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SOCIAL DETERMINANTS OF HEALTH: THE INDICATORS FOR MEASURING THE IMPACT OF POVERTY ON HEALTH

DRUŽBENE DETERMINANTE ZDRAVJA: NABOR KAZALNIKOV ZA MERJENJE VPLIVA REVŠČINE NA ZDRAVJE

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Abstract

Introduction: *The link between poverty and health is an important research topic of national and international organisations, including the WHO, which has issued several important reports that proved the impact of social determinants on people's health, of which poverty was one of the most important. The aim of this article is to define the indicators of the social determinants of health, which is important for better planning and policy-making.*
Method: *data was gathered through the comparative analysis of different sources of socioeconomic indicators, which are presented schematically, ranked in the structural field and analysed from the perspective of their impact on health.*
Results: *Indicators are divided into ten different fields that present a socioeconomic determinant of health. The fields are: material deprivation (including income and other material items necessary for everyday living), followed by social capital, (un)employment, housing and homelessness, education and profession, living environment, health, crime and safety, accessibility and ethnicity. The table includes 100 indicators that are used in various states for planning and policy-making. The extent and diversity of the indicators shows the complexity of the social determinants of health, which are often overlooked or are insufficiently understood.*
Conclusion: *Poverty is a structural problem with an important impact on health. Because living in poverty is a specific way of life, ways of tackling the problem of poverty are also specific. They have to include relations of power, the accessibility of resources and opportunities to escape from the poverty. Health plays an important role in that but it depends on the capabilities and readiness of the states to ensure this for all people regardless of their social status, material wealth or other circumstances. The list of indicators can contribute to achieving that goal.*

Key words: inequalities in health, poverty, social determinants, material deprivation index, indicators

Izvirni znanstveni članek
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Izvleček

Uvod: *Povezava med revščino in zdravjem je vrsto let predmet proučevanja nacionalnih in mednarodnih organizacij, tudi WHO, ki je o tem izdal več poročil. Ugotovili so vpliv družbenih dejavnikov, še posebno revščine, na zdravje ljudi. Namen članka je opredeliti kazalnike družbenega vpliva na zdravje, ker je spremljanje vpliva pomembno za načrtovanje ustreznih politik.*
Metoda: *Podatki so pridobljeni s primerjalno analizo različnih virov socialno-ekonomskih kazalnikov, ki so predstavljeni shematsko, razvrščeni v strukturna področja in analizirani z vidika njihovega vpliva na zdravje.*
Rezultati: *Kazalniki so razvrščeni v deset področij, ki predstavljajo socialno-ekonomske determinante zdravja, in sicer materialno prikrajšanost, ki vključuje dohodek in za življenje nujne dobrine, socialni kapital, zaposlitev in brezposelnost, stanovanje in brezdomnost, izobraževanje in poklic, življenjsko okolje, zdravje, kriminal in varnost, dostopnost in etničnost. Vključenih je prek 100 kazalnikov, ki jih različne države uporabljajo za pregled stanja in načrtovanje politik. Obseg in raznolikost kazalnikov kažeta na kompleksnost družbenih vplivov na zdravje, ki so pogosto spregledani ali niso dovolj poglobljeno razumljeni.*

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Zaključek: *Revščina je družbenostrukturni problem, ki ima velik vpliv na zdravje. Ker je življenje v revščini specifično, so specifični tudi načini spopadanja z revščino, ki so odvisni od družbene moči, dostopnosti do virov in od možnosti za izhod iz revščine. Zdravje je pri tem ključen dejavnik, ki je odvisen od zmožnosti in pripravljenosti držav, da ga zagotovijo vsem, ne glede na družbeni položaj, materialne sposobnosti ali druge okoliščine. Nabor predstavljenih kazalnikov lahko pripomore k boljšemu spremljanju stanja in načrtovanju ustreznih politik.*

Ključne besede: neenakosti v zdravju, revščina, družbene determinante, indeks materialne prikrajšanosti, kazalniki

1 Introduction

The World Health Organization has issued several reports and studies on the link between health and poverty. The conclusion is that poverty is the most important risk factor for poor health and premature death, while poor health can, in turn, lead to poverty if appropriate state measures are not in place (1). Marmot adds that the reduction of health inequalities is a matter of justice. The social gradient in health has been proved. The lower a person is positioned on the social ladder, the worse his/her health condition, which indicates that social inequalities influence health inequalities (2). Although it is important to reduce the differences along the entire social gradient, the health of poor people is the most acute problem. Poverty is a multi-dimensional phenomenon and it is present to varying extents in all the countries of the world. It is measured based on the socially determined threshold of a decent or acceptable way of life. The threshold of poverty is calculated either based on the collectively determined quantity of goods and services necessary for livelihood – e.g. food, drinking water, housing and basic health care (absolute poverty), or based on the distribution of income expressed as a percentage of the median of income per family member (relative poverty). Relative poverty is more revealing of inequalities than poverty itself, since it is assessed based on the available income. People who live in poverty more often live in poor housing, receive inadequate health care and have less options for education and life-long learning. This can lead to unemployment, further reduce their income and eventually end in social exclusion. Poor people also more often face obstacles in exercising their basic rights (3). Slovenia has a rather low level of relative poverty – during the 2005-2009 period it varied from 11.3 to 12.3 percent. However, the latest data indicate that relative poverty has substantially increased, reaching 12.7 percent in 2010. Exhaustive data for 2010 has not yet been published, so this text will rely on the data for 2009. Throughout this period, the risk of poverty has been higher for women. In 2009, the risk for men was 9.8% compared to 12.8% for women. The greatest difference between genders has been observed in the group of retired people, where the risk for men was 12.2% compared to 20.7% for women. Unemployed people run the highest risk of poverty – the risk level in this group is as high as 43.6% (4). Therefore, the risk of poverty varies from one population group to another and it may considerably depart from the population average. Researchers on health inequalities in Slovenia have come to a similar conclusion (5). The findings of research that examined health from the perspective of social inequalities were published in January 2011. Although not specifically concerned with poverty, the research indicated conspicuous differences in health between groups with low and high socio-economic statuses. Considerable differences between these groups were also observed with regard to the general mortality rate, particularly with regard to the mortality rate among infants in connection with their mothers' education. The risk of delivering a still-born child for women with the lowest education, i.e. with completed (or uncompleted) elementary school, was 74% higher than the risk for women with higher or university education; the risk of perinatal death was as much as 88% higher in the lowest education group compared to that with the highest education level (5). Characteristic differences related to socio-economic status were further observed in connection with illness rates. Cardio-vascular diseases, increased blood pressure and heart diseases have been proved to be related to socio-economic status and are further divided by gender and age. A similar conclusion applies to diabetes, certain types of cancer and bone and muscle problems. Consequently, the life expectancy for men with a low education (elementary education or lower) is 7.3 years shorter than men with higher education (college or higher level education lasting from 2 to 10 years), while the difference for women is 2.5 years (5).

The research primarily revealed the effects of social inequality on people's health. Deprivation begins before birth and amplifies until death. It is important to monitor deprivation from childhood and throughout one's lifetime to be able to understand, reduce or eliminate it (2). In Slovenia, several sets of research data are available

on the influence of poverty on the health of homeless people (6) and on Roma women and children (7). Below I concentrate on the socio-structural determinants that cause social inequalities and consequent health inequalities.

2 Method

I will analyze and compare various socio-economic indicators that were developed to prove the link between social status and health. My aim is to establish the scopes of these indicators, which spheres of life they encompass, how useful these are when researching impacts on health, and what processes or phenomena should be monitored in order to be able to more efficiently identify the influence of socio-economic position on people's health. The indicators used in the article are the ones that are most frequently employed and have been tested in research studies. I will concentrate on those that indicate direct links between socio-economic status and health within the areas regulated by state policies and consequently affecting the situation of the people. These areas are: poverty, education, housing and the accessibility of services of general importance.

3 Results

One of the most important indexes for assessing differences in social status is the multiple deprivation index, which has been developed by Peter Townsend in the UK. He defines deprivation as a state of "observable and demonstrable disadvantage relative to the local community or the wider society or nation to which the individual, family or group belongs" (8). Townsend distinguishes between material and social deprivation. In addition to finances, the former comprises goods used in contemporary life such as a car, a television set or a neighbourhood with green areas. Social deprivation involves interpersonal relations within the family, at the workplace or within the community. This is closely related to the concept of social capital, which denotes certain characteristics of social organization, e.g. isolation or connectedness, individualism or collaboration, interpersonal assistance and trust (9, 10, 11). The index includes both material and social deprivation, where income, employment, education, crime, housing conditions and the living environment are assessed.

In Great Britain, the deprivation index covers the following areas: income, employment, health and disability, education, skills and training, the living environment and living conditions, physical environment, geographical accessibility, barriers to accessing housing and services of general importance, the proximity of these services, and crime and safety in the community (12). For the purpose of monitoring these areas, more than 50 indicators were developed. The indicators affecting health are shown in table 1 below, denoted with the abbreviation IMD (index of multiple deprivation).

In addition to income-related indicators, Marmot's review of the situation in England (2) includes those pointing to social inequalities, including class, occupation, parent's occupation, the quality of the neighbourhood and ethnicity. Inequalities are reflected in health and they are assessed based on mortality, morbidity, the self-definition of one's health condition, mental health, deaths, injuries caused by accidents and violence. Other important indicators are the number of under-age pregnancies, the rate of road accidents among members of deprived communities, the number of doctors in primary health centres, the percentage of people vaccinated against flu, the consumption of fruits and vegetables and the number of homeless families living in temporary accommodation.

The index of deprivation was adopted and further developed with regard to local circumstances by certain European countries (Italy, Sweden, Spain and France), Canada, the US, Japan and New Zealand (9). In Canada, 6 further indicators have been added that have an indirect impact on health: the proportion of people over 15 with no high school diploma, the ratio of people over 15 in employment and the average income of people over 15, while also encompassing models of living and communities, which are often overlooked by other indicators, e.g., the proportion of people over 15 who live alone, the proportion of separated, divorced or widowed persons over 15, and the proportion of single-parent families (9).

The indicators are further divided based on age, ethnicity and gender and are categorized into quintiles (9) (although when assessing poverty, deciles would be more appropriate). The index of multiple deprivation could, for example, be used when researching premature deaths to establish what education these persons had, what their employment status and income were, whether they lived alone, how many of them were divorced, separated or widowed, and how many among them were single parents or came from single-parent families. The unit of population must be small, for example, a neighbourhood, a community or one area.

Data collected in this way is set apart from the general, national data. The findings of the above-mentioned research on inequalities in health in Slovenia revealed major differences between municipalities (5).

Matković, Šućur and Zrinščak (13) employed somewhat different indicators to establish the influence of socio-economic position on people's health, i.e. the Laeken indicators of income and poverty used by the EU to measure relative poverty and social exclusion. These indicators, originally 18 of them, were introduced in 2001 in Laeken, Belgium (hence the name). The indicators are divided into primary and secondary ones and relate to income, work, education and health (14). A detailed overview can be seen in Table 1. The indicators used to establish the level and intensity of material deprivation were added later. Persons who suffer from material deprivation are defined as those living in households that display from 3 or 4 to 9 elements of material deprivation exclusively as a consequence of restricted financial resources rather than personal choice or habits. The indicators relate to arrears with mortgage, loans, rent and utility bills, the capacity of the household to afford a one-week holiday away from home per year per family member, the capacity to afford a meat-based or comparable vegetarian meal at least every other day, the capacity to face unexpected financial expenses (amount corresponding to the monthly national at-risk-of-poverty threshold of the previous year), the inability to afford a landline or mobile phone, a colour TV, a washing machine, a personal car or an adequately heated apartment (15).

In 2010, the Social Protection Institute of the Republic of Slovenia issued a report on the indicators of poverty and social exclusion (in Table 1, these are denoted by the abbreviation ISV), supplemented with the proposal to introduce the following areas (16): migrations and ethnicity (the same has been proposed by Marmot in Great Britain), housing and homelessness.

The total set of indicators showing the impact of socio-economic circumstances on health is extensive and it points to the complexity of social processes and phenomena. Table 1 shows the indicators, which are organised by sources for the sake of clarity.

Table 1. Indicators of the socio-economic determinants of health from the point of view of poverty.
Tabela 1. Kazalniki socialno-ekonomskih determinant zdravja z vidika revščine.

Determinants and sources / Determinante in viri	Indicators / Kazalniki
Material deprivation / Materialna prikrajšanost	At-risk-of-poverty rate. At-risk-of-poverty rate threshold. / Stopnja tveganja revščine. Prag tveganja revščine. Inequality of income distribution: S80/S20 income quintile share ratio and S90/S10 income decile share ratio. / Neenakost razdelitve dohodka: S80/S20 kvintilno razmerje in S90/S10 decilno razmerje
Laeken indicators / Laekenski kazalniki (14)	Persistent at-risk-of-poverty rate (60% of the median). / Dolgotrajna stopnja tveganja revščine (60 % mediane) Relative median at-risk-of-poverty gap. / Relativna vrzel revščine Regional cohesion (the dispersion of regional employment rates). / Regionalna povezanost (razpršenost stopnje zaposlenosti po regijah) Long term unemployment. / Dolgotrajna brezposelnost Persons living in jobless households. / Osebe, ki živijo v delovno neintenzivnem gospodinjstvu Dispersion around the at-risk-of-poverty threshold. / Razpršitev okrog praga revščine At-risk-of-poverty rate anchored at one moment in time. / Stopnja tveganja revščine v določeni časovni točki At-risk-of-poverty rate before cash social transfers. / Stopnja tveganja revščine pred socialnimi transferji Inequality of income distribution – Gini coefficient. / Neenakost porazdelitve dohodka – Ginijev koeficient Persistent at-risk-of-poverty rate (50% of the median). / Dolgotrajna stopnja tveganja revščine (50 % mediane) Long term unemployment share. / Stopnja dolgotrajne brezposelnosti

Indicators of material deprivation / Kazalniki materialne prikrajšanosti (15) IMD-Great Britain / IVP-Velika Britanija (12)	The ability of a household to afford a one-week holiday per year per family member. / Zmožnost gospodinjstva, da si vsi člani lahko privoščijo enotedenske letne počitnice One meat-based or equivalent vegetarian meal every other day. / Zmožnost gospodinjstva, da si privošči mesni ali enakovreden vegetarijanski obrok vsaj vsak drugi dan Capacity to face unexpected financial expenses (amount corresponding to the monthly national at-risk-of-poverty threshold of the previous year). / Zmožnost gospodinjstva, da iz lastnih sredstev poravna nepričakovane izdatke v višini mesečnega praga tveganja revščine iz prejšnjega leta The inability to afford a landline or mobile phone, a colour TV set, a washing machine and a car. / Gospodinjstva, ki si ne morejo privoščiti fiksnega ali mobilnega telefona; barvnega televizorja; pralnega stroja in osebnega avtomobila The number of households entitled to subsidised rents. / Število gospodinjstev, ki prejema subvencijo stanarine The number of children dependent on jobseekers allowance or other financial help received by parents without other income. / Število otrok, ki je odvisno od nadomestila za brezposelnost ali denarne pomoči, ki ga prejemajo starši brez drugih dohodkov The number of adults and children in households where parents, although employed, have an income lower than the poverty threshold. / Število odraslih in otrok v gospodinjstvih, kjer kljub zaposlitvi starši prejemajo dohodek, nižji od praga revščine The number of adults and children receiving financial assistance for a longer period of time. / Število odraslih in otrok, ki dolgotrajno prejemajo denarno pomoč The number of persons over 65 years of age receiving state pension credit (guarantee). / Število prejemnikov državnih pokojnin nad starostjo 65 let The average income of persons over 15. / Povprečni dohodek ljudi nad starostjo 15 let The number of asylum seekers who live in private households and receive financial support. / Število prosilcev za azil, ki živijo v zasebnih gospodinjstvih in prejemajo denarni dodatek
Social capital / Socialni kapital Townsend's index of social deprivation / Townsendov indeks družbene prikrajšanosti (8)	Relationships in the family, at a workplace and in the community. / Odnosi v družini, na delovnem mestu in v skupnosti Mutual help, connectedness. / Medsebojna pomoč, povezanost Trust. / Zaupanje
Employment and unemployment IMD-Great Britain / Zaposlitev in brezposelnost IVP-Velika Britanija IMD-Canada / IVP-Kanada (9)	The number of unemployed single parents who receive unemployment allowance, or financial support or have an income per household member that is lower than the poverty threshold. / Število brezposelnih samskih staršev, ki prejemajo denarno nadomestilo za brezposelnost ali denarno pomoč ali prejemajo dohodek, ki je nižji od praga revščine na družinskega člana The number of women who care for a handicapped family member and receive partial compensation for the lost income. / Število žensk, ki skrbi za oviranega družinskega člana in za to prejema delno nadomestilo za izgubljeni dohodek The percentage of employed persons over 15 years of age. / Odstotek zaposlenih nad starostjo 15 let

Education, profession / Izobraževanje, poklic	School success by the parents' socio-economic status. / Šolski uspeh po socialno-ekonomskem statusu staršev Number of children over 15 who dropped out of secondary school or do not continue education after completing elementary school. / Število otrok nad starostjo 15 let, ki zapusti srednjo šolo ali se ne vključi v šolanje po osnovni šoli The number of young people over 19 who do not enter university. / Število mladih nad starostjo 19 let, ki se ne vključijo v študij
IMD-Great Britain / IVP-Velika Britanija	Absence rate in secondary and elementary schools. / Stopnja izostajanja od pouka v srednji šoli in v osnovni šoli Percentage of young people aged 24-25 with low-level qualifications or without education. / Odstotek mladih med 24. in 25. letom starosti z nizko ravnijo kvalifikacij ali brez izobrazbe The percentage of children attending special need schools. / Odstotek otrok v šolah s prilagojenim programom The percentage of these children who enter secondary or vocational schools. / Odstotek teh otrok, ki nadaljuje šolanje v srednji ali poklicni šoli The percentage of these children who enter university (also by gender and ethnicity). / Odstotek teh otrok, ki se vključi v visokošolsko izobraževanje (tudi po spolu in etničnosti)
Housing and homelessness / Stanovanje in brezdomstvo	The number of people living in social (temporary housing or not-for-profit apartments in Slovenia) or private apartments that are poorly maintained. / Število ljudi, ki živi v socialnih (pri nas enote za začasno prebivanje ali neprofitna stanovanja) ali zasebnih stanovanjih, ki so slabo vzdrževani The number of homeless people who obtained an apartment. / Število brezdomnih, ki dobi stanovanje
IMD-Great Britain / IVP-Velika Britanija	The number of homeless people living in shelters. / Število brezdomnih, ki ima prebivališče v zavetiščih The number of homeless people by age, gender, ethnicity and reason for homelessness. / Število brezdomnih po starosti, spolu, etničnosti in po vzroku za brezdomnost The number of evictions and number of children who were evicted. / Število deložacij iz stanovanja in število otrok, ki so deložirani The number of applicants for social (in Slovenia non-for-profit) housing and the percentage of those who were granted social apartments. / Število prosilcev za socialno (pri nas neprofitno) stanovanje in od tega odstotek dobitnikov takega stanovanja
Indicators of material deprivation / Kazalniki materialne prikrajšanosti	Arrears with mortgage or rent, utility bills, loan payments or other repayments. / Zaostanek pri plačilu hipoteke ali najemnine, rednih stanovanjskih stroškov, obrokov za kredit ali drugih odplačil posojil The ability of a household to afford an adequately heated apartment. / Sposobnost gospodinjstva, da si zagotovi primerno ogrevano stanovanje

ISV indicators / Kazalniki ISV (16)	The number of evictions with regard to the size of the family. / Število deložacij glede na velikost družine The number of temporary housing units. / Število začasnih bivalnih enot The duration of a stay in temporary housing units. / Dolžina bivanja v začasnih bivalnih enotah Transitions from temporary units to not-for-profit apartments. / Prehodnost iz bivalnih enot v neprofitno stanovanje Overcrowded housing. / Prenaseljenost v bivalni enoti The number of persons living in inadequate housing. / Število ljudi v neprimernih stanovanjih The number of persons waiting to obtain an apartment. / Število čakajočih na stanovanje The number of persons not meeting the criteria for obtaining non-for-profit apartments. / Število, ki ne izpolnjuje pogojev za neprofitno stanovanje The number of persons receiving subsidized rent. / Število prejemnikov subvencije najemnine za stanovanje The number of persons with a double mortgage. / Število ljudi z dvojno hipoteko The number of persons facing an uncertain housing situation. / Število ljudi v negotovi stanovanjski situaciji Years (period) of waiting to obtain decent housing (impact of nationality, gender and ethnicity). / Leta (časovno obdobje) čakanja na dostojno prebivališče (vpliv nacionalnosti, spola in etničnosti) The number of apartments intended for poor people (excluding temporary housing units). / Število stanovanj, ki so namenjena revnim ljudem (brez začasnih bivalnih enot) The number of homeless children. / Število brezdomnih otrok
Living environment / Življenjsko okolje IMD-Great Britain / IVP-Velika Britanija IMD-Canada / IVP-Kanada	The quality of air and water in deprived communities. / Kakovost zraka in vode v prikrajšanih skupnostih Infrastructure – electricity, drinking water, sewage, street lighting, the collection of garbage in deprived communities. / Infrastruktura – elektrika, pitna voda, kanalizacija, javna razsvetljava, odvoz smeti v prikrajšanih skupnostih The percentage of recycled garbage in deprived communities. / Odstotek recikliranih smeti v prikrajšanih skupnostih The percentage of people over 15 who live alone. / Odstotek ljudi nad starostjo 15 let, ki so razvezani, ločeni ali ovdoveli The percentage of people over 15 who are separated, divorced or widowed. / Odstotek ljudi nad starostjo 15 let, ki živijo sami The percentage of single-parent families. / Odstotek enostarševskih družin
Health / Zdravje ISV indicators / Kazalniki ISV Marmot's review of the situation in Great Britain / Marmotov pregled stanja v Veliki Britaniji (2)	The number of people without health insurance by reasons and groups. / Število ljudi brez zdravstvenega zavarovanja po vzroku in skupinah Serious diseases in the homeless group (including long term ones). / Hude bolezni brezdomnih (tudi dolgotrajne) The number of homeless people hospitalized in psychiatric wards. / Število hospitalizacij brezdomnih v psihiatričnih klinikah The number of social deaths (deaths caused by lacking health care and poor living conditions). / Število socialnih smrti (umrli zaradi pomanjkljive zdravstvene oskrbe in slabih življenjskih pogojev) The number of underage pregnancies. / Število mladoletnih nosečnosti The number of doctors within the primary health care system with regard to the unit of residence. / Število zdravnikov v primarnem zdravstvu glede na enoto prebivalcev The percentage of people vaccinated against flu. / Odstotek ljudi, ki se cepi proti gripi The consumption of vegetables and fruits in families living in temporary housing units. / Uživanje sadja in zelenjave pri družinah, ki živijo v začasnih nastanitvah

Crime and safety / Kriminal in varnost IMD-Great Britain / IVP-Velika Britanija	The number (or percentage) of reported home burglaries. / Prijavljeno število (ali odstotek) vlomov v stanovanje The number of reported instances of violence. / Prijavljeno število nasilnih dejanj The number of reported car thefts and robberies of persons or premises. / Prijavljeno število kraje avtomobila, ropov oseb ali prostorov The percentage of crime related to drugs by types of offenses and age. / Odstotek kriminala, povezanega z drogami, po vrsti prestopkov in starosti Criminal offenses by age and gender. / Kazniva dejanja po starosti in spolu
Accessibility / Dostopnost IMD-Great Britain / IVP-Velika Britanija	Distance by road and time needed to reach a general practitioner, a dentist or a pharmacy. / Cestna oddaljenost in čas do splošnega zdravnika, zobozdravnika in lekarne Distance to a food store. / Oddaljenost od trgovine s hrano Distance and time needed to reach a school. / Oddaljenost in čas do osnovne šole Distance to a post office and bank. / Oddaljenost do pošte in banke Distance and time needed to reach a centre for social work. / Oddaljenost in čas do centra za socialno delo Frequency of public transport services to services of public importance (a doctor, a centre for social work, a bank, a post office, a pharmacy). / Pogostost javnega transporta do storitev javnega pomena (zdravnika, centra za socialno delo, banke, pošte, lekarne …) Average time needed to reach a secondary school, a public library, public-access internet and services of general public importance. / Povprečen čas, potreben za dostop do srednje šole, javne knjižnice, javno dostopnega interneta in služb splošnega javnega pomena
Ethnicity / Etničnost ISV indicators / Kazalniki ISV	Generation of immigrants with low income (first, second or third). / Generacija priseljencev z nizkim dohodkom (prva, druga ali tretja) School success among children and young people in ethnic groups. / Šolski uspeh otrok in mladih iz etničnih skupin The proportion of criminal offences. / Delež strojenih kaznivih dejanj The proportion of imprisoned persons. / Delež zapornikov The proportion of children and young people in institutions. / Delež otrok in mladih v vzgojnih domovih Housing status. / Stanovanjski status Migrants' living conditions and overcrowding. / Prebivanje migrantov in prezasedenost prebivališča Income to cost of living ratio. / Razmerje med dohodkom in življenjskimi stroški Number of paperless migrants' children receiving financial support. / Število otrok, ki prejemajo denarne dodatke in katerih starši so brez dokumentov

Legend: IMD – index of multiple deprivation
IVZ - National Institut of Public Health

4 Discussion

The indicators are divided into ten areas. These are the basic areas that enable a decent quality of life and are mainly regulated by national policies. The most important of these is an anti-poverty and social exclusion policy that covers a certain period of time and encompasses material and social deprivation. In Slovenia, this document is called the National Action Plan for Social Inclusion. It was first released in 2004 and then supplemented in 2006 and 2008 (17). It covers employment, education, health care, housing policy, judicial protection, culture and regional differences and it targets groups living in poverty or social exclusion. It is part of the EU policy for fighting poverty and social exclusion. The EU member states are obliged to plan measures related to this field. Individual strategic directions are defined in recommendations for formulating national programmes that are transferred to the member state policies using the open coordination method. The EU implements the open coordination method in relation to issues that are not binding on the

member states but are recommended. All Slovenian national programs in the past years included the area of health care, but it did not play a prominent role and the goals and plans were very limited. Moreover, the impact of poverty on health was never taken into account, which primarily suggests a lack of awareness about the link between living conditions and health.

It is important to understand how the individual areas of life influence health. Material deprivation is measured based on income, which is divided into income from work and income in nature, although the later does not contribute essentially to improving the livelihood options for people living in poverty. For example, the possession of a farm can partly improve the quality of diet, but only if the farm is located close to one's house; if this is not the case, it entails additional expenses for transport and makes this option less accessible. Growing one's own produce is therefore more linked to livelihood options in rural environments than in urban areas. However, poor people in rural areas have significantly fewer options for accessing services of general importance and food items that they cannot produce themselves. Therefore, it is important to measure the index of material deprivation in smaller geographical areas such as communities, villages or similar (9). General data on the national level only shows the general situation, so this cannot serve as an adequate basis for national policies. The research on the health of the Roma people in Prekmurje (7) is an example of a local study that takes ethnicity into account and establishes the important characteristics of the health of an ethnic minority with respect to the majority population, enabling the planning of more adequate measures. Similarly, the research entitled Health Inequalities in Slovenia (5) takes into account geographical and income differences. The indicators of material deprivation measured by the EU countries over recent years include objects that have become necessities of contemporary life. Given the ever-deteriorating public transport infrastructure, a car has become indispensable for accessing services and it also improves employment opportunities and mobility. The lack of public transport affects the older population who have difficulties with such things as shopping for food (because corner-shops have been disappearing) and accessing services of public importance such as health and social services, postal and bank services and the like. An important indicator of deprivation is the household's ability to afford a meat-based meal or a comparable vegetarian meal every other day. People living in poverty are especially deprived in this respect, since they often depend on humanitarian aid, but lunch packages distributed by humanitarian organizations primarily consist of items that are harmful to health, for example white flour, white sugar and other processed food. These are food items that can be obtained at affordable prices. The Commission on Social Determinants of Health with the WHO emphasized, among other things, the importance of the equal distribution of power, money and resources (18), which can improve the health of deprived groups. Social capital has an important impact on health because it is a source of social support, it increases trust and prevents isolation and in this way significantly contributes to mental health especially. Social networks are a source of assistance as well as information and access (11). Poor people have weaker social networks because over time their contacts with the environment diminish and their connections weaken, which may lead to isolation and worse living conditions. Moreover, poverty does not end for them when they find a job, since they often have to repay debts and have no property. Our modern times are also characterized by the emergence of poor people in employment, meaning those whose income is lower than the threshold of poverty. This group has been increasing throughout the EU territories (19). Employment opportunities are better for people with higher education levels, since jobs for people with lower education have been disappearing lately. Another important fact is that people with the lowest education levels face the most difficult working conditions, e.g. at construction sites where workers' health is most endangered and the number of work accidents ending in deaths is the largest. Ethnicity is also an important aspect in this case, given that half of those who died in work accidents in Slovenia in 2010 were emigrant workers (20).

The housing and education areas include several indicators related to the living conditions of children. The above-mentioned report by the WHO on the social determinants of health drew attention to the differences in children's health depending on their parents' socio-economic position (18). A child's living environment has a decisive impact on the development of its physical, psychical, emotional, cognitive and linguistic skills, depending on the available opportunities, health care and the options of acquiring education, skills and jobs. Persistent poverty is passed down the generations, meaning that it reduces the possibility of a better life for succeeding generations because they cannot rely on their parents' resources. Therefore, structural options for exiting poverty are of crucial importance. Poor people more often leave school early, needing to earn their livelihood as well as due to the lack of opportunities to continue schooling. They are also more

often assessed as less successful learners or relegated to schools with adjusted programs. In Slovenia, it was the Roma children who were more often redirected to these programs, although the source of their difficulties lay in lacking linguistic competences and poverty rather than mental inferiority (21).

Poor living conditions, in addition to material deprivation, fundamentally affect the health of poor people. Although Slovenia has traditionally had a rather favourable housing standard, during the past few decades the accessibility of housing has reduced, especially for poor people, because the concept of "social housing" has been abolished. The criteria currently used to determine if one is eligible for not-for-profit housing are primarily material – or in other words, this type of housing is primarily accessible to those who can pay the rent and utility bills. Although the rent is subsidized, the percentage of those who receive this type of support is very low, and in addition, the utility costs are significant as they have been steadily increasing over the past few years. The inability to pay housing costs is the reason behind frequent evictions that lead to homelessness or life in temporary units. A multi-member family may consequently live in one room while sharing a bathroom and toilet facilities with other families. Problems arise when this type of living turns into a long-term arrangement, as the options for obtaining another apartment are few. Life in temporary housing and homelessness have a huge impact on health, so the indicators within this area are elaborate. Research on the health of homeless people (6) suggests a close link between the two, with the situation being further aggravated by the reduced accessibility of health services, as most participants in the research pointed out.

The accessibility of health services is not restricted to physical accessibility only, but also includes a social aspect relating to the ways in which various groups of people are included in the health care system, how they are treated, what their options are for receiving quality health care and how social stratification is reflected in the accessibility of health services. Problems with accessibility also diminish trust in the health care system, which is manifested in decisions to opt for alternative forms of treatment (22), although the costs are high so poor people cannot afford these.

Finally, let us mention a fact that is often overlooked – various types of discrimination often pile up or multiply if a person has several underprivileged statuses. In social sciences, this is denoted by the term intersectionality, which is part of the anti-discrimination theories (23). For example, a Roma woman with a handicap can be in a much worse situation than a healthy Roma person, because she is a woman, a member of an ethnic minority that is discriminated against and physically handicapped. On the other hand, a healthy Roma person is in a worse position than a member of the majority population group. Each of these statuses is underprivileged, while they together cause social exclusion that is often intergenerational. Anti-discriminatory policies should start from an awareness of the problems experienced by individual social groups in everyday life, which should also be the basis for the formulation of measures for social inclusion.

5 Conclusion

The social determinants of health are complex and comprise many spheres of life. Poverty aggravates the situation because it takes these determinants to the extreme. Since life in poverty is specific, the ways of tackling poverty are also specific, depending on social power, the accessibility of resources and the options for escaping poverty. In this, health is the key factor that depends on the ability and willingness of the state to ensure health for all regardless of a person's social status, material condition or other circumstances. Consequently, the accessibility of health care is more dependent on the state's readiness to enable it than on the health care system itself. Health is equally affected by social, education, housing and other national policies. The indicators measuring their impacts have already been developed in an attempt to contribute to the better monitoring and implementation of these policies.

The set of indicators presented above is extensive and diverse; certain indicators have already proved their applicability in individual countries, while others proved applicable in international environments as well. The indicators of poverty and social exclusion, or Laeken indicators, have been in use for more than a decade now enabling international comparisons. Although local situations differ greatly since lives of poor people in European countries differ depending on the level of development, the use of poverty thresholds that are determined with regard to the national income make comparisons possible. The assumption behind these comparisons is that there exists a common and agreed standard of the quality of life in the EU, which is reflected in the nine elements of material deprivation. The general fact demonstrated by many studies so

far is that poverty is linked to health. This link has been extensively reported by the work group of WHO researching the socio-economic determinants of health, which has also been using and developing the index of material deprivation. Some of these indicators have also been tested in the study on health inequalities in Slovenia, which produced many important findings.

More caution seems to be in order when including those indicators that have so far only been tested in local contexts. Although they proved meaningful and applicable in specific localities, this does not ensure their applicability in other environments as well. These include certain indicators in the index of multiple deprivation that primarily reflect local definitions of the quality of life and only have an indirect impact on people's health. For example, it would be difficult to prove how subsidized rents relate to health unless these are linked to the poverty of those who receive the subsidies. Another such example is the impact of the average income of people over 15 years of age on their health. A similar conclusion could refer to the index of social deprivation used to assess one's social capital, which includes trust, interpersonal connections and relations. Research has indeed shown that lower social capital leads to loneliness and isolation, which in turn may affect health, but this link is more difficult to prove than, for example, the link between poor living conditions and poor health. Nevertheless, these indicators are very important because they enable us to obtain data on people's everyday lives, which are significant for both theoretical reflections and the formulation of national and local policies. While indicators of poverty, material and multiple deprivation enable international comparability, certain indicators are particularly important because they allow us to become acquainted with the local environments, which the national policies relate to, after all. Therefore, careful deliberation is necessary when using both types of indicators, as well as when adjusting them to local circumstances and purposes.

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