployed were in a more disadvantageous position. As this finding was similar in the case of health-related quality of life parameters as well, it came up whether the unfavourable differences in the quality of life of the Roma were not associated with a difference in life expectancy at birth between the Hungarian and the Roma population, or the Roma's unfavourable parameters occur in the context of

[11] *We call those young persons "second generation unemployed" who are children of unemployed parents and also without a job by the time they reach working age*

the unfavourable difference in the life expectancy. The question is also justified because, on the one hand, in the absence of exact analysis, the Hungarian scientific literature concedes that the duration of life of the Roma is 10 years shorter (~ 65 years) than the national average (KSH, 1994; Puporka and Zádori, 1998; Human Contact 2001, 2010; Medicoline, 2019)[12], on the other hand, the life expectancy at birth of the population of the micro-region is almost 4 years (69.4 vs. 73 years) shorter than that of the Hungarian population (Csete and Németh, 2007). The latter may be due to the shorter life expectancy at birth of Roma making up a large proportion of the micro-region's population.

The following data were used to judge the assumption. Based on the 2011 census, KSH (2015) constructed the age pyramid of the Roma population of Hungary and compared it with those of the Hungarian and German nationalities *(Figure 1)*. It is striking that the Roma age pyramid is more like that of a developing country with a broad base and a pyramid of less high and peaky than in the case of developed countries, while the age pyramids of the Hungarian and German population have a form of stack like a population of an aging (usually) developed country (Robert, 1983; 1997; Ungváry and Morvai, 2008). Based on our earlier investigations carried out in 2002-2003, we also plotted the age pyramids of 10,304 Roma living in colonies and colony-like arrangements *(Figure 2)*. The age pyramids of the Roma living in colonies (5,962 people) and colony-like arrangements

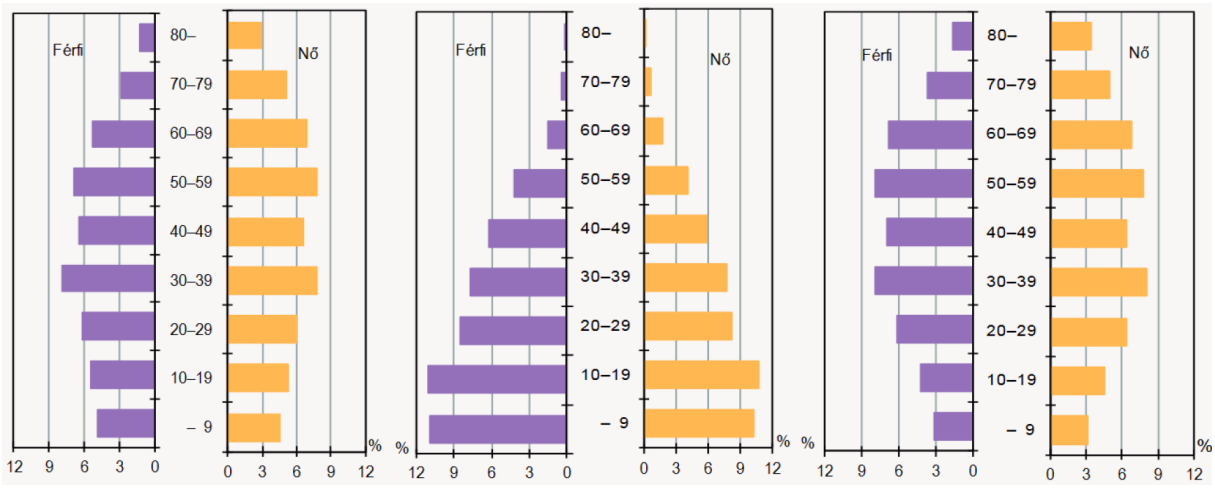

Figure 1. The Hungarian Central Statistical Office (KSH) drew up and presented the age pyramids of three nationalities of Hungary based on the census data of 2011. From left to right: age pyramids of the Hungarian, Roma (Gypsy) and German nationalities; on the left side of each age pyramid men's data, on the right side women's data are shown. Source: KSH: Demographic characteristics of national minorities. Statistical Mirror. 2015/82. December 16, 2015, Figure 1.

(4,342 persons) are similar to that of the KSH (2015), but by comparing the age pyramids it can be estimated that out of the three Roma groups those living in colonies have the shortest lifespan, while the Roma population with longest lifespan is that one defined by the census as Roma people living integrated all over the country. The proportion of Roma people over 60 years of age living in colonies is only 1.6%, in colony-like arrangements 1.8%, and the proportion of those over 60 in the KSH age pyramid is higher than either of them.

[12]*Note: In 1994 the Central Statistical Office (KSH) wrote about the shorter lifespan of the Roma and in 2015 it pointed out that the „average age" of the nationalities of Hungary was 44.1 among the Germans, 44.5 among the Hungarians and among the Roma it was 15 years younger than either of the mentioned two nationalities (26.3 years).*

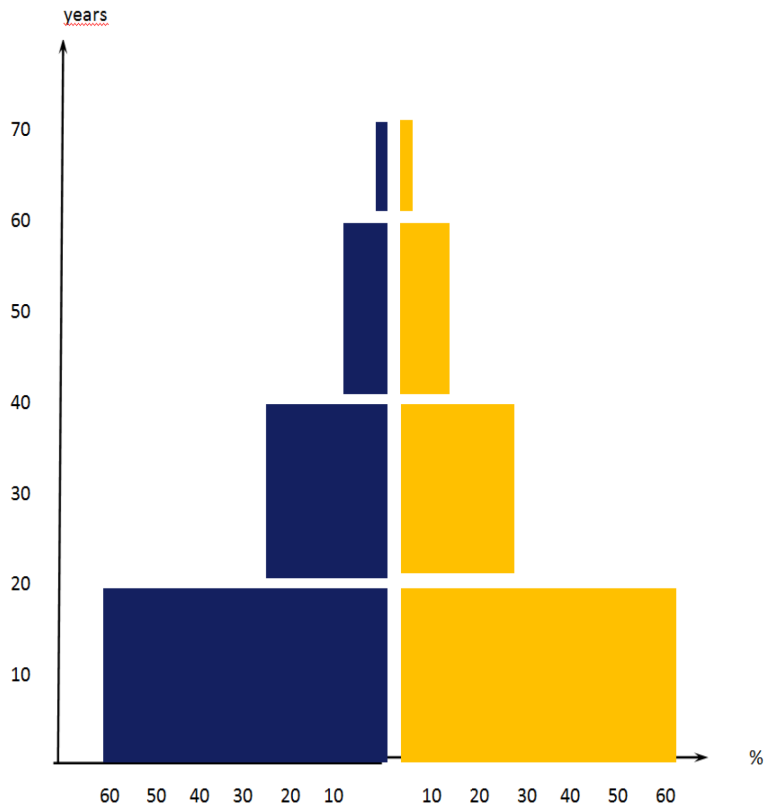

Figure 2. Two age pyramids set next to each other with sideways ramifications. On the left side the age pyramid of the Roma living in colonies, on the right side of those living in colony-like arrangements can be seen. In case of usual drawing up, each of the two age pyramids separately and also, as in this figure, the two set next to each other are pyramids with wide base and ending in a point. Characteristics: a large number of people under 20 years of age and very few people over 40 years of age. These age pyramids resemble the age pyramids of the poor developing countries.(Robert, 1983, 1997)[13]. Note: The Roma living in colonies are represented in a smaller number in the age-groups above 40 years than those living in colony-like arrangements. Source: 2002-2003 national data collection with the help of ÁNTSZ staff members' personal interviews with female family members conducted by the district nurses being in close contact with the families. See the text section for more details. References: Ungváry et al., 2005; 2014A; 2014B; Hegedűs, 2015.

The shape of the age pyramids indicates that the extremely poor quality of life of the Roma living at a disadvantage in Hungary for centuries is different from that of the non-Roma nationalities of Hungary. This "Roma age pyramid" is the age pyramid of poverty, similar to that of the poorest developing countries, but significantly different from the age pyramid of the population of Hungary, a member country of OECD. It is clear that the life expectancy at birth of the Roma is significantly lower than that of the Hungarian population.

[13]*The Central Statistical Office in its relevant publication (KSH 2015) has dealt first of all with the associations of the shape of the age pyramids with age, reproduction and lessening of the nationalities, The briefly referred results of Robert (1983; 1997) and our team relate first of all to the relationships with the social conditions of the population represented by the age pyramids.*

The life expectancy at birth of the population of Hungary has been at the forefront of the public health challenges for (centuries)[14], decades, and subject of criticism (Fodor, 1885; Józan et al., 1988; Katus, 1991; Baji et al., 2015). The life expectancy at birth of the Hungarian population, as one of the most prestigious public health outcomes of the change of regime, started to grow rapidly (Józan, 2003) from the bottom of the epidemiological crisis caused by the socialist heritage (in 1992-1993: 69.0 years), and in 2015 it was already 75.7 years (KSH, 2016; OECD, 2017). Despite this, it is still below the EU-28 average of 80.6 years by 5 years, and there is a difference of 9 years in Hungary between the people with the highest and lowest level of education (OECD, 2017).

However, it is unquestionable that the unfavourable but still not exactly defined life expectancy at birth of the Roma is significantly behind that of the Hungarian population, which has also been a subject of criticism.

However, this fact considered to be evident does not satisfactorily demonstrate the unacceptably low level of Roma life expectancy at birth. If we take into account the life expectancy at birth of the European countries (WHO, 2018), the countries of worst position have a life expectancy of 70-72 years, and the life expectancy at birth of the Roma is estimated to be 65 years, still 5-7 years lower than that. In this case, however, we face with the fact that our Roma compatriots' age in Hungary is not comparable to the age of other European citizens. Additionally, if we try to estimate the life expectancy at birth of the Roma by taking into account the data of the Roma age-pyramid, when comparing it with that of the country ranked in the last position, it is likely that the comparison would result in much less favourable data than the data used and much less favourable results, too. Just to mention: the average age of the male members of the deceased parents of the studied Roma unemployed in the micro-region was 55.8 ± 11.4 years (Hegedűs et al., 2014A).

Although some of the data summarized above may be estimated and not accurate, we still considered their presentation to be important because the Roma constitute the largest minority of Europe, their number is estimated at 7-9 million; that is (also) why raising the level of their quality of life is also a European task. It is very important to us because 80% of them live in Central-Eastern Europe (Ringold et al., 2005). According to the data of the Hungarian Central Statistical Office (KSH), in 2001 the number of Roma in Hungary was 205,720, in 2011 (at the time of the last census) 315,583, i.e. in 10 years their number increased by 53.4% (KSH 2014C). Over the same period, Hungary's population fell by 251,287 (2.5%). Moreover, according to other estimations the number of Roma people would be higher; for example, the OECD estimated that the proportion of Roma in Hungary was 7% of the total population (700,000), while the executive summary of the Roma inclusion programme developed under the Hungarian Presidency wrote about 750,000 Hungarian Roma (OECD, 1998; KIM, 2011). According to estimated data, the number of Roma in Hungary is more than double the data recorded after the 2011 census.

[14] *Examination of the problem is beyond our competence. However, we refer to the works of Professor József Fodor (1885) and Katus L. (1991), which show that solving of this centuries-old problem has rather diverging historical roots.*

We concluded that the practical correction of the severely unfavourable quality of life of Roma unemployed and residents of the micro-region is primarily a micro-regional task, but the solution is also a task that requires national and, in many respects, European assistance. As we have demonstrated, this statement is based not only on the differences explored by comparing the micro-regional and national data related the physical and mental health, social relations, environmental conditions and social welfare indicator parameters chosen according to the WHO's definition of quality of life, but also on the differences in the life expectancy at birth of the inhabitants of the micro-region, and especially the Roma people living in colonies and colony-like arrangements compared to similar parameters of Hungary and the EU-28.

By reason of what was shortly outlined above, it is obvious that the correction of the unacceptable quality of life of the Roma (unemployed, living in colonies or colony-like arrangements alike) is one of the most important tasks of the Hungarian society. In order to meet this objective, after a comprehensive and detailed analysis of the problem, an excellent strategy, the "National Social Convergence Strategy - Deep Poverty, Child Poverty, Roma - (2011-2020)" was formulated based on the programme developed during the Hungarian Presidency in Gödöllő (KIM, 2011) and its implementation was ordered by a governmental decree. The executive summary of the strategy confirmed by the law states, on the one hand: "In Hungary, the policy of Roma inclusion cannot be separated from the general struggle against poverty and the improvement of social competitiveness". On the other hand, the executive summary also considers it important that not only the impoverishment of the Roma should be combatted, but in some cases, positive discriminative measures should also help the social situation of the Roma.

All in all, we believe that inclusion of the Roma having been living with us for centuries, and having produced internationally renowned prominent figures of Hungarian culture, art, literature and sports is of national and public health interest. We also believe that implementation of the strategy is the basis for raising the life expectancy at birth of the Roma to the European level which is necessary for their inclusion. This, at the same time, brings the life expectancy at birth of the population of Hungary closer to that of the EU-28.

CONCLUSIONS

Recommendations of our team

Based on our 30 years of experience in studying the adverse health effects of unemployment and the 20 years of experience in studying the living conditions of the Roma, we believe that Hungary's two most important quality of life improvement tasks are to further reduce unemployment and maintain the results achieved in this area, and the implementation of the National Strategy formulated during the Hungarian Presidency in 2011 and its update of 2014 (Kim 2011; EEM 2014). The time required to advance in solving the two tasks is significantly different. Hungary has already achieved significant results in the fight against unemployment by now, while solving of the problems defined in the programme (deep poverty, quality of life of the Roma) rooted in deep and historically distant times can only advance by overcoming many difficulties.

The difficulty of the task is well illustrated by the first lines of the executive summary prepared for the presentation of the programme. According to this, "today Hungary's most serious problem is the gradual deterioration of the situation of the Roma population living in poverty. It results in falling behind, being ousted from life chances in the fields of learning, employment and health services alike, as well as in growing and newly developing poor housing conditions in the peripheries of disadvantageous areas and settlements.

In line with the two priority tasks, with the national strategy and with the economic development supporting the preference of the quality of life, our working group suggests putting the following tasks into the forefront.

- Following the exemplary reduction of unemployment, it is possible to expand research in directions which could further contribute to the effective prevention of unemployment. In agreement with the spirituality of Pope John Paul's teaching (1981), we believe that the moral appreciation of work is possible within the framework of the moral appreciation of economic activity (Erdő P., 2018). Our professional field still owes these researches. In this respect, we propose to conduct research concerning the analysis of the impact of public work on the mental and physical health of public workers. The Fundamental Law of Hungary states: "Hungary shall strive to create the conditions that ensure that everyone who is able and willing to work has the opportunity to do so." This research is in conformity with our Fundamental Law and the ILO Constitution.

- The precondition for social catching-up/inclusion of the social groups (including most of the Roma) living in deep poverty, and prevention of unemployment is providing education and skills necessary for employability guaranteeing a proper quality of life. We would like to emphasize that the prerequisite for successful education of the majority of Roma children is catching up education, including the already realized obligatory kindergarten engagement[15]. Without it, letting the children enter immediately into the integrated education puts them in a hopelessly disadvantageous situation which causes frustration. Without catching up education, we can expect unwanted emotional manifestations and unsuccessful school work. If we do not help them in catching up (e.g. by all-day school education supplemented by school bus service, dormitory accommodation on teaching days, employing Roma language speaking teachers), we may increase the frequency and severity of the racist manifestations that have already appeared.
- In order to achieve the average Hungarian quality of life by the Roma, it is necessary to be aware of the fact that the Roma are divided into layers of different quality of life, depending on their settlement and in-door circumstances. Differentiating the Roma according to their residential in-door quality of life requires a priority setting. This is mainly emphasized for possible correction of the quality of life of Roma living in colonies. As we have demonstrated, Roma colonies do not meet the minimum public health and epidemiological safety requirements, their homes are unsuitable for learning, relaxing and harmonious family life.

[15] *We believe that the kindergarten engagement introduced by the Hungarian Government in connection with the National Inclusion Strategy plays an important role in the implementation of catching-up education. It can successfully contribute to enlargement of vocabulary and socialization of the Roma children living in deep poverty.*

- Elimination of the Roma colonies is a priority. The living conditions provided by the colonies prevent proper learning, and as the key issue of the social inclusion of the Roma is education and skills, the elimination of colonies is of national and public health interest.[16]
  - In the case of Roma living in colony-like arrangements, an analysis (and, if necessary, provision) of housing and learning conditions should also have priority.
  - Finally, in accordance with the National Social Convergence Strategy of 2011 (KIM, 2011), and its 2014 "Updated Version" (EEM, 2014), we recommend professional supervision and monitoring of the implementation of the programme and annual publication of the results of monitoring. In view of the priority of public health and epidemiological safety, supervision and monitoring should be handled by public health professionals.

REFERENCES

BAJI, P., BRODSZKY, V., RENCZ, F. et al. (2015). Health state of the Hungarian population between 2000-2010. (In Hungarian). Orv. Hetil. 156(50):2035-2044.

BÁNFALVY, C. (1989). Unemployment (In Hungarian). In: Series of accelerated time. Magvető Kiadó. Budapest: pp. 1-232.

BMJ. (2009). Unemployment and health. Editorials. Brit. Med. J. 338:b 829.

CSETE, A. and NÉMETH, N. (2007). Inequalities of small areas of life expectancy at birth in Hungary at millenary (In Hungarian).Kormányzás, Közpénzügyek, Szabályozás. 2(2) 257-289.

DOBOSSY, L.F. (2001). On the eve of 21st century. Ózd. (In Hungarian). CEBA Kiadó. Budapest.

DOBOSSY, L.F. (2003). Ózd and its aerea . Small areas of Hungary. (In Hungarian). CEBA Kiadó Budapest.

EEM. (2014). Ministry of Human Capacities: Hungarian National Social Convergence Strategy II. Children, Roma living in permanently deprived – poor families (2012-2020). Updated Version. (In Hungarian). Ministry of Human Capacities, State Secretariat for Social Convergence.

ERDŐ, P. (2018). Labour, economics, and morals in the light of the teaching of Pope John Paul II. (In Hungarian). Magyar Tudomány. 179(1):14-23.

EUROSTAT. (2017). Euro-area unemployment at a 9.1%, EU28 at 7.7%. Eurostat newrelease, euro indicators. 121/2017- 31. July 2017.

FARAGÓ, M. (2007). Healthy life years expectancy in Hungary, 2005 – a complex, quantified indicator to assess the health status of the population. (In Hungarian) Central Statistical Office/KSH. Budapest.

[16] *Because of its importance, we repeat it here again that after the completion of our study, in conformity with the 2020 strategy, piped drinking water system was introduced in two Roma colonies in Ózd.*

FODOR JÓZSEF. (1885). Data on the liftime in Hungary and Austria (In Hungarian). cit. Occupational Health. 3. editacion. (eds. Ungváry G., and Morvai V,) Medicina Zrt. Budapest. 2010. pp. 43-44. Figs 3. and 4.

FRA. (2013). Racism, discrimination, intolerance and extremism: learning from experiences in Greece and Hungary. Thematic Situation Report. European Union Agency for Fundamental Rights. European Union Publications Office 2014. Luxemburg. 2014.

GRÓNAI, É., SZAKMÁRY, É. and UNGVÁRY, G.(2004). State of health of the unemployed in the capital. (In Hungarian) Foglalkozás-egészségügy, 8(4):5.

GUSTAVSSON, A., SVENSSON, M., JAKOBI, F. et al. (2011). Cost of disorders of the brain in Europe 2010. Eur. Neuropsychopharmacol. 21(10):718-779.

GWATKIN, D.,R., GWILLOT M. and HEUVELINE, P.(1999). The burden of diseases among the global poor. Lancet, 354:586-589.

HEGEDŰS, I. (2000). Workers for public use and occupational health. (In Hungarian) Foglalkozás-egészségügy. 4:23-27.

HEGEDŰS, I. (2003). A study of health damaging effect of unemployment. (In Hungarian) Foglalkozás-egészségügy, 2:50-58.

HEGEDŰS, I. (2015). About the Adverse Health Effect of Unemployment, its Etiology Based on the Analysis of the Public Health Situation and Health of the Hungarian and Roma Unemployed Living in the Ózd Small Area. Doctoral Theses (In Hungarian).

HEGEDŰS, I., SZAKMÁRY, É. and UNGVÁRY, G. (2003). Presentation of the health status, living conditions of the unemployed and emploed Roma population on the basis of a study carried out in some BAZ County settlements. (In Hungarian) Foglalkozás-egészségügy, 7(4): 21. Előadáskivonat. XXIII. MÜTT Kongresszus

HEGEDŰS, I., SZAKMÁRY, É., PAKSY, A. et al. (2010). Public health conditions of the unemployment in the Ózd small area before the Financial-economic world crisis I. Centr. Eur. J. Occup. Environm. Med. 16(3-4):183-198.

HEGEDŰS, I., SZAKMÁRY, É., PAKSY, A. et al. (2011).Public health conditions of unemployment in the Ózd small area (Micro Region) before the financial-economic world crisis II. Centr. Eur. J. Occup. Environm. Med. 17(1-4):3-44.

HEGEDŰS, I., MORVAI, V. RUDNAI, P. et al. (2014A). Public health issues of Roma and non-Roma unemploed persons in the Ózd microregion. Orv. Hetil. 155(15):582-589.

HEGEDŰS, I., MORVAI, V., RUDNAI, P. et al.(2014B). Life style personal hygienic habits,

health status and fitness for work of Hungarian and Roma unemployed in the Ózd Micro Region. Centr. Eur. J. Occup. Environm. Med. 20(3-4):155-190.

HUMAN CONTACT 2001. (2010). Social situation of Roma in Hungary, at the beginning of the 21st century. Comprehensive study. Human Contact. Budapest. pp.1-44.

ILO. (1919A). Constitution of International Labour Organization. Original text. Geneva.

ILO. (1919B). 2nd Convention, on unemployment. Conference. Washington, D.C. 1919; ILO. Geneve.

ILO. (1998). Constitution of the International labour Organization and standing orders of the International Labour Conference. ILO. Geneva. February 1998.

INOUE, K., TANII, H., KAIYA, H. et al.(2007). The correlation between unemployment and suicide rates in Japan between 1978 and 2004. Leg. Med. (Tokyo), 9(3): 139-142.

JAHODA, M., LAZARSFELD, P.F. and ZEISEL, H.(1933). Die Arbeitslosen von Marienthal. Leipzig. Hirzel. 1933. – In Hungarian translation and edition: Marienthal. Sociographic delinelation of the effect of permanent unemployment. (In Hunarian). Új Mandátum Kiadó. Budapest. 1999.

JÓZAN, P., BEREND, T.J. and HALÁSZ, B. (1988). "Here you must live and die" – Our health. In: "Encuradement …. …. keep your life well". (ed.: Szollár L.) (In Hungarian). Akadémiai Kiadó. Budapest. pp. 13-24.

JÓZAN, P. (2003). New trending mortality and life expectancy; the beginning of the fourth stage of epidemiologic transition in Hungary? (In Hungarian). Orv. Hetil. 144(10): 451-460.

KATUS, L. (1991). Was there demographic revolution in Hungary? (In Hungarian). [online] Available at: http://www.rubicon.hu/magyar/oldalak/volt-edemografiai-for

KIM. (2011). Ministry of Public Administration and Justice: National Social Convergence Strategy – extreme poverty, child poverty, Roma (2011-2020). (In Hungarian). KIM, Secretary of State Responsible for Social Convergence. Budapest, 2011. november

KOPP, M. and SKRABSKI, A. (2002-2006). Hungarian state of mind following the turn of the millennium. (In Hungarian). Available at: www.tavlatok.hu/86/kopp-skrabski.pdf

KSH. (1994). Central Statistical Office: Situation, condition of life of Romany. (In Hungarian) Központi Statisztikai Hivatal, Budapest.

KSH. (2013A). Central Statistical Office: 2011. Census. 3. Territorial data. 3.5. Borsod-Abaúj-Zemplén County. (In Hungarian). Központi Statisztikai Hivatal. Miskolc.

KSH. (2013B). Central Statistical Office: 2011 Census. 7. Education data. (In Hungarian). Központi Statisztikai Hivatal. Budapest.

KSH. (2013C). Central Statistical Office: Regional differences in employment and unemployment. 2012. In: Unemployment. (In Hungarian). Központi Statisztikai Hivatal. Budapest.

KSH. (2013D). Central Statistical Office: 2011. Census. 3. National data. (In Hungarian). Központi Statisztikai Hivatal. Budapest. pp. 1-276.

KSH. (2014A). Central Statistical Office: 2011. Census. 12. Housing Conditions (In Hungarian). Központi Statisztikai Hivatal. Budapest. pp. 1-251.

KSH. (2014B). Central Statistical Office:. 2011. Census. 14. Education of Population. (In Hungarian). Központi Statisztikai Hivatal. Budapest. pp. 1-147.

KSH. (2014C). Central Statistical Office: 2011. Census. 9. Data of Nationalities (In Hungarian). Központi Statisztikai Hivatal. Budapest.

KSH. (2015). Central Statistical Office: Demographic Characters of Home Nationalities. (In Hungarian). Statistical Mirror. 2015/82. pp. 1-10. Központi Statisztikai Hivatal. Budapest.

KSH. (2016A). Central Statistical Office: Mean of length of life, according to sexes (2004-2015). (In Hungarian).[online] Available at: https://www.ksh.hu/docs/hu/eurostat-tablak/tps00025.html

KSH. (2016B). Central Statistical Office: 2011. Census. 19. Workshop Essays. (In Hungarian). Központi Statisztikai Hivatal. Budapest. pp. 13-20.

KSH. (2017A). Central Statistical Office: 3.3.1. Dwelling stock. in: Social Statistics. (In Hungarian) Központi Statisztikai Hivatal. Budapest. p. 87.

KSH. (2017B). Central Statistical Office: 2. Housing Conditions of Population. in: Microcenzus 2016. (In Hungarian). Központi Statisztikai Hivatal. Budapest. pp. 1-39.

KSH. (2019A). Central Statistical Office: Unemployment 2003-2018. [online] Available at: www.ksh.hu/thm/2/indi2-3-2-html

KSH. (2019B). Central Statistical Office: Labour market situation, 2014-2018. (In Hungarian). Központi Statisztikai Hivatal. Budapest.

MARTIKAINEN, P.T. and VALKONEN, T.(1996). Excess mortality of unemployed men and women during a period of rapidly increasing unemployment. Lancet. 348(9032): 909-912.

MATHERS, C.D. and SCHOFIELD, D.J.(1998). The health consequences of unemployment: the evidence. Med. J. Aust., 168(4), 178-182.

MEDICOLINE. (2019). The Roma are sicker, die sooner and they are more vulnerable. (In Hungarian). [online] Available at: http://medicline.hu/gyogyitas/cikk/betegebbek-elobb hal.

MORVAI, V., UNGVÁRY, G., NAGY, I. et al .(1999). Significance of pre-employment examinations among unemployed. EPICOH 14th International Conference on Epidemiology in Occupational Health., Herzliya, Israel, 1999, October 10-14, Abstr. p.5.

MORVAI, V., HEGEDŰS, I., SZAKMÁRY, É. and UNGVÁRY, G. (2016). Public health situation and health status of the Roma and non-Roma unemployed in the Ózd Small Area (In Hungarian). ETT-TUKEB pályázat jelentése.

MTI. (2019). Hungarian News Agency: Pope Francis called unemployment a worldwide tragedy.(In Hungarian). Magyar Távirati Iroda, May 1st, 2019.

OECD. (1998). Thematic review of the transition from initial education to working life. Hungary. Background Report. OECD. May. 1998.

OECD. (2016). Society at a Glance 2016: OECD Social Indicators. OECD Publishing. Paris. [online] Available at: http://dx.doi.org/10.1787/9789264261488-en

OECD. (2017). State of Health in the EU Hungary Country Health Profile. European Comission. Paris: OECD Publishing. pp. 1-17.

OMI. (1990-1996). Annually reports of National Institute of Health, beetween 1990-1996. (In Hungarian). Budapest.

ÓZD ROMA SELF-GOVERNMENT. (2012) Information of the work, tasks and financial situation of the Ózd Municipal Roma Minority Council up to August 31, 2011. (In Hungarian) [online] Available at: http://webcache.googleusercontent.com/search?hl=hu&gbv=hu&gs-1=hp18....

ÖTM-KSH. (2007). Ministry of Local Goverment and Regional Development – Central Statistical Office. Information. Indicators methods of calculation used for the classification of the beneficiary areas of regional development on the basis of Act CVII of 2004 as amended by Act CVII of 2007.

PAUL, K.J. and MOSER, K. (2009). Unemployment impairs mental health: Meta-analyses. J. Vocat. Behaviour. 74:264-282.

PÉNZES, J., TÁTRAI, P. and PÁSZTOR, I.Z. (2018). Changes in the Spatial Distribution of the Roma Population in Hungary During the Last Decades. (In Hungarian), Területi Statisztika. 58(1):3-26.

POPE JOHN PAUL II. (1981). Laborem Excercens. Encyclical of Pope John Paul II – On the occasion of the 90th anniversary of the release of the Rerum Novarum Encyclical).

PUPORKA, L. and ZÁDORI, Z. (1998). Health situation of Roma in Hungary. (In Hungarian). Roma Centre of Press. Budapest. pp. 1-45.

RINGOLD, D., ORENSTEIN, M.A. and WILKENS, E. (2005). Roma in an expanding europe: breaking the poverty gide .Published Word Bank. Washington D.C. 2005.

ROBERT, L. (1983). Cellular and molecular mechanism of ageing. (In French). Masson. Paris.

ROBERT, L. (1997). Biology and pathology of ageing. (In Hungarian). Magyar Tudomány. 1:34-44.

SZAKMÁRY, É., BÓNÉ, E., HEGEDŰS, I. et al. (2007). Equal opportunity of the inhabitans of Roma Colonies (In Hungarian). Foglalkozás-egészségügy, 1:25-29.

SZAKMÁRY, É., HEGEDŰS, I., PAKSY, A. et al. (2012). Level education and unemployment in Roma Communities living in Roma Colonies and Colony-like Conditions in the Years Preceding the Financial-Economic World Crisis. Centr. Eur. J. Occup. Environm. Med., 18(1-4): 3- 14.

SZAKMÁRY, É., HEGEDŰS, I., RUDNAI, P. et al. (2017). Quality of life of second generation Roma and Non-Roma unemployed I.-Environmental, health situation. Centr. Eur. J. Occup. Environm. Med., 23(3-4): 176-190.

SZAKMÁRY, É., PAKSY, A. and UNGVÁRY, G. (2018). The role of education in the quality of life of Roma women and their families living in colonies and colony-like living environments with alarming public health - epidemiological safety, and the effect of the two settlement types on the learning conditions of Roma children in Hungary at the time of joining the EU. Centr. Eur. J. Occup. Environm. Med. 24(1-2), 38-56.

TÁMOP. (2008). Ózd Small Aerea. Borsod-Abaúj-Zemplén County. Region of Northern Hungary. Small Area situation analysis. (In Hungarian). Új-Széchenyi terv. TÁMOP-5.2.1./07/1-2008-0001.

THE LANCET. (2018). Editorial. 391: No. 10130 p 1549-21- April. 2018.

TOMATIS, L.(1997). Poverty and cancer. IARC. Sci. Publ. 138:25-39.

UNGVÁRY, G. (1993). Harmful health effects of unemployment. (In Hungarian) Magyar Tudomány, 153:159-167.

UNGVÁRY, G. and MORVAI, V. (2008). Ageing sociating, ageing workers – priority tasc of occupatioanal health at the beginning the 21st century. (In Hungarian) . Foglalkozás-egészségügy. 12(3): 111-130.

UNGVÁRY, G., GRÓNAI, É., MÁNDI, A. et al.(1997). Experiences from the Preliminary Fitness for Job Examinations of Those Working in Tengiz. (In Hungarian) Foglalkozás-egészségügy, 1(1): 6-13.

UNGVÁRY, G., MORVAI, V. and NAGY, I.(1999). Health risk of unemployment. Centr. Eur. J. Occup. Environm. Med. 5(2):91-112.

UNGVÁRY, G., NAGY I. and MORVAI V.(2002). Unemployment and quality of life. In: Life situation – Quality of life, dead ends and ways out. Hungary at the turn of the Millenium. Strategic Research at the Hungarian Academy of Sciences. Ed.: Glatz F. Magyar Tudományos Akadémia. Budapest, 33-62.

UNGVÁRY, G., ODOR, A., BÉNYI, M. et al. (2005). Gipsy Colonies in Hungary – medical care of the children and hygienic situation. (In Hungarian). Orv. Hetil. 146(15):691-699.

UNGVÁRY, G., SZAKMÁRY, É., HEGEDŰS, I., et al. (2014A). Public health situation of Roma living in colonies or colony-like conditions and the significant differences determinig quality of life of these two types of living environments in Hungary. Centr. Eur. J. Occup. Environm. Med. 20(1-2):119-150.

UNGVÁRY, G., SZAKMÁRY, É., HEGEDŰS, I. et al. (2014B). Public health situation of Roma living in colonies or colony-like conditions and the significant differences determining quality of life of these two types of living environments in Hungary before the financial and economic world crisis (In Hungarian). Egészségtudomány. 58(3):41-75.

UNGVÁRY, G., PLETTE, R., SZAKMÁRY, É. et al. (2015). Harmful mental health impact of unemployment – effect of unemployment ont he Anger Scale – Among the Roma and Non-Roma (Hungarian) Unemployed int he Ózd Micro-Region. Centr. Eur. J. Occup. Environm. Med. 21(1-2), 25-31.

UNGVÁRY, G., MORVAI, V., HEGEDŰS, I. et al. (2016A). Aetiology, factors modifying, the aetiopathogenesis of health impairment caused by unemployment in Roma and Non-Roma unemployed in a Hungarian Small Area with a high density of Roma population, diseases caused by unemployment and unemployment-related diseases. Centr. Eur. J. Occup. Environm. Med. 22(3-4),118-149.

UNGVÁRY, G., HEGEDŰS, I., SZAKMÁRY, É. et al. (2016B) Analysis of the Public Health situation as well as Fitness for work of the Roma and non-Roma second generation unemployed in the Ózd small region (in Hungarian). Foglalkozás-egészségügy, 20(4), 276-300.

UNGVÁRY, G., SZAKMÁRY, É. and HEGEDŰS, I. et al. (2018A). Public health situation of the Roma and Non-Roma unemployed in a Small Area Hungary densely populated by Roma people. Summarized observations of the research performed in Ózd Small Area. Centr. Eur. J. Occup. Environm. Med., 24(1-2),57-73.

UNGVÁRY, G., SZAKMÁRY, É., HEGEDŰS, I. et al. (2018B). Quality of life of the second-generation Roma and non-Roma unemployed II. – Education level, professional qualification, fitness for work. Centr. Eur. J. Occup. Environm. Med. 24(3-4):198-220.

UNGVÁRY, G., SZAKMÁRY, E., PLETTE, R. et al. (2019). Roma and Non-Roma Unemployed III. Mental Health. Majority Society. Centr. Eur. J. Occup. Environm. Med. 25(1-2). 31-62.

WHO. (1948). The definition and determinants of health cit. WHO website, 2018. Available at: http://www.pro-qoly.hu/az the definition and determinants of health – 108. htm

WHO. (2018). Life Expectancy Europe. Available at: https://www.worldlifeexpectancy. com/life-expectancy-europe