



VLADA REPUBLIKE HRVATSKE
Ured za ljudska prava
i prava nacionalnih manjina



Europska unija
Zajedno do fondova EU



ROMA INCLUSION IN THE CROATIAN SOCIETY

health care and social welfare

Goran Milas - Irena Martinović Klarić



Publisher:

Office for Human Rights and the Rights of National Minorities of the Government of the Republic of Croatia

For the publisher:

Alen Tahiri, M.A. Pol Sci

Year of publication:

2020

Original title:

Uključivanje Roma u hrvatsko društvo: zdravstvena zaštita i socijalna skrb

Authors:

Goran Milas and Irena Martinović Klarić

Reviewers:

Tomislav Benjak, Marija Hegeduš-Jungvirth and Ivan Rimac

Translation:

Sinonim d.o.o.

Graphic design, editing and printing:

Kerschhoffset d.o.o.

Circulation:

50 copies

Cataloguing-in-Publication data available in the Online Catalogue of the National and University Library in Zagreb under CIP record 001081827.

ISBN: 978-953-7870-25-6

Projekt je sufinancirala Europska unija iz Europskog socijalnog fonda.

Sadržaj publikacije isključiva je odgovornost Ureda za ljudska prava i prava nacionalnih manjina Vlade Republike Hrvatske.

Za više informacija:

Ured za ljudska prava i prava nacionalnih manjina Vlade Republike Hrvatske

Mesnička 23, 10 000 Zagreb

+ 385 [1] 4569 358

ured@uljppnm.vlada.hr

Više informacija o EU fondovima dostupno je na www.strukturnifondovi.hr

ROMA INCLUSION IN THE CROATIAN SOCIETY

health care and social welfare

Goran Milas
Irena Martinović Klarić

Zagreb, 2020

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Office for Human Rights and the Rights of National Minorities of the Government of the Republic of Croatia, nor the views of the institutions in which the authors are employed.

Note: All linguistic forms having a gender form in this study shall apply equally to both males and females, regardless of the form used.

Content

List of abbreviations.....	5
List of tables.....	6
List of figures.....	11
1. INTRODUCTION.....	14
1.1. Health and health care of RNM members.....	16
1.2. Strategic documents related to health care and social welfare of RNM members.....	20
1.3. Social and cultural determinants of the health of RNM members.....	22
1.3.1. Discrimination.....	22
1.3.2. Poverty.....	22
1.3.3. Scarce education.....	23
1.3.4. Social exclusion.....	24
1.3.5. Domestic violence.....	24
1.3.6. Culture and attitudes towards health and disease.....	25
1.4. Healthy and unhealthy habits.....	28
1.5. Conceptual model of social and cultural determinants of the health of RNM members.....	28
1.6. Social welfare for RNM members.....	29
2. OBJECTIVES AND METHODOLOGY.....	34
2.1. Research objectives.....	34
2.2. Data sources.....	35
2.2.1. Data collection methods.....	35
2.3. Study methodology on health care and social welfare.....	37
2.3.1. Regional division and population size estimation.....	37
2.3.2. Data.....	38
2.3.3. Processing and analysis of data.....	38
2.3.3.1. Design of multi-item indicators, scales and index.....	39
3. RESULTS.....	42
3.1. Health and health care of RNM members.....	42
3.1.1. Subjective assessment of health status.....	43
3.1.2. Long-term diseases and limitations in performing activities.....	49
3.1.3. Prevalence of childhood diseases.....	52
3.1.4. Frequency of health problems and diseases during the last 12 months.....	53

3.1.5. Reproductive health of women.....	61
3.1.6. Domestic violence and health	65
3.1.7. Healthy and unhealthy habits	66
3.1.8. Accessibility of healthcare services.....	76
3.1.8.1. Physical accessibility of healthcare services.....	76
3.1.8.2. Health insurance	78
3.1.8.3. Health care for children and women	81
3.1.8.4. Use of and satisfaction with healthcare services.....	85
3.1.8.5. Trust and satisfaction with doctors	96
3.1.9. Health of persons with disabilities	101
3.2. Social welfare.....	103
3.2.1. Socioeconomic status and living conditions.....	103
3.2.2. Use and accessibility of social welfare services.....	105
3.2.3. Social welfare measures aimed at child protection.....	116
3.2.4. Satisfaction with and attitudes towards the quality of social welfare.....	119
4. FINAL CONSIDERATIONS AND CONCLUSIONS.....	124
4.1. Health and health care of RNM members.....	124
4.1.1. Age.....	133
4.1.2. Education.....	133
4.1.3. Region and type of settlement.....	134
4.1.4. Socioeconomic factors.....	135
4.1.5. Key findings	135
4.2. Social welfare of RNM members.....	136
4.2.1. Key findings	139
4.3. Study limitations.....	139
4.4. Summary of recommendations for improving the health and social welfare of the RNM in the Republic of Croatia	140
4.4.1. Improvement of data measurement, monitoring and collection with more comprehensive inclusion of scientific knowledge.....	140
4.4.2. Targeted measures and activities for each age group of RNM members.....	141
4.4.3. Health literacy of RNM members.....	141
4.4.4. Equality in access to healthcare and social welfare services.....	141
4.4.5. Elimination of institutional discrimination, racism and inequality.....	142
5. LITERATURE.....	144
5.1. Acts and strategic documents.....	146
6. APPENDIX	148

List of abbreviations

[G]OHRNM	Office for Human Rights and the Rights of National Minorities of the Government of the Republic of Croatia
ANOVA	Analysis of variance
AP	Action plan
CBS	Croatian Bureau of Statistics
CNIPH	Croatian National Institute of Public Health
EC	European Commission
EU	European Union
EUROSTAT	Statistical Office of the European Union
FRA	European Union Agency for Fundamental Rights
KNF	Key non-Roma figure
NRIS	National Roma Inclusion Strategy from 2013 to 2020
OG	Official Gazette
PWD	Persons with disabilities
RNM	Roma national minority
RoC	Republic of Croatia

List of tables

Table 1.	Regional division and population size estimation	37
Table 2.	Comparison of subjective assessments of health status by region	44
Table 3.	Comparison of subjective assessments of health status by type of settlement	44
Table 4.	Comparison of subjective assessments of health status by age.....	44
Table 5.	Comparison of subjective assessments of health status by education.....	45
Table 6.	Comparison of subjective assessments of health status by adequacy of housing	45
Table 7.	Predictors of the general health assessment of RNM members	48
Table 8.	Frequency and degree of limitations due to long-term diseases by region....	49
Table 9.	Frequency and degree of limitation due to long-term disease by type of settlement	50
Table 10.	Frequency and degree of limitation due to long-term diseases by age	50
Table 11.	Frequency and degree of limitation due to long-term diseases by education....	50
Table 12.	Comparison of percentages by region: morbidity of children from childhood diseases.....	52
Table 13.	Comparison of percentages by type of settlement: morbidity of children from childhood diseases	53
Table 14.	Percentage of problems and disease occurrences over the last 12 months by region.....	54
Table 15.	Percentage of problem and illness occurrences over the last 12 months by settlement type	55
Table 16.	Relationship between sociodemographic characteristics and the proportion of morbidity among RNM members.....	56
Table 17.	Predictors and explained variance of the existence of different categories of diseases among RNM members	57
Table 18.	Comparison of arithmetic means and percentages by region: births, abortions and reproductive health	61

Table 19. Comparison of arithmetic means and percentages by type of settlement: births, abortions and reproductive health	62
Table 20. Relationship between sociodemographic characteristics and indicators of reproductive health and problems among female RNM members	63
Table 21. Assessment predictors of reproductive health of RNM members	65
Table 22. Comparison by region: consumption of alcoholic beverages, cigarettes and drugs or opiates	67
Table 23. Comparison by type of settlement: consumption of alcoholic beverages, cigarettes and drugs or opiates.....	68
Table 24. Comparison by age: consumption of alcoholic beverages, cigarettes and drugs or opiates	69
Table 25. Relationship between some sociodemographic characteristics and unhealthy habits among RNM members	69
Table 26. Comparison by region: frequency of consumption of certain types of food...70	
Table 27. Comparison by type of settlement: frequency of consumption of certain types of food.....	71
Table 28. Relationship between some sociodemographic characteristics and frequency of consumption of certain types of food among RNM members.....	72
Table 29. Predictors of healthy diet of RNM members.....	73
Table 30. Predictors of unhealthy diet of RNM members	73
Table 31. Comparison by region: the importance of healthy habits among RNM members.....	74
Table 32. Comparison by type of settlement: the importance of healthy habits among RNM members.....	74
Table 33. Relationship between some sociodemographic characteristics and the importance attributed to healthy habits among RNM members.....	75
Table 34. Comparison by region: accessibility of pharmacy, health center and medical care in the settlement.....	76
Table 35. Comparison by type of settlement: accessibility of pharmacy, health center and medical assistance in the settlement.....	77
Table 36. The correlation between some sociodemographic characteristics and the accessibility of pharmacy, health center and medical care in the settlement ...	78
Table 37. Comparison by region: percentage of health insurance coverage	78

Table 38. Comparison by type of settlement: percentage of health insurance coverage...	79
Table 39. Relationship between some sociodemographic characteristics and health insurance coverage of RNM members	80
Table 40. Predictors of health insurance coverage among families of RNM members....	80
Table 41. Comparison by region: vaccination coverage and pediatric care coverage of children RNM members.....	81
Table 42. Comparison by type of settlement: vaccination coverage and pediatric care coverage of children RNM members.....	82
Table 43. Comparison by region: regularity of gynecological examinations of women RNM members.....	83
Table 44. Comparison by type of settlement: regularity of gynecological examinations of female RNM members	84
Table 45. Correlation between some sociodemographic characteristics and regularity of gynecological examinations of female RNM members.....	85
Table 46. Comparison by region: percentage frequency and reasons for not using healthcare services in case of need.....	86
Table 47. Comparison by type of settlement: percentage frequency and reasons for not using healthcare services in case of need.....	87
Table 48. Correlation between some sociodemographic characteristics and reasons for not contacting a doctor in case of need of RNM members.....	89
Table 49. Comparison by region: doctor visits, emergency services, hospital stays and specialist examinations	91
Table 50. Comparison by type of settlement: percentage frequency and reasons for not using healthcare services in case of need.....	93
Table 51. Correlation between some sociodemographic characteristics and different aspects of the medical services usage by RNM members	94
Table 52. Predictors of the use of medical care and services among RNM members....	95
Table 53. Comparison by region: trust in doctors	97
Table 54. Comparison by type of settlement: trust in doctors.....	97
Table 55. Comparison by region: negative experiences due to unprofessional behavior of doctors	98
Table 56. Comparison by type of settlement: negative experiences due to the unprofessional behavior of doctors	99

Table 57. Correlation of some sociodemographic characteristics with trust in doctors and experiences with doctors among RNM members.....	99
Table 58. Predictors of assessment of unprofessional behavior of doctors	100
Table 59. Comparison of socioeconomic status by region: household income and expenditure, indebtedness, household equipment and adequacy of housing ...	103
Table 60. Comparison of socioeconomic status by type of settlement: household income and expenditure, indebtedness, household equipment and adequacy of housing	104
Table 61. Correlation of some sociodemographic characteristics with indicators of socioeconomic status of RNM members.....	105
Table 62. Comparison by region: percentage of RNM members using different forms of social assistance	107
Table 63. Comparison by type of settlement: percentage of RNM members using different forms of social assistance	108
Table 64. Correlation of some sociodemographic characteristics with the use of different forms of social assistance among RNM members.....	109
Table 65. Predictors of the use of social assistance among RNM members.....	110
Table 66. Comparison by region: percentage of RNM members using different forms of social services	111
Table 67. Comparison by type of settlement: percentage of RNM members using different forms of social assistance	112
Table 68. Correlation of some sociodemographic characteristics with the use of different forms of social assistance among RNM members.....	113
Table 69. Predictors of the use of social services among RNM members.....	114
Table 70. Comparison by region: percentage of RNM members using different forms of social assistance and average amounts	114
Table 71. Comparison by type of settlement: percentage of RNM members using different forms of social assistance and average amounts.....	115
Table 72. Correlation of some sociodemographic characteristics with the use of different forms of social assistance and amounts among RNM members	115
Table 73. Comparison by region: percentages of RNM members who heard that some families in their vicinity had their children taken away from their parents.....	116
Table 74. Comparison by type of settlement: percentages of RNM members who	

heard that some families in their vicinity had their children taken away from their parents.....	117
Table 75. Comparison by region: opinions of RNM members about the accessibility and timeliness of social welfare.....	118
Table 76. Comparison by type of settlement: opinions of RNM members about the accessibility and timeliness of social welfare.....	118
Table 77. Correlation of some sociodemographic characteristics with the use of different forms of social assistance and amounts among RNM members.....	119
Table 78. Comparison by region: average satisfaction with social workers and social assistance	120
Table 79. Comparison by settlement type: average satisfaction with social workers and social assistance	121
Table 80. Correlation between some sociodemographic characteristics and satisfaction with social workers and social assistance among RNM members [assessments 1-5].....	122
Table 81. A summary and description of the composite indicators, scales, and indexes used in the study.....	148

List of figures

Figure 1. Baseline model of social and cultural determinants of the health of RNM members.....	29
Figure 2. Age structure of the research sample of RNM members in relation to the general population of the Republic of Croatia.....	42
Figure 3. Assessment of the general health condition of RNM members by age.....	45
Figure 4. Assessment of general health by education.....	46
Figure 5. Comparison of self-assessments of the general health status of persons aged 15 and older from the general population and RNM members.....	47
Figure 6. Percentage of variance of the general health status of RNM members explainable by predictors.....	48
Figure 7. Percentage of persons suffering from a disease for more than six months by age: comparison with the general population and the situation in 2011....	51
Figure 8. Proportion of explained variance of different disease categories.....	57
Figure 9. Percentage of male RNM members of a certain age suffering from a particular disease category.....	59
Figure 10. Percentage of female RNM members of a certain age suffering from a particular disease category.....	59
Figure 11. Comparison of the presence of certain diseases among persons aged 15 years of age and older from the general population and among RNM members.....	60
Figure 12. Percentage of reproductive health variance of female RNM members explainable by predictors.....	65
Figure 13. Percentage of RNM members consuming alcoholic beverages and cigarettes by region.....	67
Figure 14. Representation of smokers in the general population and among RNM members.....	68
Figure 15. Percentage of variance of healthy diet of RNM members explainable by predictors.....	73
Figure 16. Percentage of variance of unhealthy diet of RNM members explainable by predictors.....	73

Figure 17. Average distance between pharmacy and health center in kilometers by region.....	77
Figure 18. Percentage of health insurance coverage by region	79
Figure 19. Percentage of variance of health insurance coverage among RNM families explicable with predictors.....	80
Figure 20. Percentage of households in which, during the last 12 months, despite the need, a doctor was not contacted, a medical service was not provided nor was a medicine acquired	88
Figure 21. Percentage of persons who used different medical services in the previous period by region	92
Figure 22. Percentage of variance in the use of medical care and services among RNM members explained by predictors.....	95
Figure 23. Percentage of variance in assessment of unprofessional behavior of doctors explained by predictors.....	100
Figure 24. The share of persons with disabilities in the sample and their distribution according to the nature of the disability.....	101
Figure 25. Assessment of the general health status of RNM members with and without disabilities.....	102
Figure 26. Average monthly income and expenditure in RNM households by region	104
Figure 27. Percentage of Roma covered by various forms of social assistance in relation to the general population.....	106
Figure 28. Percentage of RNM members using various forms of social assistance	108
Figure 29. Percentage of variance in the use of social assistance among RNM members explicable by predictors.....	110
Figure 30. Percentage of variance in the use of social services among RNM members explicable by predictors.....	114

1 Introduction



1. Introduction

Due to deep-rooted and long-lasting marginalization and social exclusion, members of the Roma national minority [RNM] in the Republic of Croatia have been facing a number of obstacles on their path to equal inclusion in society. Such marginalization, which results in multidimensional deprivation, unfavorably affects the field of health and health care, which is why there is a large gap in health status between RNM members and the general population. Numerous studies conducted over decades strongly indicate that this is a chronic and multi-layered problem which is extremely demanding and complex due to a multitude of social causes and determinants.

The observed inequality in the field of health and health care has been recognized as an important segment of the inclusion of the RNM in society. Consequently, the goals and objectives of the *National Roma Inclusion Strategy* [NRIS] have been defined, requiring continuous monitoring of the current situation, and launching actions for reducing inequality.

Poverty and material deprivation are also salient and widespread problems which RNM members are facing. According to socioeconomic circumstances and the presence of poverty, the gap between the Roma and the general population is even more pronounced than in the area of health. Therefore, reducing poverty and improving the quality of social services is also recognized as one of the important integration goals included in the NRIS.

In the study, we analyze data about health care and social welfare of the RNM, as these are two major factors for achieving quality of life. The analysis seeks to describe the severity of problems in specific segments, but also to identify the mechanisms that contribute to the formation and maintenance of inequality. We therefore analyzed a wide range of indicators which include social, cultural, socioeconomic, environmental and behavioral determinants. The existing study is largely based on the empirical research conducted in 2017¹ and comparative data on the Roma and general population of the Republic of Croatia or other countries collected from other sources.

1 Kunac, S., Klasnić, K. and Lalić, S. [2018] *Roma Inclusion in the Croatian Society: A Baseline Data Study*. Zagreb: Center for Peace Studies.

Data and indicators included in the analyses

The analysis sought to evaluate the existing problems related to health, health care and social welfare in their full extent, and observe them in the context of important social factors. Therefore, we included a wide range of available indicators to help clarify the mechanisms of the existing inequality reproduction. Below are systematized groups of indicators along with study objectives and indicated analytical strategies.

HEALTH

- 1) Describe the health status of RNM members by region, type of settlement, age, education, family relations, living conditions and socioeconomic status in the following segments:
 - a. diseases
 - b. subjective health assessment
 - c. health of children
 - d. health of women
 - e. mental and physical health as a possible consequence of domestic violence and neglect.
- 2) Analyze the situation of persons with disabilities: study the specificity of the position and problems faced by RNM members with disabilities.
- 3) Describe the healthy and unhealthy habits of RNM members by region, type of settlement, age, education, living conditions and socioeconomic status in the following segments:
 - a. hygiene, nutrition, physical activity
 - b. addictions: nicotine, alcohol, drugs.
- 4) Determine the accessibility of health services for RNM members by region and type of settlement in the following segments:
 - a. vicinity to the pharmacy and health center
 - b. visits of medical professionals to the settlements
 - c. health insurance coverage
 - d. vaccination coverage and pediatric childcare
 - e. accessibility of health care
 - f. use of medical services, satisfaction with them and negative experiences
 - g. satisfaction with the work of healthcare professionals.

SOCIAL WELFARE

- 1) Determine the socioeconomic situation by region and type of settlement in the following segments:
 - a. household income
 - b. household equipment
 - c. expenses
 - d. credit debt
 - e. adequacy of housing.

- 2) Analyze the level of use and accessibility of social welfare by region, type of settlement and education in the following segments:
 - a. social welfare and social welfare services
 - b. accessibility and timeliness
 - c. distance of the social welfare center and visits of social workers.
- 3) Assess the level of satisfaction with social welfare by region, type of settlement and education in the following segments:
 - a. satisfaction with the relationship with the employees of the social welfare center
 - b. attitudes toward the employees and the work of social welfare centers.

1.1. Health and health care of RNM members

Health is defined as a state of physical, mental and social well-being in which disease or infirmity is not present.² Health is a fundamental right and a universal value. *The Constitution of the Republic of Croatia* states that “everyone shall have the right to a healthy life”, that “the state shall ensure the right of citizens to a healthy environment” [Article 69] and that “everyone shall be guaranteed the right to health care” [Article 58]. In accordance with the *Ottawa Charter for Health Promotion* of 1986, the fundamental and internationally recognized conditions for health are peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equality. Improving health requires ensuring these basic preconditions and equal opportunities and resources to enable everyone to reach their full health potential.

The Republic of Croatia fulfills its obligations, tasks and goals in the field of health care, among other things, by planning health care, determining the strategy of its development, providing the legal basis and conducting health education of the population.³ The rights and obligations referred to in Article 69 of the *Constitution of the Republic of Croatia* may be exercised through the activities of several public sectors in order to provide the population with wholesome food and drink and a safe environment. Health is one of the key target areas in the *EU Framework for Roma Integration up to 2020*.⁴

Numerous studies in Croatia and around the world have shown that RNM members have difficulties in exercising their constitutionally guaranteed rights due to their specific social and economic circumstances, and to a certain extent their cultural heritage. As a result, they often face serious health threats. Despite formal equality, the RNM remains

2 World Health Organization [2006] *Constitution of the World Health Organization – Basic Documents*, Forty-fifth edition, Supplement, October 2006 [Retrieved 14 June 2020].

3 Government of the Republic of Croatia, Ministry of Health of the Republic of Croatia [2012] National Health Development Strategy 2012–2020 <https://zdravlje.gov.hr/UserDocImages/dokumenti/Programi.%20projekti%20i%20strategije/Nacionalna%20strategija%20zdravstva%20-%20za%20web.pdf> [Retrieved 15 June 2020]

4 European Commission [2011] *An EU Framework for National Roma Integration Strategies up to 2020*

in an unfavorable position due to ever-present indirect discrimination. The application of the legal principles of equal right to health care is often not sufficient when it comes to the RNM. Moreover, as stated in the NRIS from 2013 to 2020,⁵ the implementation of law without understanding of the existing inequality in living conditions can put the minority community in an even less equal position. Today, the prevailing belief is that the historically accumulated social conditions of inequality cannot be resolved by proclaimed equality alone. Positive action and equalization are needed⁶ as a way of proactive approach aimed at eliminating prejudices and discriminatory institutional practices.

The health status of the Roma population in Croatia has been presented in several national and international comparative studies and reports.⁷ Although such research on the health of the RNM is not uncommon in European countries, one should always be careful when interpreting the results and keep in mind the obstacles for collecting reliable data. There are a number of practical and methodological difficulties in conducting research and collecting data on the RNM. One major problem is the inability to obtain a comprehensive sampling framework, which makes it impossible to design a truly probabilistic sample. Another problem is the lack of a fully comparable sample from the general population. This is the major reason why comparisons in various studies often rely on only partially comparable data sets.

The European Commission survey on Roma health from 2014⁸ highlights health inequality and poorer health of the Roma population compared to the majority population in Europe. The Roma population across Europe is dominated by a younger population, which is partly due to higher birth rates and partly to shorter life expectancy. Life expectancy is significantly shorter (differences in Europe range from 5 to 20 years, and for Croatia it is estimated at 10 years), while infant mortality is generally two to three times higher than in the majority population.⁹

The inequality rests largely on social exclusion and consequent material and social deprivation. Research has shown that RNM members across Europe are exposed to unfavorable environmental and social conditions that are harmful for their health. Prevalent problems include inadequate housing conditions, overcrowded households, unsatisfactory sanitary conditions, segregation of Roma settlements, insufficient education and high unemployment rate.

5 National Roma Inclusion Strategy from 2013 to 2020 [2012] Office for Human Rights and the Rights of National Minorities of the Government of the Republic of Croatia www.vlada.hr/hr/content/download/234773/3443990/.../64_-16.pdf [Retrieved 18 June 2020]

6 Kocze, A. et al. [2014] Toolkit on programming the structural funds for Roma inclusion in 2014–20.

7 For example: Kunac, S., Klasnić, K. and Lalić, S. [2018] *Roma Inclusion in the Croatian Society: A Baseline Data Survey*. Zagreb: Center for Peace Studies; European Commission [2014] Roma health report: Health status of the Roma population. Data collection in the Member States of the European Union UNDP [2012] The health situations of Roma communities. Analysis of the data from the UNDP/World Bank/EC Regional Roma Survey.

8 European Commission [2014] Report on the health status of the Roma population in the EU and the monitoring of data collection in the area of Roma health in the Member States.

9 EPHA [2019] Closing the life expectancy gap of Roma in Europe <https://epha.org/wp-content/uploads/2019/02/closing-the-life-expectancy-gap-of-roma-in-europe-study.pdf> [Retrieved 12 June 2020]

Higher rates of infectious diseases [e.g. measles and hepatitis A] and lower vaccination coverage of children are recorded among RNM members compared to the majority population. Empirical data also indicates higher rates of chronic diseases [asthma, diabetes, cardiovascular disease, and hypertension] among the Roma compared to the majority population. There are indications that higher rates of chronic diseases are associated with risk factors such as unhealthy diet, lack of physical activity, stress, poorer access to primary health care, and poorer implementation of prevention programs to improve health care.¹⁰ Given the extreme vulnerability of the RNM, any economic crisis, including the recent recession that hit Croatia between 2008 and 2014, particularly affects this population, leading to a higher rate of chronic diseases, which exceeds the rate in the general population.

The health of Roma women is poorer than that of women in the general population, and there are also significant differences in health between Roma women and men. Contributors to poorer health of Roma women are their traditional gender roles, limited educational and employment opportunities, physical and social isolation, inadequate housing conditions, unhealthy living habits such as smoking and inadequate nutrition. The leading health risks for Roma women are early and late pregnancies, large families, insufficient access to and lower use of prenatal care services. Poorer health outcomes, abortions and stillbirths are also more common among Roma women compared to the majority population. Roma women are more often exposed to domestic violence, which impacts overall mental health. In some European countries, there is an improvement in women's health due to fewer births, but significant problems related to obesity or malnutrition, depression, metabolic disorders and other health problems still remain.

Healthy and unhealthy habits have a large impact on health. Healthy diet and physical activity are less common among the Roma. In addition, nicotine, alcohol and drug addiction are a significant risk factor for health in Roma communities, although data from different European countries are not entirely identical.

The problem of access to healthcare services for RNM members is not equally present in various European countries since it largely depends on the degree of marginalization or integration of the Roma population. In most European countries, there are numerous barriers preventing equal access to healthcare services for the Roma and majority populations, which are linked to various factors of social exclusion. The most common problems include language and literacy, insufficient knowledge of health systems, discrimination by healthcare professionals, lack of trust in healthcare professionals, distance from healthcare facilities, unresolved status issues and lack of health insurance, more frequent use of hospital services due to acute health problems and lower participation in preventive health care programs. It should also be reiterated that the RNM is extremely vulnerable and that the impact of the economic crisis on the Roma is therefore less favorable than on the majority population.

¹⁰ European Commission [2014] Report on the health status of the Roma population in the EU and the monitoring of data collection in the area of Roma health in the Member States.

Research shows that Roma in Croatia face similar problems as in other European countries. A problem that carries particular weight and has serious implications is the insufficient coverage of RNM members with health insurance. This problem is therefore recognized in the NRIS as one of the key problems in health care. The reasons for not having health insurance vary. These include unresolved status issues, completion or termination of education, termination of permanent employment, untimely registration with the Health Insurance Fund, insufficient information, and incomplete knowledge of the system.¹¹

A recent empirical study of Roma inclusion in Croatian society, which is based on an analysis of baseline data for monitoring the success of national, regional and local interventions,¹² points to positive trends considering that approximately 93% of respondents have valid health insurance and approximately 63% of Roma undergo medical examinations several times a month or year. The relatively high percentage of Roma [43%] who have used emergency services in the last 4 years or more has not been investigated in more detail in this study. Data from the literature suggests that the reasons for this may lie in the fact that this service does not require health insurance, but may also be related to the cultural understanding of health and disease, according to which the disease is treated only when it is in the acute phase and an urgent intervention is required.¹³

However, the results of this survey also point to the fact that 11% of Roma do not undergo medical examinations at all, and as many as 28% of the Roma surveyed stated that they did not seek medical help despite the need, mainly for financial reasons, long waiting lists, lack of health insurance, waiting for a health problem to resolve itself, and problems with transportation to a healthcare facility. The same survey also found that more than 50% of Roma households found themselves unable to pay for a medicine or medical service required by a family member. However, the majority of Roma are still satisfied with their health, and the most common health problems are spinal problems, chronic back and neck problems, hypertension and cardiovascular problems. Some Roma households do not have the basic prerequisites for hygiene because they do not have a connection to the water supply and sewerage systems, do not have a bathroom built or have a problem with damp and deterioration of the dwelling in which they live. It is important to emphasize that the vaccination coverage of children up to 7 years of age is generally satisfactory, at 95.5%. Consumption of addictive substances is widespread among the RNM, with gender differences. There are worrying trends in women's health, especially with regard to the low frequency of gynecological examinations, the high frequency of teenage pregnancies and the number of miscarriages and induced abortions.

11 National Roma Inclusion Strategy from 2013 to 2020 [p. 56] Op. cit.

12 Kunac et al. 2018 Op. cit.

13 Sutherland, A. [2002] Cross cultural medicine: A decade later. The Roma [Gypsies] and healthcare in the U. S. The Patrin Web Journal, 1–10. Retrieved 12 March 2003, from <http://www.geocities.com/Paris/5121/healthus.htm>; Honer D, Hoppie P. [2004] The enigma of the Gypsy patient. *RN* 67[8]:33–37.

1.2. Strategic documents related to health care and social welfare of RNM members

The first document of the Government of the Republic of Croatia that systematically dealt with the problems of the RNM, and specifically health, was the 2003 *National Roma Program*. In 2005, together with several other European countries, the Government of the Republic of Croatia participated in the establishment of the Decade of Roma Inclusion 2005–2015 and drafted the national Action Plan for Roma Inclusion 2005–2015. With this Action Plan, the Government of the Republic of Croatia set important goals in the areas of education, health, employment and housing, which were to be achieved by 2015.

Given that the achieved goals were not consistent in all areas and that adequate indicators and tools for monitoring progress needed to be developed, the Government of the Republic of Croatia developed the *National Roma Inclusion Strategy from 2013 to 2020* [NRIS], and, after its adoption, the previous documents ceased to be valid. This strategic national document for Roma inclusion is based on the provisions of international documents on human rights and the rights of national minorities and the *European Union Framework for National Roma Integration Strategies up to 2020* and the *2003 National Roma Program*. The strategy covers eight areas: education, employment, health care, social welfare, housing and environmental protection, inclusion in social and cultural life, status solutions, anti-discrimination and assistance in exercising RNM rights, and establishing and organizing a more comprehensive data collection system from all strategic areas, which is specific in comparison to other relevant national strategies in the EU.

The goal of the NRIS is to improve the position of the RNM in the Republic of Croatia. In the field of health, the goal is to improve health as well as the quality and accessibility of health care.

In the field of health, the NRIS proclaims seven objectives:

1. to increase the health insurance coverage of the Roma population
2. to increase the accessibility health-care services with emphasis on particularly vulnerable groups
3. to raise the level of awareness of responsibility for one's own health
4. to improve protection of women's reproductive health, the health of pregnant women and children, and to reduce the pregnancy rate among minors
5. to increase sensibility of healthcare professionals for work with the Roma population and improve the Roma population's communication with family practitioners
6. to reduce the instance of disease caused by poor sanitary standards and diseases for which there are vaccinations
7. to reduce the widespread consumption of all addictive substances, with emphasis on children and adolescents, and to raise awareness of the harm caused by such addictive substances.

Given the strategic determination to improve the collection of statistical data and to monitor the success of the implementation of the Strategy, it is important to stress the need for systematic collection of RNM data by age, gender and region in order to explain regional differences in more detail and ensure equal access to healthcare and social services. Therefore, the Strategy emphasizes the need to map vulnerable micro-regions and settlements, conduct ethnically disaggregated data collection and collect data on the implementation of measures and activities related to RNM inclusion at all levels, including indicators of public and executive bodies and civil society.

In order to implement the Strategy, the *Action Plan for Roma Inclusion* [AP] for the period from 2013 to 2015 was adopted. Following the external evaluation of the National Strategy and the Action Plan for the period from 2013 to 2015, the development of the *Action Plan for the Implementation of the National Roma Inclusion Strategy from 2013 to 2020* was launched.

The current AP defines three specific goals in the field of health care: 1) to raise the level of the Roma population's awareness of responsibility for their own health 2) to reduce the incidence of disease caused by poor sanitary standards and diseases for which there are vaccinations, and 3) to reduce the widespread consumption of all addictive substances among RNM members, with emphasis on children and adolescents, and to raise awareness of the harm caused by such addictive substances. Two measures have been developed: 1) improving the monitoring of the health status and social determinants of the health of RNM members and 2) improving preventive measures in order to reduce the prevalence of consumption of all addictive substances among RNM members.

In the field of social welfare, three specific goals have been defined: 1) to raise the quality, accessibility and timeliness of social services and services in the community with special emphasis on women, children, youth, the elderly and persons with disabilities; 2) to raise the quality of life of Roma families with special emphasis and the well-being of children and adolescents; and 3) to enhance the capacity of local Roma communities to recognize the risks of exposure to human trafficking, sexual exploitation and other forms of violence with emphasis on women and children. In the field of social welfare, two measures have been developed: 1) training of professional staff of social welfare centers in order to adopt new knowledge and skills that will contribute to better work efficiency and 2) improving the quality of life of RNM members.

1.3. Social and cultural determinants of the health of RNM members

Research in Croatia and in Europe shows that the health of RNM members is threatened in many ways. This is a very complex and multifaceted problem affecting multiple levels and making the improvement of the health of RNM members that more difficult. Social marginalization, discrimination and social exclusion of the Roma are profound and fundamental factors that, like distant causes, increase the likelihood of immediate health risks.

It may therefore prove to be an inappropriate strategy to consider only some aspects of the existing problem, especially those that are not true root causes. It is unlikely that this strategy will produce optimal effects or provide a platform for long-term solutions to health problems among the RNM. Research has found that health is largely¹⁴ influenced by social and economic factors, as well as physical environment and habits, and should be considered as one of the consequences of social exclusion and unfavorable socioeconomic position of RNM members, even if direct causes are of a different nature. We will list the related but separate factors that have a large and recognized role in creating conditions that result in poorer health of the Roma community by making the onset of the disease more likely while reducing the quality of life.

1.3.1. Discrimination

Due to cultural and religious differences, as well as the specific lifestyle, there are prejudices and negative stereotypes about the Roma in society, exposing members of that community to discrimination and segregation, which further deepens health inequality in relation to the majority population. Discriminatory practices have been observed among healthcare and social workers, affecting the exercise of guaranteed rights and thus limiting the accessibility of healthcare and social welfare services, which indirectly endangers health.

1.3.2. Poverty

The weak economic position and poverty are probably the biggest obstacles to achieving progress in the health status of RNM members. Poverty has a direct impact on health due to the generally poorer living conditions to which people with limited financial resources are exposed. People with scarce resources are more likely to be more exposed to the harmful environment, live in unhygienic conditions, have poorer diet and do jobs with negative health effects throughout their lives.¹⁵ Research published in 2018 provides evidence of the extremely unfavorable living conditions of a significant part of the Roma population in Croatia.¹⁶ Almost half of the sample examined at that time had no running

¹⁴ Kunac et al. 2018. Op. cit.

¹⁵ Marmot, M. [2017] Social justice, epidemiology and health inequalities. *European Journal of Epidemiology*, 32(7), 537–546. <https://doi.org/10.1007/s10654-017-0286-3>

¹⁶ Kunac, S., Klasnić, K. and Lalić, S. [2018] *Roma Inclusion in the Croatian Society: A Baseline Data Study*. Zagreb: Center for Peace Studies.

water in their apartments, nor did they have a bathroom with a shower or bathtub. More than half did not have a toilet in the housing, and almost three quarters lived without a sewage system. Basic appliances and aids such as refrigerators and washing machines, and especially less essential ones such as computers, in the Roma households lag far behind the Croatian average.¹⁷ However, poverty also has an indirect effect because persons of lower financial status are more exposed to stressful events and situations,¹⁸ which in turn have a detrimental effect on health through biological mechanisms.

1.3.3. Scarce education

Poorer education, which on average characterizes RNM members, is also a factor that increases the likelihood of disease occurrence and statistically contributes to shortening of life expectancy. Persons with a lower level of education do not have sufficient knowledge about the causes, methods of prevention and protection against disease, as well as effective methods of treatment. Recently, the term *health literacy* has been increasingly used, which includes not only knowledge but also attitudes, motivation, behavioral intentions and personal skills.¹⁹ A critical level of education coupled with basic health literacy is a protective factor that helps maintain healthy habits and reject the harmful ones, facilitates prevention and contributes to appropriate procedures once the disease has occurred. Considering their scarce education, the Roma community is particularly exposed to all harmful influences and less equipped with appropriate mechanisms for dealing with health problems. In addition, education is probably a key determinant that dramatically shapes the later life course of an individual by indirectly affecting their health. Research has shown that persons with poor education, such as those without a secondary school diploma, find it more difficult to find a job, are more existentially endangered²⁰ and more often resort to crime.²¹ Research conducted in Croatia also established a firm link between early dropout from school and all indicators that can be subsumed under the umbrella of social exclusion, such as quality of employment, housing conditions and socioeconomic status, and it has been shown that such persons lag far behind in quality of life and subjective well-being.²²

17 Ibid.

18 Thoits, P. A. [2010] Stress and Health: Major Findings and Policy Implications. *Journal of Health and Social Behavior*, 51[1_suppl], S41-S53. <https://doi.org/10.1177/0022146510383499>

19 Nutbeam, D. [2000] Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, 15[3], 259-267. <https://doi.org/10.1093/heapro/15.3.259>

20 Bridgeland, J. M., Dilulio, J. J. and Burke Morison, K. [2006] *The silent epidemic: Perspectives of high school dropouts*. Washington, DC: Civic Enterprises.

21 Harlow, C. W. [2003] *Education and correctional populations, Bureau of justice statistical special report*. Washington, DC: US Department of Justice.

22 Milas, G., Ferić, I. and Šakić, V. [2010] Osuđeni na socijalnu isključenost? Životni uvjeti i kvaliteta življenja mladih bez završene srednje škole. Društvena Istraživanja, 19, 669-689 [Destined to Social Exclusion? Conditions and Quality of Life of High School Dropouts] *Social Research*, 19, 669-689

1.3.4. Social exclusion

Social exclusion is a comprehensive construct that is recently increasingly replacing the term poverty due to its multidimensional nature and because it draws attention from financial to social resources. Social exclusion is therefore a broader construct that goes far beyond material deprivation and encompasses the whole process of marginalization of individuals and groups in society. This deprives them not only of the goods and living standards available to the majority but also of beneficial life prospects and opportunities. The Commission on Social Determinants of Health of the World Health Organization recognizes **social exclusion** as the leading cause of health inequalities in migrant and minority communities.²³

There are many ways and mechanisms through which social exclusion can affect the health of RNM members. Some of them are indirect and act through the above-mentioned causes. For example, social marginalization and social exclusion reduce the chances of an RNM member to obtain appropriate education, employment or adequate housing or socioeconomic conditions, all of which undermine the prospects for long-term health. However, social exclusion can also directly affect health. Such an impact is reflected in poorer accessibility of healthcare services at the time of need. The Roma community is often isolated and insufficiently included in the wider community, which results in deprivation of all declaratively available rights and services.

1.3.5. Domestic violence

An unfavorable family environment also has a negative impact on health. Although there is no clear evidence that domestic violence is more prevalent among RNM members compared to the general population,²⁴ there is a concern that this is just a false impression due to the reluctance of RNM women to report violence. For example, Roma activist Ramiza Memedi believes that violence against women, especially domestic violence, is deeply rooted and widespread in the RNM community, which traditionally lives in a patriarchal society. Women are expected to keep silent about violence and take some of the blame for it, and the reasons for non-reporting are fear of a violent partner, financial dependence and the feeling of shame.²⁵ There is strong empirical evidence that domestic violence has extremely negative consequences for mental and physical health.²⁶ Therefore, one of the tasks of this study is to examine possible negative effects of domestic violence on mental and physical health of Roma women. The problem of child abuse and neglect

23 WHO Regional Office for Europe [2008] The Tallinn Charter "Health Systems for Health and Wealth" Copenhagen, WHO Regional Office for Europe. http://www.euro.who.int/_data/assets/pdf_file/0008/88613/E91438.pdf

24 Racz, A. and Kajtazi, V. [2019] Stavovi pripadnika romske populacije na području Bjelovarsko-bilogorske županije o obiteljskom nasilju. Attitudes of the Roma Population in the Bjelovar-Bilogora County on Domestic Violence. *Journal of Applied Health Sciences*, 5(1), 61–70. <https://doi.org/10.24141/1/5/1/5>

25 Downloaded from: <http://romni.net/2019/12/03/nasilje-nad-zenama/> [Retrieved 30 March 2020]

26 Ellsberg, M., Jansen, H. A., Heise, L., Watts, C. H. and García-Moreno, C. [2008] Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence [An observational study] *Lancet*, 371, 1165–1172.

could also be more pronounced in the RNM community due to patriarchal customs and more frequent alcohol consumption, although there is no strong empirical evidence that it is more common than in the general population. Children exposed to such unfavorable conditions suffer long-term negative health consequences, i.e. they are more likely to have problems related to mental and physical health.²⁷ Some of the commonly used solutions, such as removal from the family, are not without problems or negative consequences,²⁸ and this study aims to offer the empirical basis for some future solutions.

1.3.6. Culture and attitudes towards health and disease

Studying the health of the RNM requires consideration of their culture. Anthropological discourse, especially in medical and anthropological literature, emphasizes the importance of a biocultural perspective for understanding health, which is based on the interaction of social, environmental and biological factors within populations and communities.²⁹ In addition to biological and socioeconomic factors, culture and customs significantly determine the health of individuals and communities. In the case of the RNM, which is an example of both an ethnic and cultural group, it is important to understand cultural attitudes and behavioral patterns that influence health care and responses to disease onset.

For the purposes of this study, we will observe culture as a whole, which includes knowledge learned and acquired throughout life and shared by members of a particular community. A culture is therefore seen as a pool of learned information stored in the memory and material heritage of members of the culture,³⁰ as a set of rules and principles that determine, motivate and manage behavior in the community,³¹ or as knowledge that an individual must acquire to function successfully within the community.³² A culture also includes symbolic meanings, beliefs, rituals, art forms, ceremonies, and a range of informal cultural practices, such as speech patterns, gossip, rumor, and various rituals that constitute everyday life.³³

In the case of the RNM, numerous examples of cultural knowledge about health and disease have been described in the literature.³⁴ Although it should be kept in mind that the RNM is an example of a highly heterogeneous European minority composed of many

27 Herrenkohl, T. I., Hong, S., Klika, J. B., Herrenkohl, R. C. and Russo, M. J. [2013] Developmental Impacts of Child Abuse and Neglect Related to Adult Mental Health, Substance Use, and Physical Health. *Journal of Family Violence*, 28(2), 191-199. <https://doi.org/10.1007/s10896-012-9474-9>

28 Ajduković, M. and Franz, B. S. [2005] Behavioural and emotional problems of children by type of out-of-home care in Croatia. *International Journal of Social Welfare*, 14 [3], 163-175. <https://doi.org/10.1111/j.1468-2397.2005.00356.x>

29 Willey, A. S. and Allan, J. S. [2009] *Medical Anthropology. A Biocultural Approach*. Oxford: Oxford University Press.

30 D'Andrade, R. G. [1987] Modal Responses and Cultural Expertise. *American Behavioral Scientist*, 31: 194-202.

31 Goodenough, W. H. [1996] Culture. in: D. Levinson and M. Ember [ed.] *Encyclopedia of Cultural Anthropology*, 291-299. New York: Henry Holt.

32 Keesing, R. M. [1974] Theories in Culture. *Annual Review of Anthropology* 3:73-97.

33 Swidler A. [1986] Culture in Action: Symbols and Strategies. *American Sociological Review*, 51 [2]: 273-286.

34 Lehti A. and Mattson, B. [2006] Handbook for action in the area of health services with the Roma community. *Family practice* 18 [4]: 445-448.

groups with different traditions,³⁵ it is possible to identify widespread cultural factors that connect diverse communities that share the Roma identity and common origin, and influence to a greater or lesser extent the attitudes and behavioral patterns of RNM members both in everyday life and in relation to health and disease. When considering the correlation between culture and health among the RNM, it should be borne in mind that each individual, as is the case in majority communities, has a different individual experience of health and disease, trust in the traditional or modern healthcare system and knowledge of the body or causes of disease.³⁶

Different Roma communities across Europe and the world are united by *romipen* or “Romahood”, which signifies a common identity and culture based on Roma traditional law, which implies a system of values and rules of conduct within the community.³⁷ The family is the greatest cultural value, and the extended family often lives together respecting the principles of patriarchal organization with a strictly defined hierarchy according to age and gender.³⁸ Another important set of rules that is widespread among many Roma groups concerns the avoidance of all forms of physical and symbolic impurity.³⁹ The Roma Code of Purity determines the relationship between the Roma and non-Roma population and the relationship between Roma women and men. Taboos related to impurity can refer to persons, things, body parts, food, conversation topics and especially to the impurity of sexually active women. For example, the genitals and lower body parts, body secretions, menstruation and childbirth are considered impure. In the traditional notion of cleanliness, healthcare workers can be considered unclean, as well as hospitals as potential sources of infection and disease, which may be one of the reasons why Roma avoid medical examinations unless they are urgent.⁴⁰ The traditional notion of cleanliness may be one of the reasons why women may be reluctant to talk about bodily functions, sexuality and reproductive health in the presence of an elderly female RNM member or a male healthcare professional,⁴¹ but also a reason why women often give birth outside home, i.e. in hospitals.⁴² The traditional concept of cleanliness also implies separation of the lower and upper body in daily life and the need to wash hands after touching the lower body, which can be important to gain trust and understanding between the patients and doctors or other medical staff during gynecological examinations and procedures.⁴³

35 Martinović Klarić, I. [2009] *Kromosom Y i potraga za novom domovinom* [Y chromosome and Search for the New Homeland]. Zagreb: Sveučilišna knjižara.

36 Sutherland, A. [2002] Cross cultural medicine: A decade later. The Roma [Gypsies] and healthcare in the U. S. *The Patrin Web Journal*, 1–10. Retrieved March 12, 2003, from <http://www.geocities.com/Paris/5121/healthus.htm>

37 Fraser A. [1992] *The Gypsies*. Oxford: Blackwell Publishers based on Martinović Klarić I. [2009] Op. cit.

38 Lehti, A. and Mattison, B. [2006] Op. cit.; Sutherland, A. [2002] Op. cit.

39 Fraser, A. [1992] Op. cit.

40 Honer, D. and Hoppie, P. [2004] The enigma of the Gypsy patient. *RN* 67(8): 33–37; Sutherland, A. [2002] Op. cit.

41 Vivian, C. and Dundes, L. [2004] The crossroads of culture and health among the Roma [Gypsies]. *J Nurs Scholarsh*, 36 (1): 86–91.

42 Sutherland, A. [2002] Op. cit.

43 Lehti, A. and Mattison, B. [2006] Op. cit.; Sutherland, A. [2002] Op. cit.

Among the Roma, disease is a phenomenon that has a broader social significance. In the case of a more serious disease, a wider circle of relatives gathers around the sick person, which is not only culturally desirable behavior and custom, but also a sincere expression of care for the sick person and their immediate family.⁴⁴ Gathering of extended family in the event of a serious disease has great cultural value in the Roma community, and older members of the community take responsibility for the younger ones in seeking adequate health care and appropriate treatment and therapeutic procedures.

It is not uncommon for the Roma to equate health and happiness, so that healthy people are also considered happy, as opposed to those who fall ill because happiness has left them. Furthermore, health and happiness are associated with body weight, so a person of higher body weight is considered happier and healthier because body weight indicates both happiness and material wealth.⁴⁵ Diseases vary according to the cause that occurs within or outside the community, and the treatment of the disease is approached differently, traditionally or with the help of modern medical science, depending on the cause. There is aversion and fear of the hospital as a place that is hostile to the Roma, unclean, isolated from the community and culture, with limited opportunities for visits by family members. The Roma are afraid of surgery and anesthesia, which they consider “small deaths”.⁴⁶ Almost as a rule, the Roma perceive health as the absence of disease, while disease is regarded as a state of disability associated with pain and inability to function in everyday life. Disease is directly associated with death, and death is the greatest family crisis with prescribed rituals of mourning of the deceased.

Culturally specific as well as pragmatic reasons and the experiences of individuals and communities have a number of practical consequences related to the way the Roma seek and receive health services. The handbook for action in the area of health services with the Roma community prepared by the Spanish Ministry of Health and the Fundación Secretariado Gitano⁴⁷ lists the cultural specificities of the Roma minority that may have direct consequences on their health, which a culturally competent health care system should take into account. In most Roma communities, health is considered only in the case of very dramatic symptoms of disease leading to disability. This is one of the major reasons why it is difficult to promote the concept of disease prevention among the Roma. If there is a diagnosis of a particular disease, but there are no symptoms or signs of disability, the disease is usually ignored. Furthermore, if an individual or family recognizes sickness, they consider it necessary to take urgent action due to the direct link between illness and death. That can lead to inadequate use of healthcare services, such as overuse of emergency services or their more frequent use compared to members of majority populations.

44 Sutherland, A. [2002] Op. cit.

45 Ibid.

46 Ibid.

47 *Handbook for action in the area of health services with the Roma community* [2006] Madrid: Ministry of Health and Consumer Affairs, Fundación Secretariado Gitano.

The role of the doctor is often perceived ambivalently. The doctor has the necessary knowledge to enable the treatment of the disease, but the doctor is also the one who diagnoses the disease and brings bad news [e.g. the diagnosis of malignant diseases]. Therefore, going to the doctor is delayed or avoided for fear that a disease will be detected or diagnosed. If the symptoms of the disease disappear due to the prescribed therapy, all other medical recommendations are usually ignored because, in the cultural model of Roma health, the disease is considered to have disappeared. In most Roma communities, women are considered responsible for family health care, and the occurrence of the disease is considered a problem of the extended family, which is actively involved in the process of diagnosis and treatment. However, it is common for older women [e.g. mothers-in-law] or men to make health-related decisions.

1.4. Healthy and unhealthy habits

Many of the social and cultural factors listed above can have a direct impact on health. For example, persons exposed to extreme poverty are not able to provide adequate housing for themselves and their families, so they are at greater risk of poor health and disease due to poor hygiene, toxic substances, atmospheric conditions or accidents due to installation failures. In most cases, however, social factors act indirectly through healthy and unhealthy habits. We have previously mentioned education and health literacy as determinants of health-oriented behaviors. Poorly educated individuals are likely to adhere to traditional cultural beliefs and pay less attention to disease prevention, while those more educated will tend to stick to medical knowledge and medical recommendations related to disease prevention, diagnosis, and treatment. Thus, in addition to biological factors, health mostly depends on healthy and unhealthy habits that can significantly affect both health and the quality and length of life. Previous research has shown that RNM members are far ahead of the general population in resorting to harmful habits such as cigarette and alcohol consumption, while lagging behind in health-promoting habits such as regular medical examinations, physical activity and a healthy diet.⁴⁸

1.5. Conceptual model of social and cultural determinants of the health of RNM members

The previous overview reveals the whole complexity and intertwining of factors that directly or indirectly affect the health of RNM members. In our model, we assumed three levels of impact on health: 1) the individual level, 2) the community level, and 3) the

48 European Commission [2014] *Roma Health Report: Health status of the Roma Population*. Data collection in the Member States of the European Union.

broader social context level. The influence of social and cultural factors is present at all levels, and the mechanisms of action are sometimes direct, but more often indirect, which can contribute to creating situations that are risky for health or increase the likelihood of unhealthy habits and harmful behaviors. Figure 1 shows the conceptual model, which we will use as a starting point in statistical analyses and when considering and analyzing the health status of the RNM.

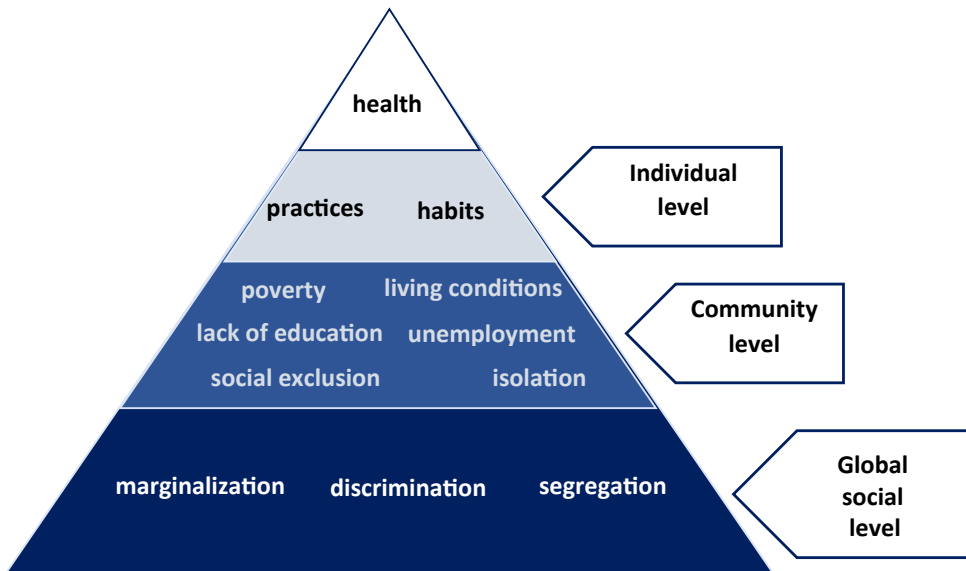


FIGURE 1. Baseline model of social and cultural determinants of the health of RNM members

1.6. Social welfare for RNM members

A very brief overview of the social determinants of health points to the numerous and deep-rooted causes of inequality and deprivation of RNM members. One of the obvious and unavoidable sources of inequality lies in poverty and destitution, which are extremely pronounced and much more present among RNM members than among members of other ethnic communities or in society as a whole. A significant number of RNM members, as previous research shows, approximately one in eleven, live in absolute poverty, i.e. they are not able to meet even the most basic needs of life.⁴⁹ It should be added that, according to the same survey, more than nine-tenths of the Roma population fall into the

⁴⁹ Bagić, D., Burić, I., Dobrotić, I., Potočnik, D. and Zrinščak, S. [2014] Romska svakodnevica u Hrvatskoj: prepreke i mogućnosti za promjene [Everyday Life of Roma in Croatia: Obstacles and Opportunities for Change]. UNDP, UNHCR and UNICEF.

category of relative poverty.⁵⁰ All other indicators also provide evidence that the Roma were and remain a population facing extreme poverty, and that the gap in relation to the general population has narrowed only slightly in recent decades.⁵¹

Recent research largely confirms what has been known for decades about the material deprivation of the RNM. The household income of the average Roma family is lower than the income of the average family from the general population. When looking at the amount per household member, the situation is even more devastating due to the large number of RNM family members. The median monthly income per RNM household member is only HRK 450.⁵² RNM members are much more likely to be at risk of poverty and will not be able to afford the costs taken as indicators of material deprivation, which are considered available to the vast majority of the general population. These include adequate heating, a substantial meal at least once every two days, settling unexpected financial expenses and other similar expenses.⁵³ As expected, material deprivation is reflected not only in current income, but also in living conditions that are often far below the standards of modern society.

RNM members typically live on the outskirts of cities or in isolated settlements, often with poor access roads and away from institutions that guarantee life in accordance with the basic human rights to a healthy life and a healthy environment. They often live in cramped and inadequate structures that in many cases are not connected to public sewerage or water supply systems, and a significant number of households do not even have an electricity supply system.⁵⁴ In addition, the housing of RNM members is often deficient and below the housing standard of the vast majority of the general population. Problems with damp in the apartment, leaking roofs and rotten window frames are very common.⁵⁵

It is obvious that, despite many efforts, poverty is still an urgent problem that requires immediate and continuous solving. The issue of poverty of RNM members was therefore highlighted as one of the key topics in the NRIS, which accordingly set strategic objectives focused on reducing poverty and raising the quality and accessibility of social services.⁵⁶

Although tackling the problem of poverty and the socioeconomic gap in relation to the general population is certainly the most prominent and visible problem, the NRIS considers Roma issues in the field of social welfare on a much broader and more comprehensive level. In addition to poverty, the NRIS recognizes family relationships, quality of life and negative phenomena affecting mainly women and children as major problems.

50 Ibid.

51 Ibid.

52 Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

53 Ibid.

54 Ibid.

55 Ibid.

56 National Roma Inclusion Strategy from 2013 to 2020 Op. cit.

The NRIS therefore indicated one goal and three objectives in the field of social welfare. The general goal is to reduce the poverty of the Roma population and improve the quality of social services. Three objectives should contribute to this.

The first objective focuses on raising the quality, accessibility and timeliness of social services. In order to achieve this objective, it is planned to strengthen the capacities of existing social welfare services for the Roma population.

The second objective is concerned with raising the quality of life of Roma families with particular emphasis on the well-being of children and youth. With this intention, the aim is to educate and empower RNM members in order to improve their parenting skills and raise the quality of life within the family, especially that of children.

The third objective is focused on recognizing and preventing the risk of negative phenomena like human trafficking, sexual exploitation and violence, especially aimed towards women and children.

The NRIS has evidently set comprehensive and ambitious goals based on the outstanding and proactive role of social welfare centers and family centers. Furthermore, the goals are clearly operationalized, as is the way in which they are monitored, providing the possibility of evaluation.

However, it is quite understandable that the strategic objectives are intertwined and that it is difficult to separate social welfare from all other aspects of Roma exclusion and deprivation. This deprivation and exclusion, as we have reiterated numerous times, is chronic, deeply rooted, and pervasive to the extent that individual measures and targeting isolated areas are unlikely to bring about real change.

It is clear that addressing the accumulated problems in the area of social exclusion of the RNM requires coordinated active policy measures aimed at reducing indirect discrimination and discriminatory practices of institutions, which often disappear off the radar. As previous research shows, health and health problems are largely caused by fundamental inequalities in socioeconomic status, living conditions and education.

2

Objectives and methodology



2. Objectives and methodology

2.1. Research objectives

The purpose of this study is to expand the factual basis necessary for the preparation of a new national strategy for the inclusion of Roma in Croatian society in the field of health and social welfare. The main objective of the study is to evaluate the achievement of the goals set in the NRIS and to offer recommendations based on the collected data to improve the implementation of the set tasks.

Secondary objectives are:

1. to provide the basic descriptors related to health, health care and social welfare of RNM members with respect to potentially relevant variables, mainly region, type of settlement and sociodemographic characteristics, along with healthy habits and behaviors
2. to compare the relevant indicators describing RNM members with those obtained in previous surveys or other populations [primarily the general population, preferably also RNM members in other European countries]
3. to analyze the relationship between relevant indicators in the field of health, health care and social welfare in order to identify the mechanisms of mutual influence and create a model of influences
4. on the basis of recorded data and models of influences, formulate recommendations that will facilitate and accelerate the achievement of the goals set by the NRIS in the future.

Interpretations of the findings include a comparative approach and show regional differences among RNM members in Croatia, differences between RNM members and the majority population, and, where possible, a comparative presentation of data on Roma in Croatia and data on Roma from other EU countries.

2.2. Data sources

The data presented in this study were collected as part of the project titled *Collection and Monitoring of Baseline Data for the Effective Implementation of the National Roma Inclusion Strategy* carried out by Ecorys Hrvatska d.o.o. and the Center for Peace Studies for the Office for Human Rights and the Rights of National Minorities as beneficiaries in 2017 and 2018. As part of this project, comprehensive empirical research was conducted in 2017, aiming to define the baseline values for measuring the effects of the *National Roma Inclusion Strategy from 2013 to 2020* [NRIS] and the *NRIS Action Plan* [AP] at the national, regional and local levels, as well as to define the needs of Roma communities and obstacles to the inclusion of the Roma national minority at the local/regional and national levels. Part of the results of this research related to key baseline data was published in the book *Roma Inclusion in the Croatian Society: A Baseline Data Study*.⁵⁷

Given the importance of creating and expanding the factual basis for the development of an effective strategic framework for the inclusion of RNM members in Croatian society and a thorough analysis of the situation, as well as needs related to health care and social welfare of RNM members, this book will present the results of the new analyses of the data collected in 2017.

2.2.1. Data collection methods

This empirical research from 2017 was conducted using the so-called mixed methodology and it included three main research sections: 1) Mapping of Roma communities in the Republic of Croatia, 2) Interviews and focus groups with representatives of the Roma national minority, key persons in Roma communities and representatives of relevant institutions at the level of local self-government units, and 3) Surveys of the Roma population on a representative sample of Roma households. This publication analyzes relevant data regarding health, health care and social welfare from all three research sections.

A detailed description of the research methodology and each research section was published in the original publication,⁵⁸ while this provides a brief description of the implementation of individual sections, which is crucial for understanding the data presented in this book.

1) Mapping of Roma communities

The mapping of Roma communities was carried out with the primary goal of determining the Roma population as a prerequisite for quantitative sampling of the Roma population, but also to collect data on the specifics of individual localities inhabited by members of the RNM. The mapping of Roma communities was conducted during May and June 2017

⁵⁷ Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

⁵⁸ Ibid.

using the methods of structured interviews and observations at a total of 134 localities in 15 counties of the Republic of Croatia. Informants (persons who provided information about localities) were members of the RNM, i.e. persons who live in these localities and are well informed about them, so they were selected to provide educated mappers with the necessary information according to questions in templates for population and community description. Three structured interviews were planned per each locality, i.e. an interview with three informants where at least one of them was supposed to be female. A total of 371 structured interviews were conducted (with 196 men and 175 women), so there were on average 2.8 informants per locality.

2) Qualitative methodology – interview and focus group methods

The second research section was related to the application of qualitative methodology. Semi-structured expert interviews were conducted with representatives of relevant institutions at the level of local self-government units (141 in total) and semi-structured in-depth interviews with representatives of the Roma national minority and key persons in Roma communities (67 in total). In addition, seven focus groups were conducted with representatives of relevant institutions at the county level (a total of 73 people participated).

In interviews and focus groups, questions were asked about education, employment, health care, social welfare, children, space, housing and environmental protection, social and cultural life, status and rights, institutional environment, and needs and priorities for change.

3) Quantitative methodology – survey method

The third and key research unit referred to quantitative research using the survey method (face-to-face technique) with members of the RNM in 12 counties of the Republic of Croatia. The survey was conducted during October and November 2017 at a total of 109 localities inhabited by members of the RNM. 1550 Roma households were included, collecting data on 4758 members of these households. Data on 38% of all Roma households registered in the mapping process were collected and on 21% of the total estimated Roma population in these counties.

The survey questionnaire contained questions about infrastructural, environmental and housing living conditions in Roma settlements, various economic and social characteristics of Roma households, various sociodemographic, socioeconomic and sociocultural characteristics of all household members, about the personal employment status, education, health and housing, on integration, discrimination, awareness of rights and citizenship issues, and questions on personal experiences and attitudes related to various areas of the National Roma Inclusion Strategy. Due to the extremely large number of topics and questions that the survey was supposed to cover, two versions of the survey questionnaire were used (the so-called A and B versions). Therefore, not all questions were posed to all respondents. As a result, in technical terms, different questions were answered by somewhat different subsamples.

The sample of Roma population in the survey was designed according to data on the survey population collected by mapping of Roma communities and it is considered representative according to the age and gender for members of the Roma national minority in 12 counties of the Republic of Croatia for localities inhabited by at least 30 RNM members.

2.3. Study methodology on health care and social welfare

2.3.1. Regional division and population size estimation

For the purpose of statistical processing and analyses, the results from the county level⁵⁹ are grouped into six regions, taking into account their geographical proximity and certain sociodemographic specifics.

Given that this publication discusses the shares of RNM members in individual regions, in Table 1 estimates of the total number of RNM members in individual regions are presented, according to data collected by mapping Roma communities.⁶⁰

TABLE 1. Regional division and population size estimation

Region	Counties	Number of localities in which mapping and the survey were conducted	Number of Roma households in which the survey was conducted	Estimation of population size, i.e. number of RNM members from mapping
Međimurje	Međimurje	14	566	6368
Northern Croatia	Koprivnica-Križevci County and Varaždin County	17	156	2460
Zagreb and its surrounding area	City of Zagreb and Zagreb County	17	214	3539
Central Croatia	Bjelovar-Bilogora County and Sisak-Moslavina County	21	194	3655
Slavonia	Osijek-Baranja County, Brod-Posavina County and Vukovar-Srijem County	25	296	4142
Istria and Primorje	Primorje-Gorski Kotar County and Istria County	15	124	2322

59 Counties of research interest were determined by applying a combination of external and [expert] internal identification of localities inhabited by a minimum of 30 Roma [for details see: Kunac, Klasnić and Lalić, 2018: 53–55]. Such an approach did not identify any locality where at least 30 Roma live in any county in the Dalmatia region.

60 This is the sum of the mean values of the estimates of individual informants in each locality.

2.3.2. Data

All data related to health, health care and social welfare issues [exhaustively listed at the very beginning of the introduction] were collected using the self-report method. This method has its advantages, such as cost-effectiveness and the absence of the need for professional staff or complex medical diagnostics, but at the same time it has a number of shortcomings that need to be taken into account when considering the collected data. The method implies that the respondent is well acquainted not only with their own health condition but also with the health problems, habits and behavior of all household members. Of course, in many cases such an expectation is unrealistic, so it is quite possible that some health problems or diseases have been left out due to the lack of information and/or knowledge. Another problem is responding in line with social desirability, which is probably why the prevalence of undesirable habits and behaviors such as poor hygiene, alcoholism, drug addiction, resorting to violence, and others is underestimated.

2.3.3. Processing and analysis of data

The first level of analysis is based on individual indicators. Most of the variables relevant to the researched issues were analyzed at the regional level according to the proposed division into six regions: **Međimurje, Northern Croatia, Zagreb and its surrounding area, Central Croatia, Slavonia, Istria and Primorje** and the type of settlement. Various sociodemographic, status, environmental and behavioral indicators such as age, education, family relationships, living conditions, socioeconomic status, values and habits were used as additional predictors, i.e. possible determinants of health. In order to determine whether the differences or correlations were statistically significant at all, we applied appropriate inferential statistical tests. To determine the size of the correlations, the corresponding effect size indicators were calculated:⁶¹

- **for nominal variables:** Pearson's chi-square test to test the significance and contingency coefficient C to calculate the effect size
- **for quantitative variables:** the corresponding parametric test (ANOVA) with the partial squared eta coefficient as the corresponding size measure.

The Pearson correlation coefficient was used to verify the relationship between quantitative variables. If there was a suspicion that the correlation was not linear, ANOVA was applied.

61 We draw attention to the fact that statistical significance and the effect size are two different indicators that should be taken into account when interpreting a statistical finding. Statistical significance indicates whether a difference or correlation is present at all at the population level, or whether we have strong enough arguments to conclude that these indicators are different from zero. Effect size is the measure of the strength of the correlation. Considering the size of the sample included in this study and its large statistical power, even very small differences [between regions, types of settlements, etc.] or correlations [with education, age, etc.] are statistically significant. However, only some of them deserve attention due to their size. For example, a correlation of 0.10 with a sufficiently large sample is statistically significant, but explains a very small proportion of variance, only 1%. Therefore, in interpreting the statistical findings, we mainly focused on those statistical indicators that are not only significant but also of substantial magnitude.

2.3.3.1. Design of multi-item indicators, scales and index

Given that individual indicators are often markedly susceptible to measurement errors, i.e. unreliable, but at the same time very specific, it is necessary to combine them into broader and more universal constructs. Wherever possible, we used synthetic indicators based on a larger number of items in the analyses to obtain more precise and reliable findings. For each such newly formed scale or indicator, we checked the factorial validity and **reliability measured by the Cronbach's alpha coefficient**. The table in the Appendix summarizes the synthetic indicators together with the constituent items and the reliability of the composites thus formed.

The second level of analysis is based on composite indicators, scales and indexes. Where it has been shown that individual indicators belong in broader and more universal constructs through factor analysis and logical linking, **correlation and regression analyses** have been used. This allowed a better estimation of the individual predictor contribution and a better insight into the viability of the initial theoretical model.

When we sought to explain the variance of a particular indicator of health, health status, or social status, we generally used hierarchical regression analyses. In them, the predictors are given successively, in blocks, according to primacy. In the first block, we would include sociodemographic variables and variables related to socioeconomic status and living conditions because we believed that they were among the primary determinants of health according to the initial model. We would then include behavioral indicators such as healthy and unhealthy habits in the analysis. Only if the analysis indicated that the variables from the second block significantly contributed to the prediction in addition to the variance of the predictors from the first block, we would present their individual contribution [beta coefficients].

Indicators such as the regularity and frequency of visits to the doctor were excluded from the second block because they were shown to be negatively related to health and would therefore point to erroneous conclusions. However, such a finding is fully in line with the introductory consideration that RNM members are extremely reluctant to undergo preventive examinations and that they visit a physician only when the disease has already occurred or progressed.

Given that a number of analyses has already been presented elsewhere,⁶² these analyses were not repeated, but, wherever appropriate, we referred to the results presented in that publication.

If necessary, in addition to the quantitative analysis, the **results of qualitative research** were used, i.e. interviews and focus groups conducted with key representatives of the Roma national minority and key non-Roma figures for the relevant issues of this study.

62 Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

3. Results



3. Results

3.1. Health and health care of RNM members

In this part of the study, we analyze the area of health status, both subjective evaluations and self-reports about the presence of diseases included in the survey. The research is based on self-reports or reports regarding other persons from the household, so we cannot talk about objective data, but rather about perceptions and personal judgments. Given that the descriptive data is presented in another publication,⁶³ here we will focus on the description in relation to some potentially relevant variables such as region, type of settlement, socioeconomic status, living conditions and others. Health assessment takes into account the demographic specificity of the Roma community, which is significantly younger than the rest of the population.⁶⁴ One of the reasons for this is the shorter life expectancy, which, according to some estimates, is up to twenty years shorter than the life expectancy of the general population.⁶⁵ Younger age and fewer elderly persons naturally have an impact on the health image of RNM members and may give the wrong impression of a better situation than it actually is. Therefore, the estimates will be considered in the context of the demographic specificity of the RNM.

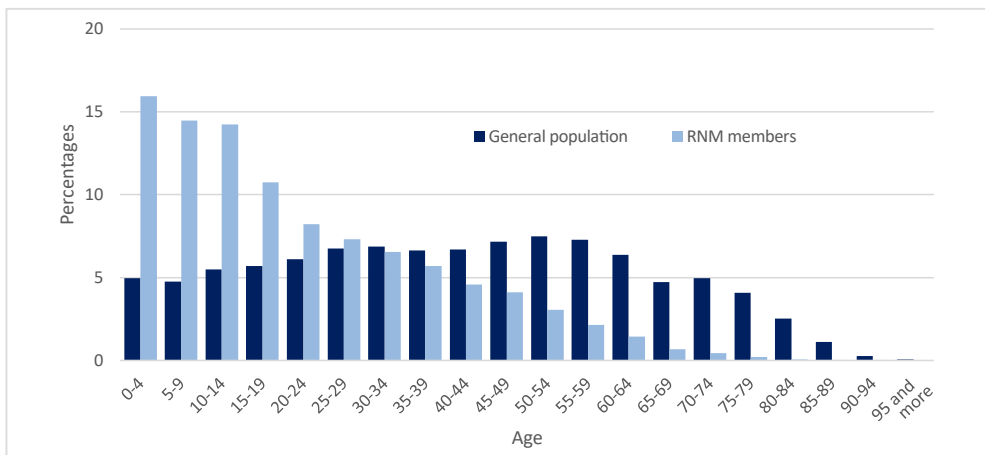


FIGURE 2. Age structure of the research sample of RNM members in relation to the general population of the Republic of Croatia⁶⁶

63 Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

64 European Commission [2014] *Roma health report: Health status of the Roma population*. Data collection in the Member States of the European Union.

65 Ibid.

66 Population census [2011] Zagreb: CBS

Research shows that the Roma population is demographically very different from the general population in Croatia and other European countries. The share of children and youth in the RNM population is disproportionately higher in contrast to the share of the elderly, which is extremely small. The life expectancy of RNM members is significantly shorter than the life expectancy of non-Roma populations, even up to twenty years.⁶⁷ All that was indicated by previous research is demonstrated by the graphical representation of the age structure of the sample, which we believe largely reflects the entire RNM population compared to the age structure of the general population. Children and young people in the RNM research sample have a much higher share compared to the general population, in contrast to the elderly, whose share is significantly lower, especially those older than 75 years, who are almost non-existent in the sample.

In the study, we regard the share of the elderly in the sample as the best available estimate of the share of the elderly in the RNM population. Although the sample is not probabilistic and such an estimate may be somewhat biased, it is nevertheless one of the few studies that provide the possibility of even a biased estimate. The share of the elderly population in the RNM community will be compared with the share from the general population and discussed in the context of life expectancy.

3.1.1. Subjective assessment of health status

Subjective health measures are gradually gaining importance following the global acceptance of the expanded definition of health by the World Health Organization, which defines health not only as the mere absence of disease and infirmity, but as complete physical, mental and social well-being. Subjective health assessment includes the overall perception of health and the biological, psychological and social dimensions of health⁶⁸ that cannot always be observed or measured through standard diagnostic procedures. Various factors influence the subjective evaluation of health – not only the psychological, socioeconomic and cultural characteristics and health behavior of the individual, but also the network of formal and informal social support and the accessibility of the healthcare system. Subjective health evaluation is positively correlated with measures of a person's subjective well-being and is often used as an indicator of health-related quality of life.⁶⁹ Subjective and objective evaluations of health status can differ significantly, and modern literature suggests the importance of collecting and combining both categories of measures. However, when considering subjective indicators of health status, it is important to keep in mind that this data primarily indicates the knowledge or awareness of health, and not necessarily the actual or objective health status.

67 European Commission [2014] *Roma Health Report: Health status of the Roma population*. Data collection in the Member States of the EU.

68 McDowell, I. [2006] *Measuring Health: A Guide to Rating Scales and Questionnaires*. New York: Oxford University Press.

69 Monden C. [2014] Subjective Health and Subjective Well-Being. In: Michalos A. C. [ed.] *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer.

In the case of national and cultural minorities, especially given the context of stigmatization, discrimination and social exclusion, when individuals conceal, ignore or exploit unknown or incomprehensible cultural concepts of health and disease to the majority population and health care workers, collecting and understanding both subjective and objective data becomes crucial for health improvement and improvement of the quality and accessibility of health care. In the analysis of subjective indicators of the health status of RNM members, special attention should be paid to cultural knowledge related to health and disease and culturally induced health behavior. It is often the case that RNM members recognize a disease only after facing an acute illness that they perceive as a disability or a long-term disease related to aging, or only if the disease requires a medical examination or hospital treatment. The perception of health status among RNM members is largely related to the accessibility of health care and the level of health competence and culture. Research on health in vulnerable groups shows that subjective health evaluation deteriorates with increasing access to healthcare services.⁷⁰ After the diagnosis of a particular disease, the population becomes more aware of previous health issues and more often reports poorer health, especially in the case of diseases that cannot be confirmed by intuition and without a medical examination [e.g. hypertension].

TABLE 2. Comparison of subjective assessments of health status by region

Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surrounding area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Significance of difference [F]	Effect size [η^2]
3.79	3.98	3.87	3.70	3.52	3.58	3.75	$p < 0.01$	0.02

Note: assessments range from 1 [“very bad”] to 5 [“very good”]

TABLE 3. Comparison of subjective assessments of health status by type of settlement

Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance of difference [F]	Effect size [η^2]
3.80	3.60	3.61	3.80	3.75	$p < 0.01$	0.01

TABLE 4. Comparison of subjective assessments of health status by age

18–24 [N=707]	25–34 [N=731]	35–44 [N=525]	45–54 [N=388]	55–64 [N=245]	65+ [N=111]	Total [N=2,707]	Significance	Effect size [r]
4.05	3.82	3.22	2.70	2.33	1.87	3.39	$p < 0.01$	-0.53

70 Mihailov, Dotcho [2012] *The health situation of Roma communities: Analysis of the data from the UNDP/World Bank/EC Regional Roma Survey 2011*. Roma Inclusion Working Papers. Bratislava: United Nations Development Programme.

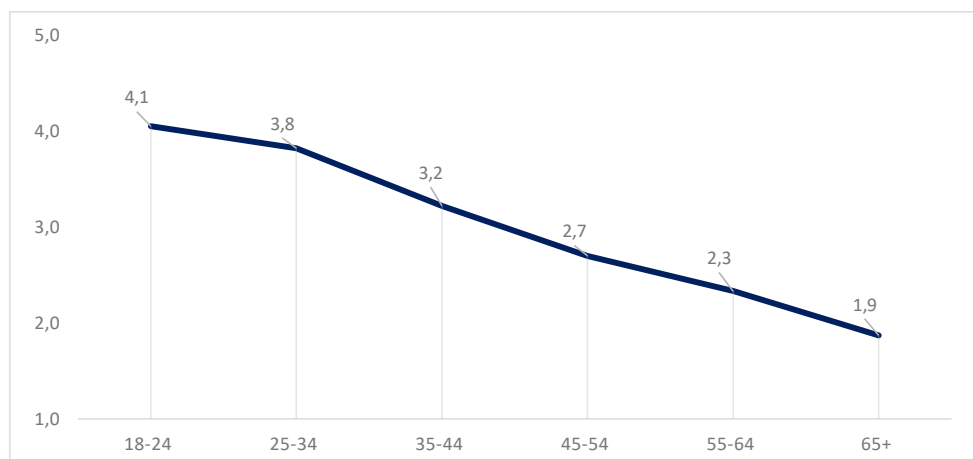
TABLE 5. Comparison of subjective assessments of health status by education

No education [N=654]	1-4 grades of primary school [N=676]	Incomplete primary school [5-7 grades] [N=756]	Completed primary school [N=934]	Completed at least secondary school [N=433]	Total [N=3,453]	Significance	Effect size [r]
3.17	3.42	3.75	3.73	3.88	3.59	p<0.01	0.19

TABLE 6. Comparison of subjective assessments of health status by adequacy of housing

Completely inadequate [N=829]	2 [N=865]	3 [N=1,000]	4 [N=914]	Satisfactory [N=1,071]	Total [N=4,679]	Significance	Effect size [r]
3.44	3.58	3.85	3.76	4.01	3.75	p<0.01	0.16

Respondents were asked to evaluate the general health status of each household member, and the responses collected in this study were analyzed by region, settlement type, age, education, and adequacy of housing. The average subjective evaluation of health status ranges around the middle point, or in school terminology, between the grade good and very good. Although it varies depending on all the predictors taken, only some of them, given the effect size, deserve to be addressed. Regions and the type of settlement have not proven to be significant determinants of the health self-assessment of RNM members. As expected, the subjective assessment of health depends mostly on age, with older persons in the Roma community much more often judging their health as poor or very poor [particularly in the 65+ age category], as opposed to younger age groups, who tend to evaluate their health as very good.

**FIGURE 3.** Evaluation of the general health condition of RNM members by age

It is also not surprising that health self-evaluation is linked to education and the adequacy of housing, which is in line with the initial assumptions of the conceptual model of social and cultural determinants of health among RNM members. Therefore, younger and more educated RNM members who live in an adequate housing estimate their health as better than older persons of lesser education.

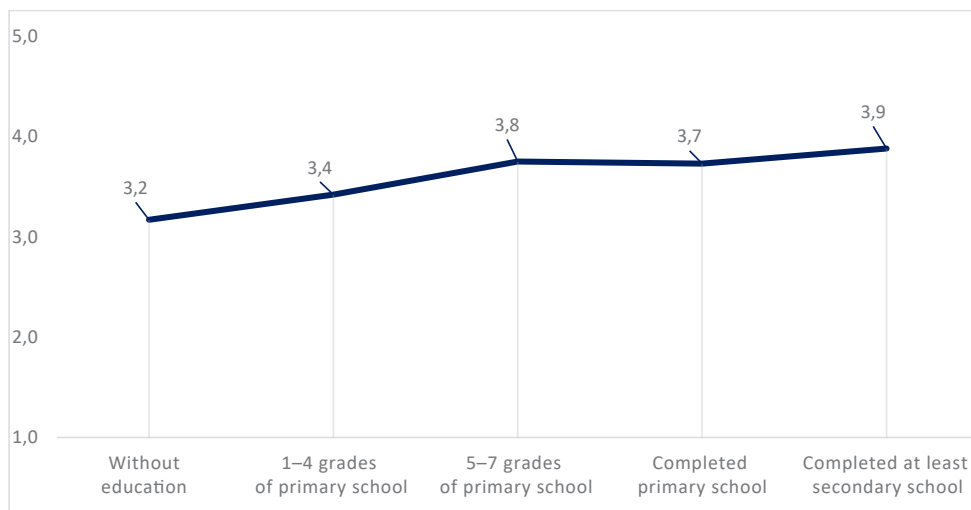


FIGURE 4. Evaluation of general health by education

Research conducted by the UNDP, the World Bank and DG Regio in Central and Eastern European countries⁷¹ indicates that a high percentage of not only Roma [84%] but also the surrounding majority population [86%] rates their health as good. It is noticeable that the subjective evaluation of health is somewhat lower among RNM members than the rest of the population, but these differences are still not significant. There are differences among the surveyed countries. For example, in non-EU countries: Albania, Bosnia and Herzegovina, Moldova, Macedonia and Serbia [except for the Czech Republic], the Roma are less satisfied with their health than the rest of the population. In new EU Member States: Bulgaria, Hungary, Romania and Slovakia, the opposite trend is observed, meaning that the rest of the population was more dissatisfied with their health than the Roma. In the case of Croatia, differences in the subjective assessments of health between RNM members and the rest of the population are almost non-existent. 88% of RNM members and 89% of the rest of the population consider their health to be good.

A comparison with the data collected in the Republic of Croatia in 2011 shows that, compared to the previous six years, the number of RNM members who describe their health as poor or very poor increased from 12.3 to 16.6%, which may be a reason for concern, but can also reflect the limited comparability of the samples.

⁷¹ Mihailov, Dotcho [2012] *The health situation of Roma communities*. Op. cit.

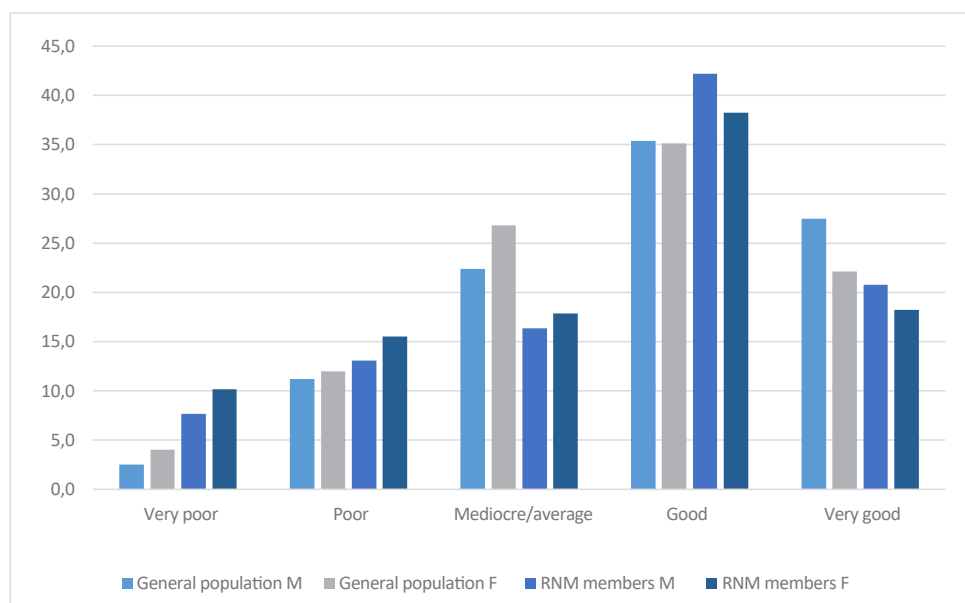


FIGURE 5. Comparison of self-reported general health status of persons aged 15 and older from the general population⁷² and RNM members

The self-reported health status of the general population does not deviate significantly from that given by RNM members. However, it should be taken into account that age is the principal factor that influences the deterioration of health. Given that, as we noted earlier, the Roma population is significantly younger, even when persons under the age of 15 are left out, the similar evaluations almost certainly conceal the poorer general health status of RNM members.

⁷² Croatian National Institute of Public Health [2016] *European Health Interview Survey in Croatia 2014–2015*. European Health Interview Survey [EHIS].

TABLE 7. Predictors of the general health assessment of RNM members

Predictors	Beta	P		R	R ²	R ² change	Significance of change
Gender	-.02	.60	First block	0.59	0.35	0.35	0.00
Age	-.54	.00	Second	0.61	0.37	0.02	0.00
Education	.07	.04					
Basic household equipment	.06	.15					
Adequacy of housing	.09	.01					
Distance from the health center	.00	.91					
Pollution	-.01	.68					
Healthy diet	.12	.00					
Unhealthy diet	.04	.34					
Alcohol consumption	.05	.16					
Smoking	.03	.43					
Drug or opiate consumption	-.05	.17					
Healthy habits	-.01	.72					

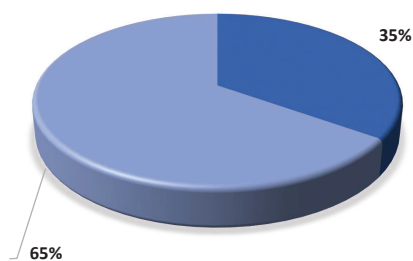


FIGURE 6. Percentage of variance of the general health status of RNM members explainable by predictors

Note: sociodemographic, socioeconomic and location predictors were entered in the first block of hierarchical regression analysis, and predictors related to healthy or unhealthy habits were entered in the second block; statistically significant predictors are indicated in bold.

Regression analysis shows that, as expected, the largest share of the variance of the subjective evaluation of general health was explained by age. Understandably, older age and the consequent progressive process of reduction in the structure and function of organs and organ systems are associated with poorer general health. In the research, we were primarily interested in how much health status is affected by factors that may be a reflection of social exclusion and marginalization. The results obtained indicate that the adequacy of housing demonstrates less impact, as does education. However, although the role of social exclusion, poverty and modest education seems to be completely insignificant, it is probably just a false impression created by the homogeneity of the Roma population regarding general deprivation and poor and inadequate living conditions. Small differences between households of RNM members in terms of the quality of housing, education and household equipment give a deceptive impression that the impact of these variables is non-existent or virtually non-existent. In addition to inappropriate conditions and education, a healthy diet also plays a role in subjective assessment.

Why do the Roma get sick: “We drink Coca-Cola like everyone else, we like spicy food and we rarely exercise.”

In their answers to the questions about health in Roma communities, RNM representatives emphasize the connection between disease and poor housing conditions, diet, lack of physical activity and poverty. It is pointed out that the level of poverty is not the same everywhere in Roma communities, including the incidence of diseases caused by poverty and malnutrition. They recognize the same reasons for disease and health problems in the Roma and majority population, and as a specificity of lifestyle in Roma communities in relation to the majority population, they point out unhealthy diet and lack of physical activity, especially among the elderly.

- *We are pretty healthy here... The biggest issue is inadequate housing. Roma have fallen ill because of inadequate housing. In the winter it was terribly cold, people would get sick and get lung cancer, they had kidney failure and so on. We cannot say that anymore. Now we have firm buildings, and it all depends, we have adapted to that level just like the majority population. Our people smoke, so do yours. You can get lung cancer if you are one of us, or one of you, equally. There are no rules on what we get ill from the most... And we eat and drink Coca-Cola just like everyone else. We all drink water. The only thing that is a little specific for us is that we prefer spicy flavor and use more meat. We do not move much. In the context of sport. The old generation is not very active. Then there is obesity, high blood pressure, diabetes and so on. People aged 40 and older. It all includes movement. The thing is, there is no rule on what we get ill from the most. In that aspect, there is poverty. Somewhere more, somewhere less. People get ill because of poverty. From malnourishment, lack of hygiene. [RNM representative, Međimurje County]*

3.1.2. Long-term diseases and limitations in performing activities

TABLE 8. Frequency and degree of limitations due to long-term diseases by region

Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surrounding area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Significance	Effect size [C; η^2]
Percentage of persons with diseases lasting longer than 6 months								
15.7	10.5	21.1	16.1	22.6	26.3	18.0	p<0.01	0.11
Degree of limitation in performing routine activities [1–4]								
3.05	3.44	3.23	3.16	3.25	2.71	3.11	p<0.01	0.03

TABLE 9. Frequency and degree of limitation due to long-term disease by type of settlement

Separate from a town or village [N=2104]	On the outskirts of a town or village [N=793]	A settlement within a town or village [N=430]	Dispersed across a town or village [N=1355]	Total [N=4682]	Significance	Effect size [C; η^2]
Percentage of persons with diseases lasting longer than 6 months						
15.0	21.6	23.2	18.8	18.0	$p < 0.01$	0.08
Degree of limitation in performing routine activities [1-4]						
3.05	3.44	3.23	3.16	3.25	$p < 0.01$	0.02

In the study, respondents also answered the question of whether household members suffered from long-term diseases [longer than six months]. Respondents who indicated that they lived in a household with someone suffering from a long-term disease also answered a question about the degree of limitation in performing routine activities due to disease in the last 6 months. The results suggest that longer-term diseases are somewhat more common in Istria and Primorje and in settlements within a town or village. However, this is probably due to the slightly older population of RNM members living there. Age is, just as in the self-evaluation of health, a key determinant of the presence of long-term diseases. The secondary factor is education, which is assumed to be a protective factor due to better health literacy and stronger motivation to adopt healthy habits and medical recommendations.

TABLE 10. Frequency and degree of limitation due to long-term diseases by age

18-24 [N=707]	25-34 [N=731]	35-44 [N=525]	45-54 [N=388]	55-64 [N=245]	65+ [N=111]	Total [N=2,707]	Significance	Effect size [r]
Percentage of persons with diseases lasting longer than 6 months								
7.7	12.5	28.0	50.0	64.3	68.2	26.7	$p < 0.01$	0.46
Degree of limitation in performing routine activities [1-4]								
2.65	3.02	3.17	3.28	3.55	3.51	3.24	$p < 0.01$	0.25

TABLE 11. Frequency and degree of limitation due to long-term diseases by education

No education [N=654]	1-4 grades of primary school [N=676]	Incomplete primary school [5-7 grades] [N=756]	Completed primary school [N=934]	Completed at least secondary school [N=433]	Total [N=3,453]	Significance	Effect size [r]
Percentage of persons with diseases lasting longer than 6 months							
32.1	27.5	16.2	18.0	18.0	22.2	$p < 0.01$	-0.13
Degree of limitation in performing routine activities [1-4]							
3.41	3.30	3.18	3.04	2.68	3.18	$p < 0.01$	-0.21

The above-mentioned survey on Roma health in a number of European countries⁷³ showed that a similar proportion of Roma [17%] and the rest of the population [18%] estimate that they have suffered from long-term diseases. The age of the respondents is correlated with the higher incidence of long-term and chronic diseases in both RNM members and the rest of the population, with the impact of age on the likelihood of long-term diseases being significantly more pronounced in Roma over 65 [70% of Roma and 56% of non-Roma over 65 suffer from long-term diseases]. Gender also plays an important role, so that women feel that they have suffered from long-term diseases significantly more than men, both among RNM members and in the rest of the population.

When we compare the results from the 2011 Roma health survey⁷⁴ with the data from the current study, we notice that the incidence of chronic diseases in the Roma population has not decreased, on the contrary [Figure 7]. In a recent study, we found a 5 to 10% higher prevalence of chronic diseases in the middle age group of 35 to 64 years. Chronic diseases are, as can be seen, much more common among the Roma compared to the non-Roma population across the entire age range. However, the differences become drastic from the age of 45 onwards, as already at that age every other RNM member suffers from chronic diseases. Such a high percentage of chronic diseases morbidity is certainly a cause for serious concern, especially when viewed in the context of the significantly shorter life expectancy of RNM members.

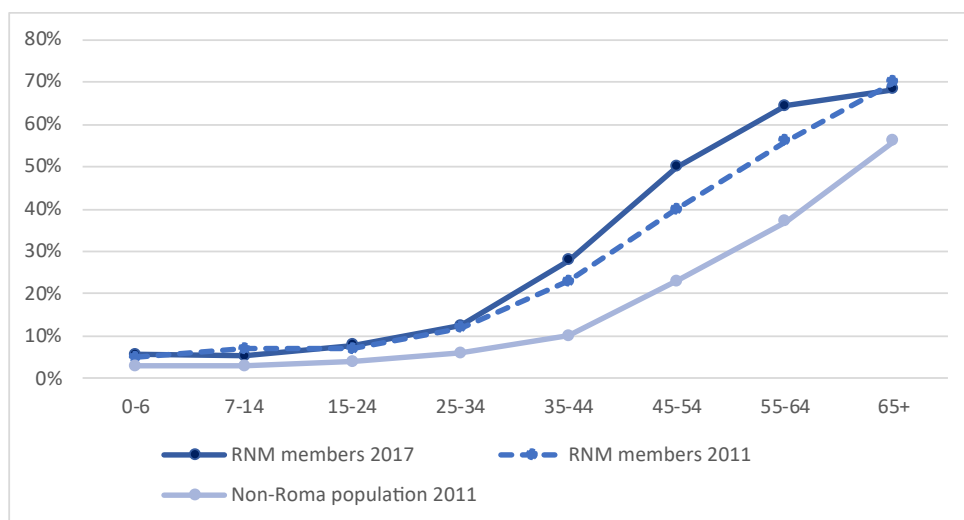


FIGURE 7. Percentage of persons suffering from a disease for more than six months by age: comparison with the general population and the situation in 2011

73 Mihailov, Dotcho [2012] *The health situation of Roma communities*. Op. cit.

74 Ibid.

3.1.3. Prevalence of childhood diseases

Among the objectives of the NRIS, care for the health of children and prevention of diseases by vaccination occupy a prominent place. The study therefore included questions regarding the prevalence of childhood diseases. A baseline data study⁷⁵ found that among children under 14 years of age, the most common diseases were the flu, chickenpox, and diarrhea lasting less than 14 days. The current research shows that some childhood diseases are more present in certain regions and types of settlements, but based on the collected data it is not possible to assess whether the observed differences are a reflection of systemic factors or statistical fluctuations that occurred by chance. When it comes to diseases outside the scope of the vaccination program, and especially those as common as the flu or diarrhea, it is not possible to conclude whether their higher occurrence is due to poor living conditions or if it is merely a coincidence. However, when it comes to diseases included in the vaccination program, it should be noted that there is a correlation between education and the probability of contracting some of them [-0.10; $p < 0.01$], as well as the adequacy of housing [-0.14; $p < 0.01$], which is probably due to lesser vaccination coverage of children from less educated and/or poor families.

TABLE 12. Comparison of percentages by region: morbidity of children from childhood diseases

	Medimurje [N=742]	Northern Croatia [N=221]	Zagreb and its surrounding area [N=173]	Central Croatia [N=151]	Slavonia [N=253]	Istria and Primorje [N=129]	Total [N=1,669]	Signifi- cance	Effect size [C]
1. Chickenpox	58.5	43.0	63.0	51.7	52.2	62.0	55.6	$p < 0.01$	0.12
2. Measles	2.2	0.0	6.9	4.6	10.3	10.1	4.4	$p < 0.01$	0.18
3. Pertussis	1.5	0.0	5.8	0.0	0.4	7.8	1.9	$p < 0.01$	0.17
4. Rubella	0.1	0.0	0.0	0.0	0.0	0.8	0.1	0.35	
5. Scarlet fever	0.3	0.0	0.6	0.7	0.8	0.8	0.4	0.72	
6. Mumps	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.12	
7. Tuberculosis [consumption, TBC]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	
8. Meningitis	0.4	0.5	0.0	0.7	0.4	1.6	0.5	0.52	
9. Erythema infectiosum [Fifth disease]	0.0	0.0	0.6	0.0	0.4	0.0	0.1	0.29	
10. Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	
11. Tetanus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	
12. Parotitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	
13. Hepatitis	0.0	0.0	0.6	0.0	2.0	0.0	0.4	$p < 0.01$	0.12
14. Flu	56.1	45.2	61.8	51.7	67.6	50.4	56.1	$p < 0.01$	0.13
15. Poliomyelitis	2.4	0.0	0.6	0.0	0.0	1.6	1.2	$p < 0.01$	0.10
16. Diarrhea lasting less than 14 days	40.7	19.5	44.5	22.7	26.9	34.1	34.1	$p < 0.01$	0.19

75 Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

TABLE 13. Comparison of percentages by type of settlement: morbidity of children from childhood diseases

	Separated from a town or village [N=868]	On the outskirts of a town or village [N=253]	A settlement within a town or village [N=138]	Dispersed across a town or village [N=410]	Total [N=1,669]	Significance	Effect size [C]
1. Chickenpox	59.1	51.0	54.3	51.5	55.6	p<0.05	0.08
2. Measles	2.3	10.7	5.8	4.6	4.4	p<0.01	0.14
3. Pertussis	1.8	0.4	3.6	2.4	1.9	0.12	
4. Rubella	0.1	0.0	0.7	0.0	0.1	0.17	
5. Scarlet fever	0.2	1.2	0.7	0.2	0.4	0.18	
6. Mumps	0.0	0.0	0.0	0.2	0.1	0.38	
7. Tuberculosis [consumption, TBC]	0.0	0.0	0.0	0.0	0.0	-	
8. Meningitis	0.2	0.8	0.0	1.0	0.5	0.22	
9. Erythema infectiosum [Fifth disease]	0.0	0.4	0.0	0.2	0.1	0.34	
10. Diphtheria	0.0	0.0	0.0	0.0	0.0	-	
11. Tetanus	0.0	0.0	0.0	0.0	0.0	-	
12. Parotitis	0.0	0.0	0.0	0.0	0.0	-	
13. Hepatitis	0.0	0.8	2.9	0.0	0.4	p<0.01	0.14
14. Flu	53.9	69.6	43.5	56.8	56.1	p<0.01	0.13
15. Poliomyelitis	2.1	0.0	0.0	0.7	1.2	p<0.05	0.08
16. Diarrhea lasting less than 14 days	38.4	21.1	37.0	32.0	34.1	p<0.01	0.13

3.1.4. Frequency of health problems and diseases during the last 12 months

One of the goals set by the NRIS in the field of health is its improvement, and objectives such as raising awareness of the responsibility for one's own health and increasing the accessibility of health services should contribute to it. Monitoring the frequency of health problems and diseases in the Roma population is an extremely important and measurable criterion for the effectiveness of the Strategy.

TABLE 14. Percentage of problems and disease occurrences over the last 12 months by region

	Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surround- ing area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C]
1. Heart or blood vessel problems	6.1	2.8	11.2	8.0	15.0	11.8	8.6	p<0.01	0.14
2. Hypertension	7.3	5.7	16.9	10.5	16.4	12.5	10.8	p<0.01	0.14
3. Asthma	3.8	3.2	7.0	2.7	6.4	5.9	4.7	p<0.01	0.07
4. Lung problems	5.8	3.0	6.4	5.7	7.7	9.8	6.3	p<0.01	0.07
5. Stroke or the effects of a stroke	0.3	0.0	1.6	0.4	2.2	2.0	0.9	p<0.01	0.09
6. Osteoarthritis [including arthritis]	0.8	0.2	1.6	0.8	2.9	0.5	1.2	p<0.01	0.08
7. Spinal problems and chronic back or neck problems	10.4	5.3	12.0	15.0	22.1	14.0	12.8	p<0.01	0.15
8. Diabetes	1.9	0.9	5.8	4.5	2.7	6.1	3.1	p<0.01	0.10
9. Hepatitis	0.1	0.0	0.6	0.0	0.1	0.2	0.1	p<0.05	0.05
10. Dysentery	0.1	0.0	0.1	0.6	0.0	0.0	0.1	p<0.05	0.05
11. Disability	3.7	1.9	3.0	2.5	3.6	5.6	3.4	p<0.05	0.05
12. Liver cirrhosis	0.4	0.2	0.0	0.4	0.6	1.2	0.4	0.06	
13. Allergy	4.2	1.5	7.8	5.1	10.7	12.0	6.3	p<0.01	0.14
14. Bladder control issues	3.8	2.1	2.8	3.9	7.2	5.4	4.2	p<0.01	0.08
15. Kidney problems	3.6	3.2	6.0	7.0	11.1	8.1	5.9	p<0.01	0.12
16. Developmental disabilities	0.7	0.8	0.3	0.4	0.1	0.5	0.5	0.39	
17. Mental disorder	2.5	4.2	3.3	2.3	6.1	4.2	3.5	p<0.01	0.07
18. Behavioral disorder	1.4	1.7	1.0	0.6	2.5	2.5	1.6	p<0.05	0.05
19. Other	4.2	1.3	1.3	5.8	6.9	5.9	4.2	p<0.01	0.10

TABLE 15. Percentage of problem and illness occurrences over the last 12 months by settlement type

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C]
1. Heart or blood vessel problems	5.58	11.93	13.16	10.08	8.63	p<0.01	0.10
2. Hypertension	7.07	12.31	16.63	13.88	10.78	p<0.01	0.11
3. Asthma	3.67	5.40	7.39	4.97	4.67	p<0.01	0.05
4. Lung problems	5.58	6.91	9.93	5.77	6.25	p<0.01	0.05
5. Stroke or the effects of a stroke	0.37	1.76	1.85	1.10	0.95	p<0.01	0.06
6. Osteoarthritis (including arthritis)	0.60	1.88	1.15	1.61	1.16	p<0.01	0.50
7. Spinal problems and chronic back or neck problems	9.39	19.60	18.71	12.42	12.82	p<0.01	0.12
8. Diabetes	1.77	2.89	4.62	4.89	3.12	p<0.01	0.08
9. Hepatitis	0.05	0.00	0.46	0.29	0.15	0.06	-
10. Dysentery	0.05	0.38	0.00	0.07	0.11	0.08	-
11. Disability	3.39	3.02	3.46	3.65	3.41	0.89	-
12. Liver cirrhosis	0.42	0.75	0.46	0.22	0.42	0.32	-
13. Allergy	4.00	7.91	13.39	6.50	6.23	p<0.01	0.11
14. Bladder control issues	3.49	6.66	6.00	3.29	4.19	p<0.01	0.07
15. Kidney problems	3.58	10.55	8.78	5.99	5.92	p<0.01	0.11
16. Developmental disabilities	0.60	0.63	0.46	0.29	0.51	0.59	-
17. Mental disorder	2.65	5.03	5.77	3.36	3.54	p<0.01	0.06
18. Behavioral disorder	1.30	2.39	2.31	1.31	1.58	0.09	-
19. Other	4.37	6.41	4.62	2.63	4.23	p<0.01	0.06

TABLE 16. Relationship between sociodemographic characteristics and the proportion of morbidity among RNM members

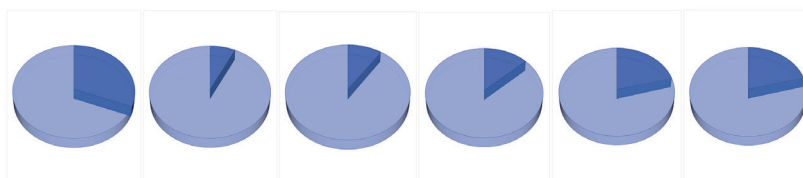
	Gender	Age	Education	Basic household equipment	Adequacy of housing
1. Heart or blood vessel problems	0.04	0.40	-0.12	0.04	-0.04
2. Hypertension	0.03	0.46	-0.09	0.10	0.01
3. Asthma	0.07	0.28	-0.10	0.01	-0.06
4. Lung problems	0.01	0.26	-0.11	-0.01	-0.06
5. Stroke or the effects of a stroke	0.01	0.18	-0.07	0.01	-0.02
6. Osteoarthritis [including arthritis]	0.05	0.17	-0.06	0.01	-0.04
7. Spinal problems and chronic back or neck problems	0.02	0.34	-0.07	0.05	-0.05
8. Diabetes	0.00	0.27	-0.04	0.07	0.02
9. Hepatitis	0.01	0.03	-0.01	0.02	0.00
10. Dysentery	0.01	0.04	-0.03	-0.03	0.00
11. Disability	-0.04	0.19	-0.06	-0.04	-0.06
12. Liver cirrhosis	0.03	0.09	-0.03	-0.02	-0.02
13. Allergy	0.06	0.07	0.02	0.05	-0.05
14. Bladder control issues	0.06	0.19	-0.08	0.00	-0.07
15. Kidney problems	0.07	0.20	-0.08	0.01	-0.07
16. Developmental disabilities	0.02	-0.01	-0.02	-0.01	-0.03
17. Mental disorder	0.04	0.17	-0.06	-0.03	-0.08
18. Behavioral disorder	0.00	0.05	-0.03	-0.02	-0.03
19. Other	0.03	0.07	-0.02	-0.03	-0.02

* Statistically significant correlations are printed in bold.

Sociodemographic characteristics are proving to be an important determinant of the disease emergence likelihood. In addition to age, which is an important predictor in the occurrence of almost all diseases included in the study, a relevant element is education, which, as already mentioned, has the role of a protective factor against chronic, especially cardiovascular diseases. Indicators of destitution and poverty, poor household equipment and inadequate living conditions play a secondary role in the occurrence of the disease, sporadically statistically significant, but regularly on a smaller scale.

TABLE 17. Predictors and explained variance of the existence of different categories of diseases among RNM members

	Cardiovascular diseases	Mental disorders and behavioral disorders	Respiratory diseases	Diseases of the urinary system	Diseases of the musculoskeletal system	Reproductive health of women
R	0.54	0.21	0.31	0.31	0.46	0.26
R ²	0.29	0.05	0.09	0.09	0.21	0.07
F change	0.00	0.00	0.00	0.00	0.00	0.00
Second block R	0.56	0.27	0.33	0.36	0.46	0.38
Second block R ²	0.31	0.07	0.11	0.13	0.21	0.14
F change second block	0.02	0.01	0.15	0.00	0.52	0.00
Predictors						
Gender	0.02	0.03	0.04	0.07	0.03	
Age	0.50	0.20	0.25	0.26	0.44	0.15
Education	-0.04	-0.02	-0.07	-0.04	-0.01	-0.19
Basic household equipment	0.05	-0.03	0.03	0.01	0.01	0.09
Adequacy of housing	-0.02	-0.02	-0.04	-0.03	-0.06	-0.11
Distance from the health center	-0.01	0.00	0.02	-0.01	-0.06	0.05
Pollution	0.01	0.02	-0.01	0.02	-0.01	0.05
Healthy diet	0.03	-0.15		-0.18		-0.08
Unhealthy diet	-0.11	0.03		-0.01		0.00
Alcohol consumption	-0.03	-0.03		-0.02		0.02
Smoking	0.00	0.01		0.02		-0.09
Drug or opiate consumption	0.02	0.09		0.04		0.05
Healthy habits	0.10	0.06		0.13		0.25
Explained variance	31 %	7 %	9 %	13 %	21 %	14 %
Unexplained variance	69 %	93 %	91 %	87 %	79 %	86 %

**FIGURE 8.** Proportion of explained variance of different disease categories

Note: sociodemographic, socioeconomic and location predictors were entered in the first block of hierarchical regression analysis, and predictors related to healthy or unhealthy habits were entered in the second block.

The baseline data study⁷⁶ found that in the last 12 months, the most common health problems among RNM members were spine or chronic back or neck problems, high blood pressure, and cardiovascular problems. This study shows that these diseases are not equally common among RNM members in different regions or types of settlements. But before more complex analyses are conducted, it is difficult to conclude whether the identified differences are a reflection of different customs and habits nurtured in some regions or types of settlements or a consequence of higher share of some of the risk categories, primarily older age groups. For now, it seems that cardiovascular diseases are somewhat less common among RNM members in Northern Croatia with Međimurje and outside towns and villages. Given that these are regions with the relatively youngest Roma population, such data can be explained at least in part by the age disparity of regions. The same goes for spinal diseases.

Regression analysis showed that age is an important and unavoidable predictor of all categories of diseases included in the survey. In explaining the emergence of the musculoskeletal system diseases, it is the only significant predictor, while in cardiovascular system diseases, it is an extremely dominant predictor. Education, which is expected to be important in understanding information and comprehending the importance of preventive measures, has not been shown to be predictive, except in the case of women's reproductive health.

Socioeconomic, environmental and location factors that we assumed would have detrimental effects on health and increase the risk of developing at least some diseases, such as those of the respiratory system, did not prove to be significant predictors in this case. But it should be borne in mind that this finding does not necessarily mean that material deprivation and inadequacy of housing do not play a role in the development of the disease, but perhaps only that RNM members are relatively equal in terms of exposure to such unfavorable circumstances.

Healthy habits, such as attention to hygiene, diet and physical activity are, contrary to expectations, positively associated with diseases of the cardiovascular system, the urinary tract and the reproductive health of women. This, of course, does not mean that such habits increase the likelihood of these diseases occurring, but they almost certainly lead to a conclusion about the importance of culturally induced behavior in health and disease. This finding can be interpreted as an indication that RNM members only begin to consider healthy habits after they fall ill, although these habits should be an integral part of disease prevention.

76 Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

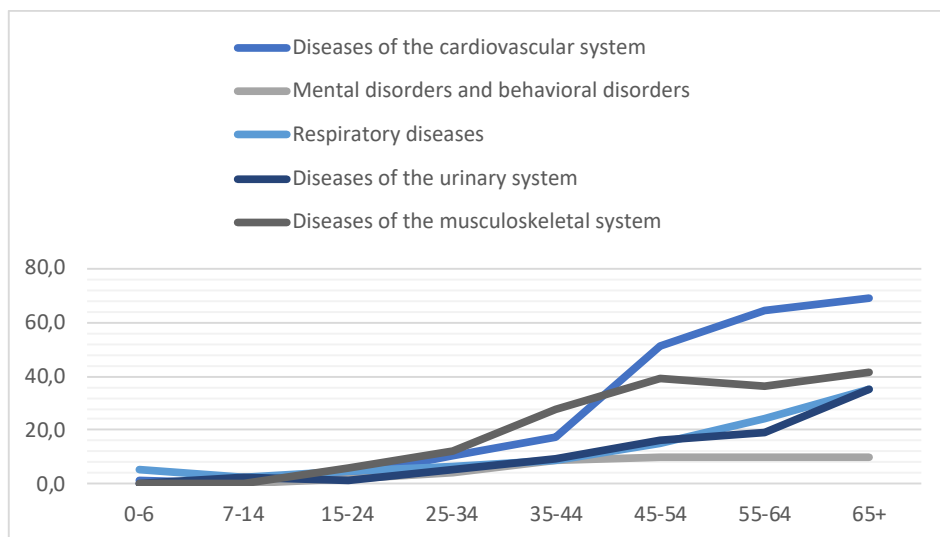


FIGURE 9. Percentage of male RNM members of a various age suffering from a particular disease category

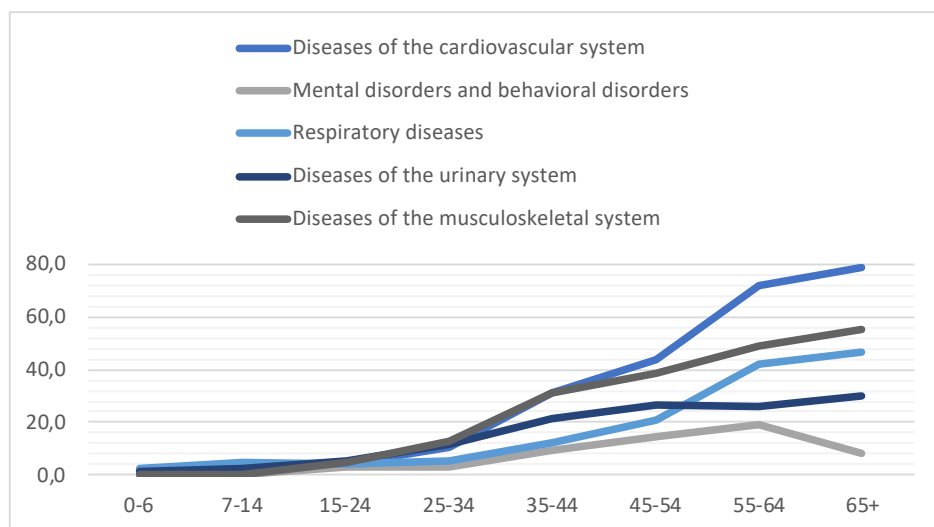


FIGURE 10. Percentage of female RNM members of a various age suffering from a particular disease category

Regression analysis confirmed the expected finding that age is the most important predictor of becoming ill. However, RNM members appear to suffer from some diseases at a significantly younger age compared to the general population. Thus, for example, a significant increase in the incidence of cardiovascular diseases is observed in men from the age of 45 onwards. Among women, the increase in frequency is moderate, but also

relatively steep. There are also relatively sudden increases in musculoskeletal system diseases in the middle-age group.

When we compare the data describing the general population with the data for RNM members, we notice some expected but also some inconsistent differences. It is quite clear that the data is veiled by age differences between the two populations, which makes RNM members appear healthier and less susceptible to disease. Another possibility is that the observed differences are due to the fact that the diseases which were surveyed are usually diagnosed by the medical profession and those suffering from them might not have obvious symptoms. Therefore, it is not possible to determine whether someone is actually ill based on personal experience or the experience of relatives. In addition to the stated age differences, this could be the reason why the data shows that high blood pressure is more common in the general than in the Roma population.

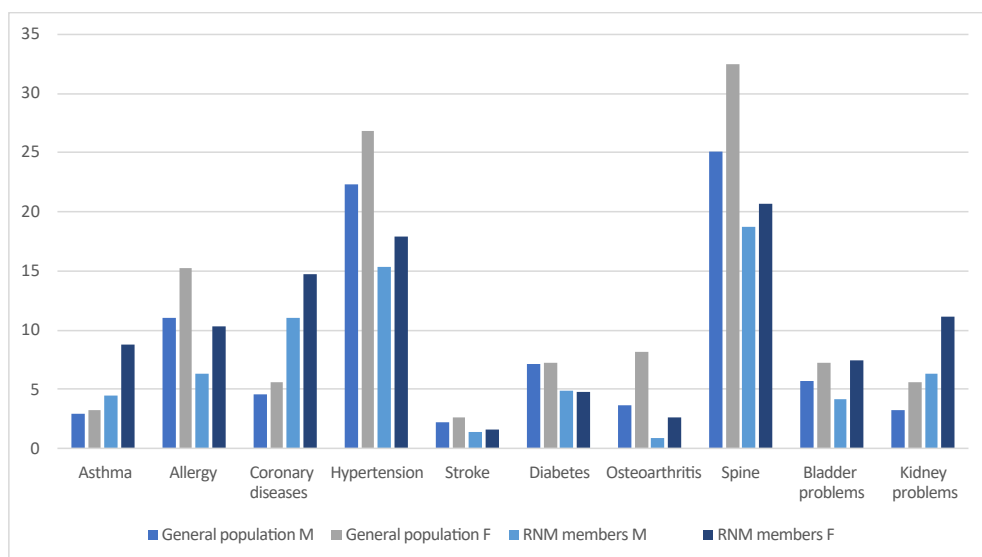


FIGURE 11. Comparison of the presence of certain diseases among persons aged 15 years of age and older from the general population⁷⁷ and among RNM members

Also, asthma is more common among RNM members. It is an example of a disease that commonly occurs in childhood, so age differences do not play a major role in its frequency. It is accompanied by significant respiratory problems, which usually require medical attention that is often urgent. Most other diseases are more common in the general population, most likely as a result of differences in the demographic structure and a higher share of younger age groups in the Roma population. Coronary diseases and kidney diseases, which are more common among members of the RNM, deviate from this pattern.

⁷⁷ Croatian National Institute of Public Health [2016] *European Health Interview Survey in Croatia 2014–2015*. European Health Interview Survey (EHIS).

3.1.5. Reproductive health of women

Early sexual debut, a large number of teenage pregnancies and frequent abortions among RNM members contributed to the high positioning of women's reproductive health problems among the NRIS objectives. The findings of the baseline data study⁷⁸ confirmed the already known challenges related to improving the reproductive health of women, namely the relatively low frequency of gynecological examinations and the high frequency of teenage pregnancies and abortions. In this study, we paid attention to the analysis of various indicators related to childbirth, abortion and reproductive health with regard to the region and the type of settlement as well as socioeconomic determinants such as age, education, basic household equipment and adequacy of housing.

TABLE 18. Comparison of arithmetic means and percentages by region: births, abortions and reproductive health

	Medi- murje [N=139]	Northern Croatia [N=41]	Zagreb and its surrounding area [N=59]	Central Croatia [N=61]	Slavonia [N=84]	Istria and Primorje [N=30]	Total [N=414]	Signifi- cance	Effect size [C; η^2]
Age at first birth and number of births: arithmetic means									
How old were you when you first gave birth?	17.5	16.5	19.7	18.2	18.2	18.4	18.0	p<0.01	0.09
How many births have you had in total in your lifetime?	4.6	5.1	2.9	3.8	3.5	4.3	4.1	p<0.01	0.05
Abortions and stillbirths: percentages									
Abortion – never	54.7	61.0	40.7	60.7	41.7	43.3	50.7	0.06	
Yes, miscarriage	35.5	17.9	15.5	23.3	42.4	37.9	30.8	p<0.01	0.21
Yes, induced [abortion on request]	14.9	7.7	42.4	13.3	28.6	20.7	21.2	p<0.01	0.26
Stillborn	9.6	7.5	6.9	6.7	9.5	6.9	8.4	0.97	
Died in the first 4 weeks of life	6.0	5.1	0.0	3.3	4.8	0.0	4.0	0.08	
Died between the first month and the first 12 months of life	6.0	10.3	1.7	3.3	2.4	10.3	5.0	0.21	
Reproductive health									
Complications related to pregnancy and childbirth	29.1	17.2	39.2	24.1	37.5	37.0	31.1	p<0.01	0.33
Reproductive system diseases	14.7	6.7	20.4	16.1	26.6	11.1	17.3	p<0.01	0.28

78 Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

Before embarking on an interpretation of the relationship between women's reproductive health and possible regional, locational, and sociodemographic determinants, it should be noted that a relatively small sample of women answered the questions, making the results highly susceptible to sampling error. For this reason, we will comment only on the most salient differences which are unlikely to be the result of accidental fluctuations.

The fact that the number of induced abortions is by far the highest in Zagreb, where it is probably the easiest to organize it is a cause for concern. The number of miscarriages is highest in Slavonia and Istria, and the lowest number, obviously related to the average age, is in Northern Croatia.

TABLE 19. Comparison of arithmetic means and percentages by type of settlement: births, abortions and reproductive health

	Separated from a town or village [N=168]	On the outskirts of a town or village [N=83]	A settlement within a town or village [N=43]	Dispersed across a town or village [N=120]	Total [N=414]	Significance	Effect size [C: η^2]
Age at first birth and number of births: arithmetic means							
How old were you when you first gave birth?	17.5	17.7	17.7	19.2	18.0	p<0.01	0.07
How many births have you had in total in your lifetime?	4.7	4.2	3.8	3.1	4.1	p<0.01	0.05
Abortions and stillbirths: percentages							
Never had an abortion	56.0	50.6	39.5	47.5	50.7	0.21	
Yes, miscarriage	35.3	33.3	36.6	20.8	30.8	p<0.05	0.14
Yes, induced [abortion on request]	12.3	21.0	26.8	31.4	21.2	p<0.01	0.20
Stillborn	9.7	13.6	4.9	4.2	8.4	0.09	
Died in the first 4 weeks of life	6.1	2.5	4.9	1.7	4.0	0.24	
Died between the first month and the first 12 months of life	6.8	4.9	7.3	1.7	5.0	0.23	
Reproductive health							
Complications related to pregnancy and childbirth	27.0	29.3	42.1	34.6	31.1	0.52	
Reproductive system diseases	10.6	24.3	28.9	18.3	17.3	0.10	

How to reduce complications during pregnancy: “I would pack a lot of courage and strength for her.”

Healthcare professionals talk about positive examples from practice related to health education based on persistent and continuous work in the community in cooperation with Roma associations. An example of good practice is the success of a series of workshops aimed at successful parenting involving RNM members who are fathers.

...here is also a positive example, last year in cooperation with an association ... we educated Roma fathers... I have to admit, I was very skeptical because I had experience so far, it's really challenging to work with their wives, and then I thought to myself: why these guys now, how come, how will they do it now... they were supposed to write down what should be packed when the woman goes to the maternity ward. Now you're going to say, “Well, they have experience in that, right.” They really do. They remembered to pack things that I would not remember now, but what touched me very much – one wrote that he would pack her a lot of courage and strength... they did it with such enthusiasm, they were actually so creative and then, when one looks at it, then you see that when you invest in something you do get the result back. But what I say all the time is that it's a lot of effort, a lot, a lot, a lot of time and everything. That is after 12 workshops, after 12 meetings, every Tuesday afternoon, and one Tuesday we'll have the positive change. It is extremely demanding, but it is doable. And then you really see how they later pass it on to their children and react differently and it's useful, it's necessary... [KNF, Medimurje County]

TABLE 20. Relationship between sociodemographic characteristics and indicators of reproductive health and problems among female RNM members

	Age	Education	Basic household equipment	Adequacy of housing
How old were you when you first gave birth?	0.01	0.28	0.23	0.10
How many births have you had in total in your lifetime?	0.40	-0.52	-0.20	-0.15
Never had an abortion	-0.27	0.16	-0.07	0.10
Yes, miscarriage	0.08	-0.18	-0.07	-0.18
Yes, induced [abortion on request]	0.30	-0.09	0.17	0.04
Stillborn	0.14	-0.20	-0.02	-0.07
Died in the first 4 weeks of life	0.14	-0.16	-0.09	-0.04
Died between the first month and the first 12 months of life	0.11	-0.19	-0.09	-0.06
Complications related to pregnancy and childbirth	0.01	-0.07	-0.07	0.00
Reproductive system diseases	0.04	-0.10	-0.04	-0.04

*Statistically significant correlations are printed in bold.

Age is the strongest predictor of the number of births and abortions due to the higher number of pregnancies that can be carried out over a longer period of time during a woman's reproductive life. Education is, as elsewhere, a protective factor against unfavorable outcomes during and after pregnancy. Thus, results suggest that mothers with higher levels of education are less likely to have abortions and have a lower incidence of stillbirths and infant deaths. Such findings are probably a result of better care and concern for one's own and the child's health, but it is possible that poorly educated pregnant women and young mothers living in poverty are additionally exposed to unfavorable environmental conditions that adversely affect the fetus or newborn. Such an assumption is supported by correlations between the number of abortions and the adequacy of housing.

However, in order to gain a better picture of the determinants of reproductive health, we designed a composite variable that includes reproductive system diseases, unfavorable outcomes, and complications during pregnancy. The explained variance of reproductive health is neither large nor negligible and amounts to 14%. The main predictor of poor health is lower education, which, as we have mentioned, contributes to being inadequately informed, non-compliant with health recommendations and avoidant of examinations. Healthy habits, i.e. attention to hygiene, nutrition and physical activity, seemingly harms reproductive health, but, as in many other analyses, it seems that this artifact is a consequence of the lack of prevention and disease being the only or almost only trigger for healthy behavior among the RNM.

Pregnancy and examinations: "First-time mothers go, others don't go."

The lack of regular examinations among pregnant RNM members is also a widely recognized health problem. There are various reasons that prevent pregnant women from undergoing regular gynecological examinations, such as socioeconomic reasons [e.g. lack of money for a medical examination or transport] and multiple cultural reasons. Healthcare professionals recognize that families with large numbers of children are an unquestionable cultural value in Roma communities and that pregnancy is considered a normal condition. If there are no symptoms of a disease during pregnancy, Roma women often feel that they do not need regular gynecological examinations. Healthcare workers emphasize that Roma women are often stigmatized due to multiple pregnancies, so women who give multiple births avoid examinations during pregnancy more often than first-time mothers.

- *As for women, I would say that they should be a little more educated on reproductive health as well, because they do not undergo regular gynecologist examinations, nor do they undergo gynecologist examinations during pregnancy. Sometimes they are 4, 5, 6 months pregnant and they have not yet gone to the first gynecologist appointment. As a reason, they state either "I know that everything is fine" or "I'm not going because I don't have money", "I don't have transportation" and such things – we have to provide them better access. They*

often say that they feel ashamed because they've been pregnant many times or something, so they know people will talk and they don't want to go. [KNF, Medimurje County]

- When they get pregnant, they do not undergo gynecological examinations regularly, although they have the option to do so. Everyone has health insurance. Here we try to advise them to go to the appointments if they are told. First-time mothers go but if it's the fifth child, then they think everything is OK. [KNF, Osijek-Baranja County]

TABLE 21. Predictors of reproductive health self-reports of RNM members

Predictors	Beta	P		R	R ²	R ² change	Significance of change
Age	.15	.01	First block	0.26	0.07	0.07	0.00
Education	-.19	.00	Second	0.38	0.14	0.07	0.00
Basic household equipment	.09	.17					
Adequacy of housing	-.11	.07					
Distance from the health center	.05	.34					
Pollution	.05	.32					
Healthy diet	-.08	.24					
Unhealthy diet	.00	.97					
Alcohol consumption	.02	.70					
Smoking	-.09	.11					
Drug or opiate consumption	.05	.39					
Healthy habits	.25	.00					

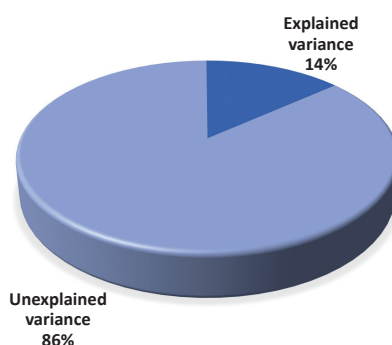


FIGURE 12. Percentage of reproductive health variance of female RNM members explainable by predictors

3.1.6. Domestic violence and health

The findings of numerous studies unequivocally prove the existence of adverse effects of domestic violence on physical and mental health. Women and children are particularly exposed to such harmful influences.⁷⁹ Roma families are traditional and patriarchal, and there are indications that women and children in those families are more exposed to violence than those in the general population. However, there is no empirical evidence for such indications, as women are expected to keep silent about violence and, moreover, to take the blame for it. Therefore, this issue is extremely difficult to investigate, and

⁷⁹ Ellsberg, M., Jansen, H. A., Heise, L., Watts, C. H. and García-Moreno, C. [2008] Op. cit.; Herrenkohl, T. I., Hong, S., Klika, J. B., Herrenkohl, R. C. and Russo, M. J. [2013] Op. cit.

the obtained empirical indicators often provide a highly distorted reflection of reality. However, violence in general and violence against women and children in particular, has been identified as a major problem in the NRIS, which is why the third objective related to social welfare calls for a stronger focus on its recognition and prevention.

Although the topic of women's exposure to domestic violence was extensively covered in the survey, it is evident that women felt uncomfortable and inhibited in answering these sensitive questions, and perhaps the circumstances of the survey did not provide sufficient protection and confidentiality. Perhaps because of this, most women deny exposure to any form of violence: verbal, physical, sexual, as well as that based on material subordination. Only a small number of respondents acknowledge the occurrence of certain forms of violence, but the overall arithmetic mean shows that each of the forms of aggressive or violent behavior occurred less frequently than once in a lifetime. Less than 5% of women admit to being victim of violence frequently. It is likely that the collected results hugely underestimate the actual rate of domestic violence, and therefore the established correlation between violence and health should be taken with caution. A mostly weak correlation between exposure to violence [composite variables defined as the sum of individual indicators] and different aspects of health, has been found, but only at the zero-order correlation level. Exposure to violence was negatively associated with subjective health assessment [$r=-0.24$; $p<0.01$], cardiovascular disease [$r=0.23$; $p<0.01$], musculoskeletal disorders [$r=0.20$; $p<0.01$], respiratory diseases [$r=0.12$; $p<0.05$], mental disorders [$r=0.12$; $p<0.05$] and reproductive health [$r=0.11$; $p<0.05$]. However, although zero-order correlations suggest that exposure to violence influences health and disease risk, it turns out to be an insignificant predictor in the context of all other variables involved. Let us reiterate, however, that the obtained finding should be taken with caution due to problems related to data collection and the honesty of the respondents.

3.1.7. Healthy and unhealthy habits

Healthy habits are permanent behavioral patterns that reflect the lifestyle of an individual and are connected with long-term favorable and unfavorable health outcomes. Many unhealthy habits such as unhealthy diet, alcohol consumption and smoking have a negative impact on health, and they can trigger the development of a wide range of chronic diseases. The results of previous research conducted in Croatia and other countries show that RNM members tend to adopt unhealthy habits compared to the general population. Of particular importance are healthy eating habits and a balanced diet as forms of behavior that have a beneficial effect on health. However, in the case of RNM members, healthy eating habits are not only a reflection of culture and preferences, but also of socioeconomic status, which can be a limiting factor, and many Roma families have to forgo healthier foods such as fruits and vegetables. The baseline data study⁸⁰ found that smoking and the consumption of poor quality and unhealthy food and beverages are extremely

80 Kunac, S., Klasnić, K. and Lalić, S. [2018] Op. cit.

widespread among RNM members. In the current study, we focused on the analysis of the healthy and unhealthy habits in relation to some potentially relevant variables such as region, type of settlement, socioeconomic status, disease, self-reported health and others.

TABLE 22. Comparison by region: consumption of alcoholic beverages, cigarettes and drugs or opiates

	Medi- murje [N=1,121]	Northern Croatia [N=320]	Zagreb and its surround- ing area [N=505]	Central Croatia [N=373]	Slavonia [N=562]	Istria and Primorje [N=287]	Total [N=3,168]	Signifi- cance	Effect size [C]
Alcohol consumption	20.45	20.94	10.10	12.33	13.55	9.06	15.63	p<0.01	0.13
Smoking	53.26	64.37	60.59	52.28	54.80	47.04	55.15	p<0.01	0.09
Drug or opiate consumption	0.09	0.00	0.99	0.27	0.36	2.44	0.51	p<0.01	0.10

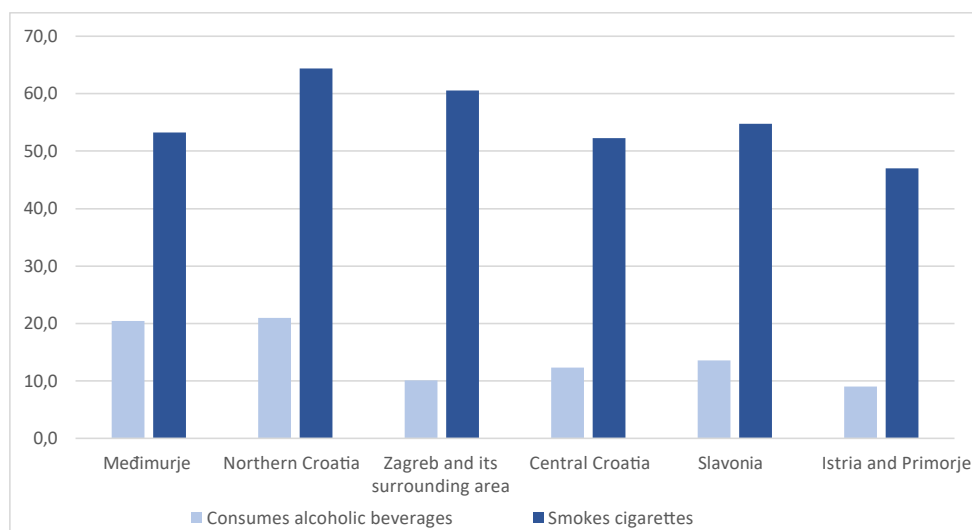


FIGURE 13. Percentage of RNM members consuming alcoholic beverages and cigarettes by region

The findings suggest that neither the region nor the type of settlement has a significant impact on the different types of addiction among RNM members. Although statistically significant, the observed differences between regions were not pronounced. Alcohol is consumed to a slightly greater extent in Northern Croatia and Medimurje, and cigarettes in Northern Croatia and Zagreb. Although they are less prone to alcohol and nicotine, in Istria they resort more to the consumption of narcotics.

Comparing the prevalence of smokers among RNM members with that in the general population, striking differences are found between both sexes and in all age categories. There are twice as many smokers among the Roma as in the general population, and among men this percentage rises to over half in the 15–24 age category. During adulthood, the percentage of smokers in the Roma population does not fall below 60% among men nor below 55% among women. The prevalence of smokers is noticeably lower only in the older age, but the data does not answer the question of the extent to which such a decline is due to increased mortality of smokers or quitting smoking because of health reasons.

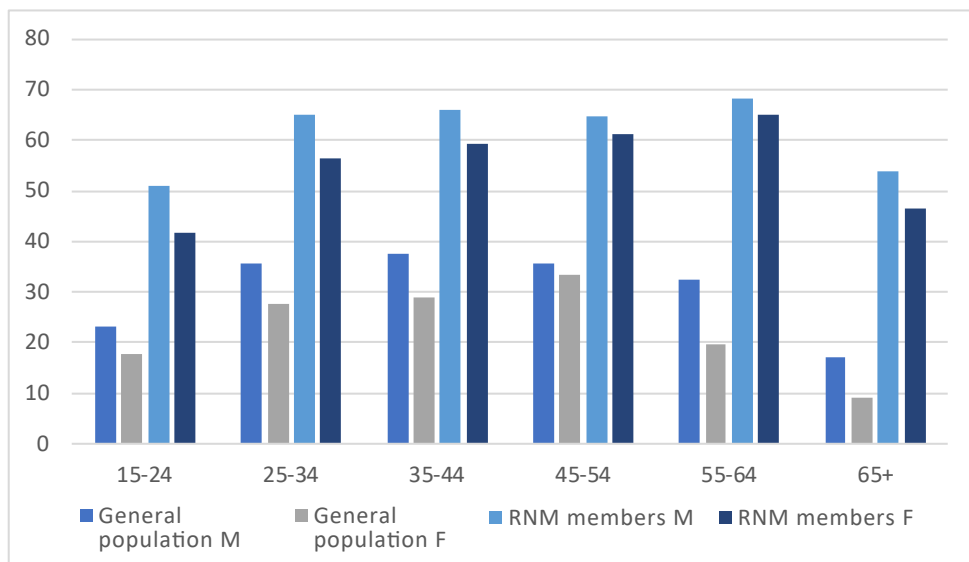


FIGURE 14. Representation of smokers in the general population⁸¹ and among RNM members

TABLE 23. Comparison by type of settlement: consumption of alcoholic beverages, cigarettes and drugs or opiates

	Separated from a town or village [N=1,323]	On the outskirts of a town or village [N=556]	Within a town or village [N=304]	Dispersed across a town or village [N=983]	Total [N=3,166]	Significance	Effect size [C]
Alcohol consumption	19.6	15.8	16.2	9.9	15.6	p<0.01	0.11
Smoking	54.0	57.6	52.0	56.3	55.1	0.30	
Drug or opiate consumption	0.1	0.4	2.0	0.7	0.5	p<0.01	0.08

81 Croatian National Institute of Public Health [2016] *European Health Interview Survey in Croatia 2014–2015*. European Health Interview Survey [EHIS].

TABLE 24. Comparison by age: consumption of alcoholic beverages, cigarettes and drugs or opiates

	7-14 [N=92]	15-24 [N=1,059]	25-34 [N=739]	35-44 [N=530]	45-54 [N=390]	55-64 [N=245]	65+ [N=110]	Total [N=3,165]	Signifi- cance	Effect size [C]
Alcohol consumption	3.3	10.4	19.2	21.7	19.0	12.2	18.2	15.6	p<0.01	0.14
Smoking	10.8	46.3	60.8	62.8	62.8	66.5	50.0	55.1	p<0.01	0.22
Drug or opiate consumption	1.1	0.5	0.7	0.4	0.8	0.0	0.0	0.5	0.73	

Age is also an important factor in alcohol consumption, not just cigarettes, and the existing relationship seems to be curvilinear. In both cases, consumption increases from early youth to middle age and then declines. The observed decline may be due to the earlier mortality of people who have consumed alcohol and nicotine excessively during their lifetime. Another possibility is that the consumption of alcohol and nicotine decreases in old age due to medical recommendations.

TABLE 25. Relationship between some sociodemographic characteristics and unhealthy habits among RNM members

	Gender	Education	Basic household equipment	Adequacy of housing
Alcohol consumption	-0.20	0.01	-0.08	0.03
Smoking	-0.07	-0.12	-0.10	-0.08
Drug or opiate consumption	-0.04	0.02	0.03	0.00

* Statistically significant correlations are printed in bold.

As expected, a significantly higher percentage of men consume alcohol than women, and they are also more likely to smoke than women. Furthermore, smoking is more common among people with lower education and those of lower socioeconomic status and among residents in lower quality housing.

To preserve health and prolong life, it is important not only to avoid unhealthy habits but also to adopt healthy ones. One of the most important among them is certainly proper nutrition. Respondents answered questions about the frequency of consumption of certain types of food, both those that doctors classify as unhealthy and those that are recommended to be on the table in every household. We examined the diet of RNM members not only through individual items but also by observing it through the optics of broader constructs of healthy and unhealthy diet, which we included in the analysis as composite variables.

TABLE 26. Comparison by region: frequency of consumption of certain types of food

	Međimurje [N=287]	Northern Croatia [N=75]	Zagreb and its surround- ing area [N=105]	Central Croatia [N=109]	Slavonia [N=145]	Istria and Primorje [N=60]	Total [N=781]	Signifi- cance	Effect size [η^2]
1. Greasy and extremely spicy food	3.60	3.60	3.65	3.83	3.52	2.82	3.56	p<0.01	.03
2. Chocolate and candy	4.03	3.47	3.96	3.59	3.43	3.81	3.78	p<0.01	.04
3. Fast food [pizza, fries, hamburgers, hot-dogs, etc.]	2.93	2.68	3.09	2.72	2.24	2.73	2.76	p<0.01	.04
4. Soft drinks	4.00	3.56	4.16	3.51	3.39	3.40	3.75	p<0.01	.05
5. Snacks [chips etc.]	3.58	3.25	4.10	3.48	3.31	3.78	3.57	p<0.01	.03
6. Fish and seafood	2.81	2.36	2.53	2.68	2.16	2.50	2.56	p<0.01	.04
7. Meat	4.67	3.95	4.58	4.11	4.21	3.78	4.36	p<0.01	.11
8. Meat products [salami, pâté, etc.]	4.36	3.61	4.70	4.10	4.01	4.12	4.21	p<0.01	.07
9. Fruits and vegetables	4.38	3.47	4.20	4.19	3.88	4.15	4.13	p<0.01	.07
10. Cereals and cereal products [e.g. bread, pasta, etc.]	4.61	3.99	4.77	4.56	4.79	4.56	4.60	p<0.01	.05
Healthy diet	3.60	2.91	3.37	3.44	3.02	3.33	3.35	p<0.01	.07
Unhealthy diet	3.75	3.37	3.94	3.54	3.32	3.44	3.61	p<0.01	.06

Note: estimates ranged from 1 – “never” to 5 – “every or almost every day”; “Healthy diet” and “Unhealthy diet” are composite variables [see the table in the Appendix].

As in most previous comparisons, one gets the impression that neither the region nor the type of settlement play a key role in the diet of RNM members, meaning that they do not contribute to a greater extent to a healthy or unhealthy diet. There are certain differences among regions and settlements, but those differences are much smaller than those between groups that differ in financial status, education or age.

Habits are hard to change: “They will take the medicine, but they will not change their diet.”

Regular medical check-ups are often absent among chronic patients as well. Older RNM members take medicine which is directly related to the diagnosed disease because it alleviates or reduces the symptoms of the disease, but they do not follow other physician recommendations related to the disease, such as diet.

- *As for the check-ups, for example these diabetics or patients with hypertension, I see that they don't really attend them. As far as older people are concerned, they somehow don't go for check-ups... Maybe it doesn't matter so much to them. So, they will take the medicine, but they won't change their diet when it comes to diabetes. It is very difficult for them to change their diet. [KNF, Bjelovar-Bilogora County]*

TABLE 27. Comparison by type of settlement: frequency of consumption of certain types of food

	Separated from a town or village [N=339]	On the outskirts of a town or village [N=139]	Within a town or village [N=74]	Dispersed across a town or village [N=228]	Total [N=780]	Significance	Effect size [C]
1. Greasy and extremely spicy food	3.65	3.69	3.22	3.48	3.57	p<0.01	0.01
2. Chocolate and candy	3.94	3.50	3.48	3.80	3.78	p<0.01	0.02
3. Fast food (pizza, fries, hamburgers, hot-dogs, etc.)	2.90	2.25	2.42	2.96	2.75	p<0.01	0.04
4. Soft drinks	3.96	3.49	3.39	3.74	3.76	0.07	
5. Snacks (chips etc.)	3.58	3.35	3.49	3.71	3.57	p<0.01	0.01
6. Fish and seafood	2.74	2.29	2.25	2.58	2.57	p<0.01	0.02
7. Meat	4.58	4.24	3.88	4.26	4.36	p<0.01	0.05
8. Meat products (salami, pâté, etc.)	4.28	4.09	4.03	4.25	4.21	0.13	0.01
9. Fruits and vegetables	4.29	3.93	4.01	4.06	4.13	p<0.01	0.02
10. Cereals and cereal products [e.g. bread, pasta, etc.]	4.57	4.83	4.59	4.50	4.60	p<0.05	0.01
Healthy diet	3.51	3.11	3.16	3.32	3.35	p<0.01	0.03
Unhealthy diet	3.72	3.40	3.33	3.66	3.61	p<0.01	0.02

Note: estimates ranged from 1 – “never” to 5 – “every or almost every day”; “Healthy diet” and “Unhealthy diet” are composite variables [see the table in the Appendix].

The diet of RNM members is closely related to their sociodemographic characteristics, in particular their socioeconomic status. Persons of a higher socioeconomic status tend to have the listed foods on their menus more often, especially when measured by the adequacy of housing. The results suggest that differences do not exist in the quality but in the quantity of the diet, i.e. the wealthier RNM families consume both unhealthy and healthy foods more often. Similarly, educated people are more likely to consume all foods rather than to selectively consume healthier ones. The observed phenomena can be explained, at least in part, by the cultural model of health in Roma communities that links health, happiness and abundance. Therefore, people of higher body weight are considered both happier and healthier because body weight indicates health, happiness and material wealth.⁸² Interestingly, it is age that is associated with less frequent consumption of unhealthy foods, which is a possible consequence of medical instructions or serious health problems incompatible with an unhealthy diet. In addition, some of the foods that the elderly abstain from are culturally, traditionally and for advertising purposes intended for children and young people, such as sweets, snacks and soft drinks.

TABLE 28. Relationship between some sociodemographic characteristics and frequency of consumption of certain types of food among RNM members

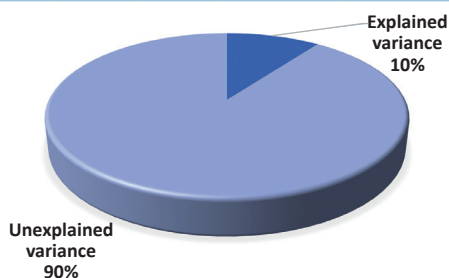
	Gender	Age	Education	Basic household equipment	Adequacy of housing
1. Greasy and extremely spicy food	-0.11	-0.04	0.02	0.05	-0.01
2. Chocolate and candy	-0.02	-0.35	0.22	0.14	0.20
3. Fast food [pizza, fries, hamburgers, hot-dogs, etc.]	-0.06	-0.22	0.21	0.13	0.19
4. Soft drinks	-0.09	-0.25	0.16	0.14	0.14
5. Snacks [chips etc.]	0.02	-0.23	0.20	0.19	0.23
6. Fish and seafood	-0.09	-0.05	0.04	0.01	0.19
7. Meat	-0.04	-0.15	0.09	0.06	0.17
8. Meat products [salami, pâté, etc.]	-0.03	-0.10	0.08	0.11	0.16
9. Fruits and vegetables	0.03	-0.05	0.13	0.09	0.22
10. Cereals and cereal products [e.g. bread, pasta, etc.]	0.05	-0.04	0.07	0.07	0.02
Healthy diet	-0.04	-0.07	0.10	0.05	0.25
Unhealthy diet	-0.07	-0.28	0.21	0.18	0.21

* Statistically significant correlations are printed in bold.

82 Sutherland, A. [2002] Op. cit.; Vivian, C. and Dundes L. [2004] Op. cit.

TABLE 29. Predictors of healthy diet of RNM members

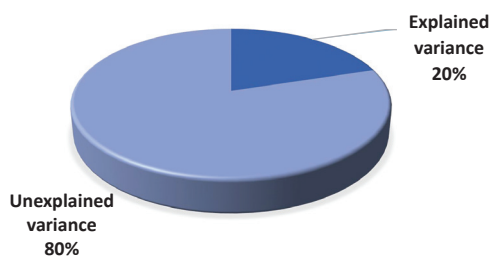
Predictors	Beta	P			R	R ²	R ² change	Significance of change
Gender	-.03	.52			0.31	0.10	0.10	0.00
Age	-.05	.18						
Education	.06	.14						
Basic household equipment	.04	.42						
Adequacy of housing	.23	.00						
Distance from the health center	.14	.00						
Pollution	.08	.05						

**FIGURE 15.** Percentage of variance of healthy diet of RNM members explainable by predictors

The findings of regression analysis also point to the conclusion of a special, culturally specific view of nutrition. Despite the possible expectation, education does not contribute to the tendency of a healthy diet. On the contrary, higher education, as was evident from the correlation analysis, is associated with higher consumption of unhealthy food, which makes the assumption of linking health, happiness and abundance in Roma communities even more convincing. The socioeconomic status goes in the same direction, i.e. towards the tendency for greater abundance, regardless of its acceptability in terms of health.

TABLE 30. Predictors of unhealthy diet of RNM members

Predictors	Beta	P			R	R ²	R ² change	Significance of change
Gender	-.05	.21			0.45	0.20	0.20	0.00
Age	-.30	.00						
Education	.11	.00						
Basic household equipment	.22	.00						
Adequacy of housing	.12	.00						
Distance from the health center	.12	.00						
Pollution	.11	.00						

**FIGURE 16.** Percentage of variance of unhealthy diet of RNM members explainable by predictors

Although we regularly expect a behavior to follow the attitudes and advocated values, in reality it is a much more complex relationship. In the survey, nutrition is included in two thematic blocks. However, the importance of a balanced diet is only slightly corre-

lated with the consumption of foods classified as healthy [$r=0.19$], and at the same time, paradoxically, it is positively correlated with unhealthy diet, albeit to a lesser extent [$r=0.11$]. When the importance attached to healthy habits is taken as a whole, as a composite variable, it is found to be almost completely unrelated to unhealthy habits such as cigarette, alcohol, and drug consumption. The results suggest one of the two possible interpretations. Either the Roma perceive the declared values and actual behavior as two separate realities or, according to previous interpretations, their cultural understanding of the components of health is significantly different from the point of view of modern medicine. Therefore, we considered that the importance attached to healthy habits should be analyzed as a value category independently of behavioral statements.

TABLE 31. Comparison by region: the importance of healthy habits among RNM members

	Međimurje [N=287]	Northern Croatia [N=75]	Zagreb and its surround- ing area [N=105]	Central Croatia [N=109]	Slavonia [N=145]	Istria and Primorje [N=60]	Total [N=781]	Signifi- cance	Effect size [η^2]
Hygiene	4.94	4.24	4.79	4.89	4.85	5.00	4.83	$p<0.01$.15
Balanced diet [meat, fish, vegetables, fruits, cereals, etc.]	4.81	4.01	4.35	4.82	4.75	4.78	4.66	$p<0.01$.11
Physical activity [e.g. walking, exercising, etc.]	4.50	3.51	3.38	4.46	4.40	4.47	4.23	$p<0.01$.13

Note: evaluations ranged from 1 – “it is not important to me at all” to 5 – “it is extremely important to me”.

TABLE 32. Comparison by type of settlement: the importance of healthy habits among RNM members

	Separated from a town or village [N=1,323]	On the outskirts of a town or village [N=556]	Within a town or village [N=304]	Dispersed across a town or village [N=983]	Total [N=3,166]	Signifi- cance	Effect size [η^2]
Hygiene	4.88	4.88	4.95	4.70	4.83	$p<0.01$.02
Balanced diet [meat, fish, vegetables, fruits, cereals, etc.]	4.74	4.72	4.75	4.47	4.66	$p<0.01$.02
Physical activity [e.g. walking, exercising, etc.]	4.42	4.38	4.22	3.85	4.22	$p<0.01$.04

Note: assessments ranged from 1 – “it is not important to me at all” to 5 – “it is extremely important to me”.

Hygiene and the cult of cleanliness: “Children used to be washed in cauldrons, but they would be washed!”

There is an emphasis on the importance of hygiene for health care, as well as the high cultural value of personal hygiene and cleanliness of clothing [the cult of cleanliness], which is traditionally nurtured in Roma culture despite material poverty and difficult living conditions. It is also recognized that the level of hygiene is not the same among different communities and individuals, especially in cases of lack of adequate infrastructure in the settlement or individual household.

- ...There is a cult of cleanliness within the Roma community which, it speaks for itself, means cleanliness, neatness, being clean, shaven. It doesn't matter if the clothes are old or new, it is important that they are properly washed. It doesn't matter if it's patched and so on, but you see... There is [inaudible] once Roma women, grandmothers, mothers, fathers, maintained this in the way I mentioned. Children used to be washed in cauldrons. But they would be washed! [RNM representative, City of Zagreb]
- ...but there are some Roma cultures, some Roma who think about hygiene only when they go to the doctor. They wash themselves and unfortunately see water when they are born and when they die. I'll say it like that because that is what it is like in their heads, isn't it? Um, but you mostly have people who heat water on the stove even in winter and bathe in those iron troughs like they used to do in old bathtubs and so on, and maintain hygiene as much as they can, but now, again, if you don't have electricity, water, where do you bring water from, how do you heat it? So, there are problems. [RNM representative, City of Zagreb]

TABLE 33. Relationship between some sociodemographic characteristics and the importance attributed to healthy habits among RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
Hygiene	0.03	0.01	0.04	0.07	0.00
Balanced diet (meat, fish, vegetables, fruits, cereals, etc.)	-0.01	0.03	-0.01	0.01	-0.01
Physical activity (e.g. walking, exercising, etc.)	-0.10	-0.04	0.12	-0.05	-0.01

* Statistically significant correlations are printed in bold.

The previous questions address the behavioral aspect of diet and healthy and unhealthy habits. However, what is also important to explore is the value basis of such behavior. Given the multidimensional deprivation of RNM members, especially in the sphere of material goods, it could be expected that some of the advocated values will not be realized due to practical, most often material, obstacles. The results indicate that it is really very important for RNM members, at least on a value level, to practice healthy habits, hygiene, healthy diet and physical activity. Although similar results have been recorded in all regions, Northern Croatia still stands out somewhat from other regions due to less emphasis on the importance of healthy habits.

3.1.8. Accessibility of healthcare services

As mentioned in the introduction, the social exclusion of RNM members, along with discrimination and segregation, is one of the major problems that indirectly affects the health of this community. Accessibility is mostly reflected in the coverage of the Roma population with health insurance, vaccination coverage of children and the frequency of use of healthcare services in case of need. In addition, accessibility is affected by the kindness of healthcare staff and attitudes about healthcare professionals.

3.1.8.1. Physical accessibility of healthcare services

In the field of health, the NRIS has set as its goal the improvement of health and the quality and accessibility of health care. One of the important aspects of accessibility refers to the physical reach, which can sometimes affect the quality and speed of service and thus significantly affect the outcome of the intervention. Therefore, data on the existence of services and the distance of basic health care institutions are crucial for considering the overall accessibility.

TABLE 34. Comparison by region: accessibility of pharmacy, health center and medical care in the settlement

	Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surrou- nding area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C, η^2]
Pharmacy in the settlement [%]	4.9	6.0	93.0	20.4	48.6	89.6	32.5	p<0.01	0.59
The average distance from the pharmacy in km	4.4	4.3	2.6	6.2	2.7	6.9	4.3	p<0.01	0.17
The average distance of a health center or hospital from a settlement in km	4.3	4.3	2.3	5.0	2.3	2.6	3.7	0.38	
Does medical assistance come to the settlement [%]	100.0	100.0	98.9	100.0	99.1	75.6	97.6	p<0.01	0.41

The accessibility of healthcare services varies greatly depending on the region in which RNM members live. Unlike urban areas such as Zagreb, pharmacies are only rarely available to those who live outside cities and villages, with most of them being in Međimurje. The average distance of a pharmacy varies from less than 3 km in Zagreb and its surrounding area to almost 7 km in Istria and Primorje. The responses of some of the RNM members further suggest that health and medical assistance do not come to the settlements in Istria and Primorje, which makes this area stand out from all other regions included in the sample.

The distance from the health center and pharmacy certainly has more weight outside the settlement where there is no organized public transport. The average distance from basic institutions, such as pharmacies and health centers, is almost five kilometers in such settlements, which is certainly a major obstacle to regular check-ups and medical care. This particularly affects the elderly population with impaired health, which is likely to face a number of practical problems due to the difficult accessibility of facilities. However, young families with many children of an age that requires frequent medical care, examinations and medication are not spared from this problem either.

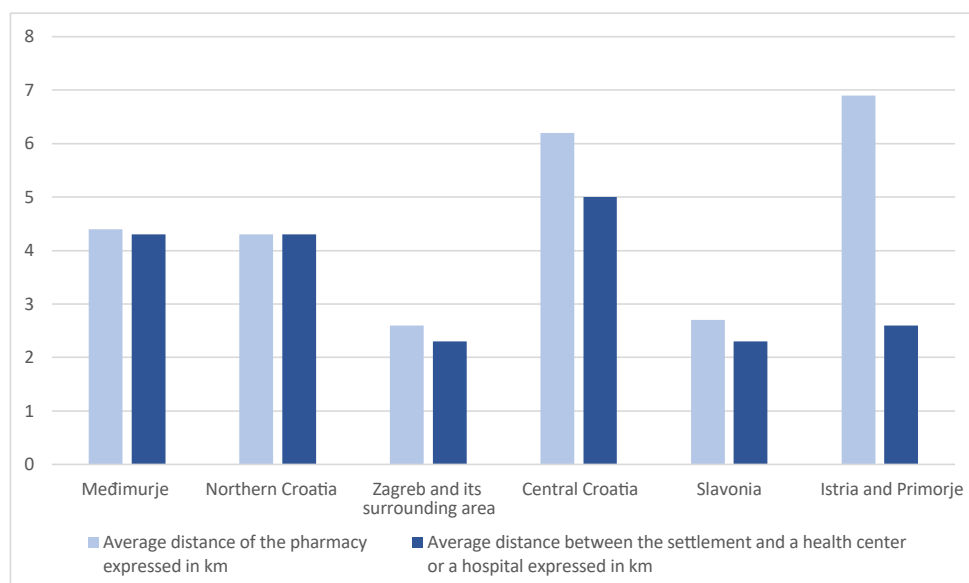


FIGURE 17. Average distance between pharmacy and health center in kilometers by region

TABLE 35. Comparison by type of settlement: accessibility of pharmacy, health center and medical assistance in the settlement

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C. η^2]
Pharmacy in the settlement [%]	3.5	19.7	82.9	72.9	32.5	$p < 0.01$	0.58
The average distance from the pharmacy in km	4.8	2.8	3.1		4.3	$p < 0.01$	0.11
The average distance of a health center or hospital from a settlement in km	4.6	2.7	2.0	2.1	3.7	$p < 0.01$	0.19
Does medical assistance come to the settlement [%]	100.0	99.1	77.1	99.5	97.6	$p < 0.01$	0.39

TABLE 36. The correlation between some sociodemographic characteristics and the accessibility of pharmacy, health center and medical care in the settlement

	Age	Education	Basic household equipment	Adequacy of housing
Pharmacy in the settlement	0.19	0.07	0.51	0.10
The average distance from the pharmacy in km	-0.06	-0.01	-0.16	0.00
The average distance of a health center or hospital from a settlement in km	-0.12	-0.04	-0.29	0.00
Does medical assistance come to the settlement	-0.03	-0.06	-0.03	0.02

* Statistically significant correlations are printed in bold.

Older persons, persons with higher education and the ones with a better socioeconomic status on average live closer to pharmacies and health facilities, in settlements in which such infrastructure exists. It can be speculated that younger people of lower socioeconomic status live in settlements far from urban agglomerations, but it is also possible that not so many elderly people are to be found in remote settlements due to shorter life expectancy on such localities.

3.1.8.2. Health insurance

For many RNM members, the lack of health insurance is a major obstacle to obtaining health care. Consequently, increasing the coverage of the Roma population with health insurance is one of the health objectives set by the NRIS. Before addressing the issue of coverage by region and with respect to sociodemographic and socioeconomic variables, it should be noted that in general the health insurance coverage of RNM members over 16 years of age increased from 83% recorded in 2011⁸³ to 89% in the current survey. This is still significantly less than 97% of the non-Roma population used in the 2011 survey as a frame of reference.

TABLE 37. Comparison by region: percentage of health insurance coverage

	Medimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surrounding area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Significance	Effect size [C]
Does he/she have valid health insurance?	91.1	86.6	97.2	95.9	94.1	94.8	92.8	p<0.01	0.12
Is there anyone in the household who does not have any form of health insurance?	30.0	46.7	6.8	16.0	26.1	18.6	25.0	p<0.01	0.25
Reason for not having it: did not register with the HZZO	47.6	35.7	0.0	50.0	61.1	60.0	46.3	0.06	

83 Mihailov, Dotcho [2012] *The health situation of Roma communities*. Op. cit.

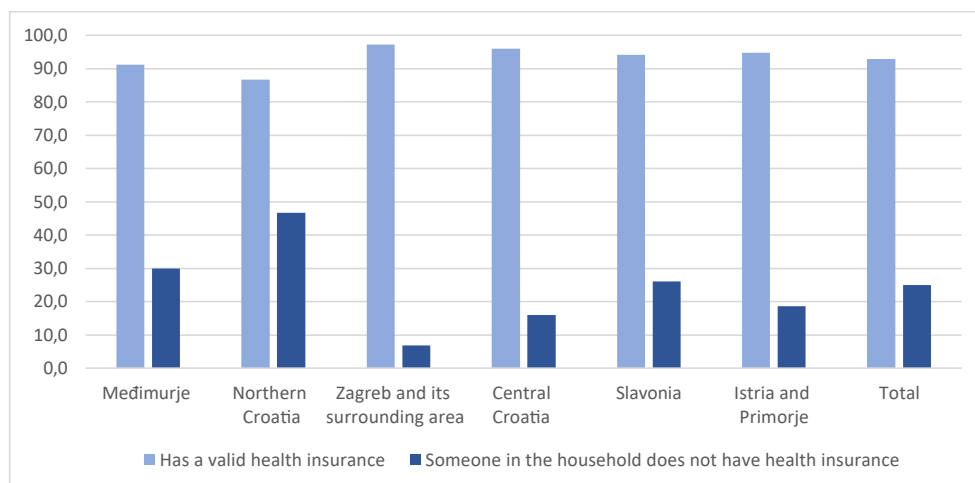


FIGURE 18. Percentage of health insurance coverage by region

TABLE 38. Comparison by type of settlement: percentage of health insurance coverage

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C]
Does he/she have valid health insurance?	90.1	92.8	96.8	95.8	92.8	p<0.01	0.10
Is there anyone in the household who does not have any form of health insurance?	32.6	24.6	25.4	13.8	25.0	p<0.01	0.18
Reason for not having it: did not register with the HZZO	44.0	29.4	76.9	50.0	46.3	p<0.01	0.52

Health insurance coverage is far from complete, which prevents some RNM members from exercising their constitutionally guaranteed rights. The lowest coverage is in Northern Croatia, and the highest in Zagreb. A quarter of the respondents surveyed state that there is a person in the household who does not have any health insurance. Most of them are in Northern Croatia, almost half. The reasons for not being insured vary, but one is extremely prevalent – not registering with the HZZO. Less educated and poorer members of the RNM are less likely to have health insurance.

TABLE 39. Relationship between some sociodemographic characteristics and health insurance coverage of RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
Does he/she have valid health insurance?	0.06	0.09	0.05	0.12	0.04
Is there anyone in the household who does not have any form of health insurance?	-0.08	-0.09	-0.10	-0.19	-0.12

* Statistically significant correlations are printed in bold.

Health insurance coverage is somewhat higher among women and the elderly, as well as those of better socioeconomic status. Gender and age are likely to reflect personal responsibility and need, while the predictive power of socioeconomic status may indicate to the part of the population that is more socially excluded.

TABLE 40. Predictors of health insurance coverage among families of RNM members

Predictors	Beta	P		R	R ²	R ² change	Significance of change
Gender	.11	.00	Block 1	0.32	0.10	0.10	0.00
Age	.11	.01	Block 2	0.34	0.11	0.01	0.39
Education	.08	.06					
Basic household equipment	.23	.00					
Adequacy of housing	.03	.52					
Distance from the health center	.03	.43					
Pollution	-.06	.18					

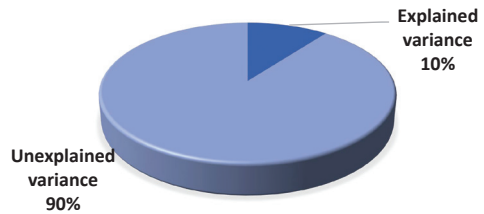


FIGURE 19. Percentage of variance of health insurance coverage among RNM families explicable with predictors

3.1.8.3. Health care for children and women

The health of women and children is one of the priorities included in a specific objective of the NRIS along with increasing the accessibility of healthcare services, especially for vulnerable groups. Therefore, indicators of coverage and accessibility of health care for this part of the Roma population are extremely important.

How to ensure high vaccination coverage and regular examinations: “We, the doctors, are getting through to them.”

Healthcare workers also recognize the importance of fieldwork in Roma communities. As a positive example, they talk about the improvement in vaccination coverage and the inclusion of Roma school-age children in general medical examinations thanks to the way public healthcare professionals work, which includes not only work in healthcare institutions but also field work in schools and settlements.

- *So, everything that has been invested in the education sector and all that has happened in the healthcare system has really produced results and it is evident that the situation today is much better. I think that public health institutes really play a big role in that because they include the entire population, but also because we are getting through to them. We are not waiting for them to come to our clinic, but we go to schools and, if necessary, to settlements... a great progress has been made in terms of vaccination coverage, it is a concrete indicator that shows how much change and improvement happened... every school child has regular physical examinations... There are a lot of measures now... but these measures mean that as long as the last Roma child does not respond, we regard them as absentees, and we insist that this examination takes place. Likewise, all projects in the field of prevention are transferred to Roma children and we always try to include Roma children as participants in the field of prevention and addiction and all other types. So... there is definitely progress. But there is still a lot of room for improvement, that is certain... [KNF, Međimurje County]*

TABLE 41. Comparison by region: vaccination coverage and pediatric care coverage of children RNM members

	Međimurje [N=404]	Northern Croatia [N=118]	Zagreb and its sur- rounding area [N=89]	Central Croatia [N=94]	Slavonia [N=119]	Istria and Primorje [N=77]	Total [N=901]	Signifi- cance	Effect size [C]
Percentage of children vaccinated against infectious diseases	95.0	97.5	96.6	97.9	95.0	94.8	95.8	0.71	
Percentage of children registered with a pediatrician	97.3	94.1	100.0	95.7	93.3	97.4	96.4	0.08	

There is no prevention: “They bring the children when they are sick, but prevention is very poor.”

Often, healthcare professionals recognize the RNM’s efforts to take care of their own health and the problem of not understanding the importance of disease prevention.

- *Well, they care a lot about their health, but prevention has not broken the dead-lock... They give birth mainly in the hospitals. They no longer give births at home. They bring the children when they are sick, but prevention is very bad. [KNF, Varaždin County]*

TABLE 42. Comparison by type of settlement: vaccination coverage and pediatric care coverage of children RNM members

	Separated from a town or village [N=474]	On the outskirts of a town or village [N=125]	Within a town or village [N=78]	Dispersed across a town or village [N=224]	Total [N=901]	Significance	Effect size [C]
Percentage of children vaccinated against infectious diseases	94.5	99.2	97.4	96.0	95.8	0.96	
Percentage of children registered with a pediatrician	96.2	96.8	96.2	96.9	96.4	0.11	

The vast majority of children have been vaccinated against infectious diseases and have been registered with a pediatrician. Given the generally small number of exceptions, the variance of these two variables is small, so it is not surprising that neither the region of residence nor the type of settlement is found to be significant predictors. Vaccination coverage is very high compared to the vaccination coverage of Roma children in the surrounding European countries and is on a par with the vaccination coverage of the non-Roma population from these areas.⁸⁴ It can be concluded that, according to this indicator, the set goal has been largely achieved. The situation is even better when it comes to pediatric care, which covers almost the entire child population.

How pediatricians perceive the Roma population: “They take care of the children, but they only go to the doctor when the child is really very ill.”

Healthcare professionals in the analyzed counties comment on the high vaccination coverage of children, regular pediatric check-ups, care for the health of young children, but also recognize certain problems related to the culturally specific pattern of health of RNM members. They cite examples of patients coming for medical examinations only when the symptoms of the disease become more severe and state that the prevention of the disease is poorly represented in the RNM.

84 Mihailov, Dotcho [2012] *The health situation of Roma communities*. Op. cit.

- *From the newborn age, they come regularly for vaccinations. If they don't come, the pediatricians give me a notice, I deliver that notice to them and they call back regularly. Here, the vaccination coverage is basically 99.9%. [KNF, Sisak-Moslavina County]*
- *Whatever family doctors or pediatricians recommend, they get it and, if necessary, buy it for their child. Doesn't matter if it's some kind of syrup or something. For example, when we visit them for umbilical cord care, they have everything ready, while someone else who is not Roma, does not necessarily buy it immediately. But they have everything for the child, everything separated, everything ready... [KNF, Osijek-Baranja County]*
- *I can't say they don't take the kids to the pediatrician or for a checkup, but they kind of wait to see how the disease will develop and then more complications can occur in terms of those diseases. So, from the very beginning, some diseases that might be better prevented end up with hospitalization more often because things get complicated. [KNF, Bjelovar-Bilogora County]*
- *...another problem at the national level and another specific one in that population is that they go to the doctor when the child is already seriously ill. So, they don't go for preventative checkups, at least not the way they should despite having the option like all other children. [KNF, Koprivnica-Križevci County]*

TABLE 43. Comparison by region: regularity of gynecological examinations of women RNM members

	Međimurje [N=142]	Northern Croatia [N=34]	Zagreb and its surround- ing area [N=61]	Central Croatia [N=55]	Slavonia [N=85]	Istria and Primorje [N=27]	Total [N=404]	Signifi- cance	Effect size [η^2]
Percentage of women who have had a gynecological examination in the last 12 months	52.1	50.0	31.1	52.7	50.6	44.4	48.0	.55	
The percentage of women who have performed the so-called pap smear in the last 12 months	30.2	37.9	22.8	42.6	49.4	37.0	36.1	.44	

Reasons for not going to the gynecologist: “If she goes to the gynecologist, she is pregnant!”

When it comes to undergoing regular gynecological examinations, there were problems related to the feeling of shame of RNM patients and problems in communication with doctors due to lack of understanding of medical jargon and technical terms. The problem of community stigmatization is also present. Namely, visits to

the doctor and gynecologist are not a matter of personal choice and are not organized in privacy. The extended family and community are actively involved in addressing health-related issues and making value judgments about desirable and undesirable behaviors concerning health and disease.

- ... Perhaps this irresponsibility stems in part from shyness because a lot of women are reluctant to go to the gynecologist. Some because of misunderstanding, thinking they will just look at the doctor and won't understand anything. That's how complications are created; someone has problems with childbirth, someone has problems with a child, someone has problems with a tumor. For now, as far as the Roma settlement is concerned, the hygiene is really OK... [RNM representative, Primorje-Gorski Kotar County]
- The problem with us is that women do not go to a female doctor, gynecologist. It's horrible. It's not allowed. If she goes to the gynecologist at the age of 15-16, then she is pregnant. Even when they are pregnant, they don't go to the gynecologist regularly. This is a big problem... [RNM representative, Primorje-Gorski Kotar County]

TABLE 44. Comparison by type of settlement: regularity of gynecological examinations of female RNM members

	Separated from a town or village [N=168]	On the outskirts of a town or village [N=78]	Within a town or village [N=40]	Dispersed across a town or village [N=118]	Total [N=404]	Significance	Effect size [C]
Percentage of women who have had a gynecological examination in the last 12 months	50.0	52.6	55.0	39.8	48.0	0.91	
The percentage of women who have performed the so-called pap smear in the last 12 months	30.9	50.0	43.6	31.3	36.1	0.20	

Despite the doctor's recommendations, almost half of female RNM members did not undergo a gynecological examination during the last 12 months, and more than two-thirds of them did not have the pap smear performed. Such a tendency is present everywhere, regardless of the region and type of settlement. However, the frequency of gynecological examinations increases with age and to some extent with education and socioeconomic status. The association with age probably reflects the repeatedly confirmed finding that RNM members go for check-ups only when their health is impaired, and they rely less on prevention.

TABLE 45. Correlation between some sociodemographic characteristics and regularity of gynecological examinations of female RNM members

	Age	Education	Basic household equipment	Adequacy of housing
Regularity of gynecological examinations	-0.36	0.11	0.00	0.03
Regularity of performing the so-called pap smear	-0.17	0.06	0.18	0.02

* Statistically significant correlations are printed in bold.

3.1.8.4. Use of and satisfaction with healthcare services

Among RNM members, the inability to cover costs is often cited as a reason for the unavailability of a medical service or medicine. Almost two thirds of households have encountered such a situation, and this applies equally to all regions and types of settlements. RNM members of a better socioeconomic status are only slightly less often exposed to it.

The decision not to contact the doctors, apart from financial reasons, was, as the participants say, motivated by a number of other reasons. Some of them are more objective, like the distance, others are subjective, like waiting for the problem to go away on its own. For some reasons, such as the expressed lack of time, it is difficult to estimate the share of both. Although there are some differences between regions and types of settlements in the frequency of citing individual reasons, the number of respondents in each subcategory does not allow us to know with certainty whether the difference is real or merely due to random fluctuations. The same is true for correlation findings, which should serve as a guide in this case, because only a correction due to the number of comparisons would indicate correlations that probably exist at the population level.

Fear of the hospital: “How will it go and how will they manage without me?”

Interviewees express fear of the hospital and the outcome of the surgery, but also fear that the family will not be able to cover the basic cost of living while one family member is in the hospital.

- *Well, most people go to the family doctor, for example, when they need to solve something... But when they have to go to the hospital, then there is a problem, as they fear the outcome of the surgery. Will it be positive or negative, will some consequences remain, maybe even the financial inability to buy food, how will the family live at home if I am in the hospital... [RNM representative, Brod-Posavina County]*

TABLE 46. Comparison by region: percentage frequency and reasons for not using healthcare services in case of need

	Medimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surround- ing area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C]
During the last 12 months, the household could not afford to pay for medicine or medical services	71.5	60.6	35.6	38.7	74.3	63.2	61.5	p<0.01	0.25
They did not contact a doctor in the last 12 months even though they needed medical help	28.8	19.2	24.8	25.9	33.1	30.0	27.8	0.34	
Financial reasons	26.7	28.6	7.7	10.7	22.9	5.6	20.0	0.09	
Waiting list	3.6	7.1	3.8	0.0	28.8	11.1	10.0	p<0.01	0.34
Lack of time	9.6	14.3	3.8	3.6	35.3	16.7	15.0	p<0.01	0.31
Too long of a distance	18.3	21.4	3.8	17.9	14.9	5.6	14.9	0.40	
Fear of the doctor	1.2	21.4	0.0	7.1	22.4	5.6	8.3	p<0.01	0.32
They waited to see if it would go away on its own	12.2	7.1	3.8	14.3	37.5	0.0	15.7	p<0.01	0.32
They did not know of a good doctor	1.2	0.0	3.8	3.6	8.5	0.0	3.3	0.28	
Refused the treatment	1.2	0.0	3.8	0.0	12.5	5.6	4.2	p<0.05	0.23
Did not have health insurance	3.6	21.4	3.8	7.1	4.3	5.6	5.6	0.17	
It is not common to go to the doctor for such problems	0.0	0.0	0.0	0.0	2.1	5.6	0.9	0.28	
They were ashamed	1.2	0.0	3.8	0.0	6.4	0.0	2.3	0.35	

TABLE 47. Comparison by type of settlement: percentage frequency and reasons for not using healthcare services in case of need

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C]
During the last 12 months, the household could not afford to pay for medicine or medical services	67.4	71.9	59.1	46.8	61.5	p<0.01	0.25
They did not contact a doctor in the last 12 months even though they needed medical help	28.3	30.9	33.3	23.4	27.8	0.27	
Financial reasons	28.0	16.3	12.5	11.3	20.0	0.05	
Waiting list	4.1	13.6	20.0	12.7	10.0	0.05	
Lack of time	11.3	20.9	20.0	14.5	15.0	0.44	
Too long of a distance	21.9	11.6	4.2	9.6	14.9	0.06	
Fear of the doctor	4.2	20.9	12.0	3.8	8.3	p<0.05	0.24
They waited to see if it would go away on its own	10.4	23.3	20.8	17.0	15.7	0.22	
They did not know of a good doctor	1.0	9.3	0.0	3.8	3.3	0.06	
Refused the treatment	2.1	9.3	0.0	5.7	4.2	0.16	
Did not have health insurance	5.2	4.7	4.2	7.7	5.6	0.89	
It is not common to go to the doctor for such problems	0.0	2.3	4.2	0.0	0.9	0.17	
They were ashamed	1.0	4.7	4.2	1.9	2.3	0.55	

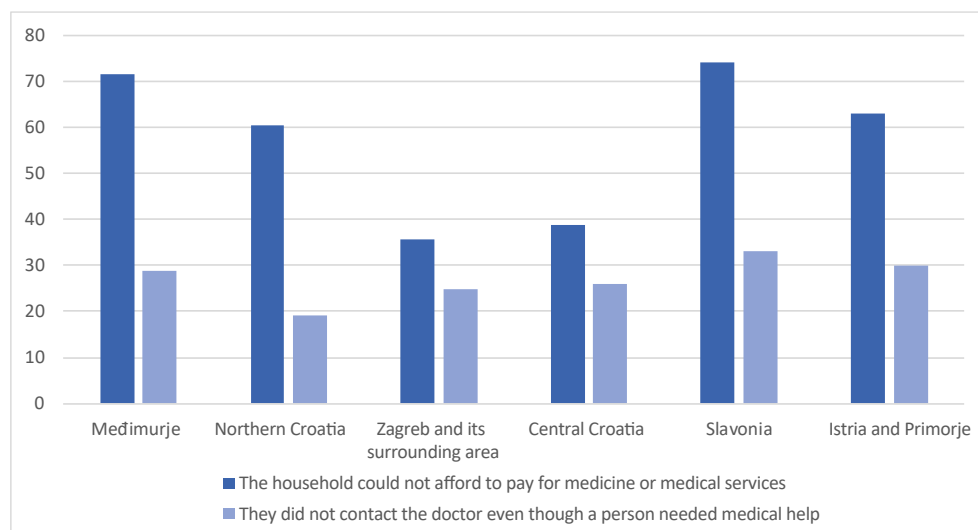


FIGURE 20. Percentage of households in which, during the last 12 months, despite the need, a doctor was not contacted, a medical service was not provided nor was a medicine acquired

The concept of health from the perspective of RNM representatives: “You go to the doctor at the last minute, when the disease has progressed.”

A number of statements by representatives of the Roma community point to a specific, culturally conditioned concept of health. Health is a condition characterized by the absence of disease, and disease prevention is not widely accepted as an important factor in maintaining one’s health. The need for health care is recognized when the disease does not go away on its own, when the symptoms of an acute disease are so severe that the person becomes incapable of routine activities due to injuries that cannot be treated without professional help or when traditional approaches to treatment within the family do not produce good results.

- *...with the Roma, there is one crazy rule, until something appears, they don’t need a doctor. Only when a disease appears, you go to the doctor. [RNM representative, City of Zagreb]*
- *...there is also the fact that our Roma refuse treatment very often. It’s all the same story, I’m not going to the dentist today, it will go away on its own. We don’t take enough care of ourselves. I am 36 years old and at that age you become a granny, a grandpa at the age of 36, at the age of 40 you are already an old man. But in fact, they feel that way... [RNM representative, Osijek-Baranja County]*
- *When there is a severe wound or something, when the wound can no longer be closed, then they go to the doctors. They don’t take care of themselves. [RNM representative, Brod-Posavina County]*

- ...although, no one likes to go to the doctor. Neither Roma nor non-Roma, who likes to go to the doctor?! They go when it's too late. Well, they don't talk to anyone, they suffer to a certain extent, but then they call either an ambulance or ask someone to take them to...to the doctor. But we have that health insurance and mostly go, but really, no one likes a doctor and I mostly avoid doctors as much as possible. [RNM representative, Osijek-Baranja County]
- You go to the doctor when you have to ... when tea and grandma can't help, then you go to the doctor. [RNM representative, City of Zagreb]

TABLE 48. Correlation between some sociodemographic characteristics and reasons for not contacting a doctor in case of need of RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
During the last 12 months, the household could not afford to pay for medicine or medical services	0.00	-0.02	0.00	-0.03	-0.08
They did not contact a doctor in the last 12 months even though they needed medical help	0.07	0.10	-0.10	-0.05	-0.04
Financial reasons	-0.01	-0.13	-0.02	-0.09	-0.08
Waiting list	-0.04	0.07	0.01	0.09	-0.14
Lack of time	0.11	0.01	-0.09	0.13	-0.17
Too long of a distance	0.15	-0.06	-0.14	-0.15	-0.01
Fear of the doctor	0.06	0.11	-0.25	-0.05	-0.08
They waited to see if it would go away on its own	0.09	0.00	0.04	0.16	0.01
They did not know of a good doctor	-0.05	0.02	-0.01	0.05	0.00
Refused the treatment	-0.01	0.08	-0.09	-0.10	-0.27
Did not have health insurance	-0.08	-0.07	0.01	-0.17	-0.10
It is not common to go to the doctor for such problems	-0.01	0.03	-0.02	0.02	-0.07
They were ashamed	0.01	0.06	-0.11	-0.05	0.05

* Statistically significant correlations are printed in bold.

Residents of some regions and types of settlements differ in terms of the frequency of use of certain medical services, such as emergency medical care, hospital admission or specialist examination. However, it can be assumed that these differences are based on sociodemographic characteristics that have a much stronger impact on the need to seek help. Logically, the most important determinant here is age. Older generations are much more likely to need medical attention, examinations and hospital admissions. Women also need medical care more often, probably due to pregnancy and childbirth. On the contrary, persons with a higher level of education are less likely to use all forms of medical care, probably due to better investment in their own health throughout their lives before the need for emergency care or hospital treatment arises.

Reasons for not going to the doctor: “A different world and a long journey for a brief examination.”

The study further noted non-attendance of medical examinations despite the need, due to feelings of discomfort and insecurity caused by staying outside the community, especially in healthcare facilities. Other reasons are the experience of discrimination while waiting for the examination, as well as a great organizational and financial effort to go to the examination that does not necessarily meet the expectations or needs of RNM patients.

- *...the other day I talked to a gentleman whose back hurts and I asked him why he doesn't go to the doctor...“no, I can't, I don't feel like it,” “so what?”, “when I come there, it's as if I came... somewhere I don't feel comfortable” [...] all of us, we always somehow try something with some folk remedies, somehow we don't like going to the doctor... people don't like to go... they say, I sit there for five hours in the waiting room, it seems we are always second in line... our people live mostly far away, imagine, they have to spend the whole day for one examination that lasts 15 minutes, maybe that's why they don't go... [RNM representative RNM, Osijek-Baranja County]*

TABLE 49. Comparison by region: doctor visits, emergency services, hospital stays and specialist examinations

	Medimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surround- ing area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C. η^2]
Percentage of persons who have used emergency medical services at least once in the last four years	40.1 %	30.1 %	62.5 %	37.4 %	41.7 %	51.7 %	43.0 %	p<0.01	0.20
Average satisfaction with the emergency medical service [1–5]	4.4	4.0	4.0	4.1	3.6	4.1	4.1	p<0.01	0.08
The average number of visits to a general practitioner and family doctor in the last four years	16.0	15.3	39.0	17.5	22.0	27.5	20.7	p<0.05	0.07
Average satisfaction with the work of general practitioners and family doctors [1–5]	4.1	4.0	4.2	4.4	3.8	4.3	4.1	p<0.05	0.07
Percentage of persons who have been hospitalized at least once in the last four years	45.6 %	37.5 %	62.3 %	39.3 %	47.6 %	42.4 %	46.4 %	p<0.01	0.18
Average number of specialist examinations performed in the last four years	2.8	1.5	4.1	4.6	4.0	5.3	3.5	0.12	
Percentage of persons who were last examined by a dentist in the last 12 months	38.9 %	38.4 %	32.1 %	36.3 %	37.8 %	40.0 %	37.4 %	p<0.01	0.25

How to increase the accessibility of medical services: “It would be desirable to organize mobile clinics.”

RNM representatives advocate the arrival of healthcare professionals to the settlements. They recognize the value of ambulances coming on call, so they believe that it is possible to organize mobile clinics based on a similar principle, which would provide basic health examination services in Roma settlements on a monthly basis.

- *Just like an ambulance, those vans, we should have those mobile stations. It would be very nice if they went to a Roma settlement at least once a month, to measure blood pressure, because we have a lot of heart attacks, unfortunately, lately it happens even to 20-something year-olds... Or if they said, come once a month by age groups. Or if they had some free check-ups for both men and women... [RNM representative, Međimurje County]*

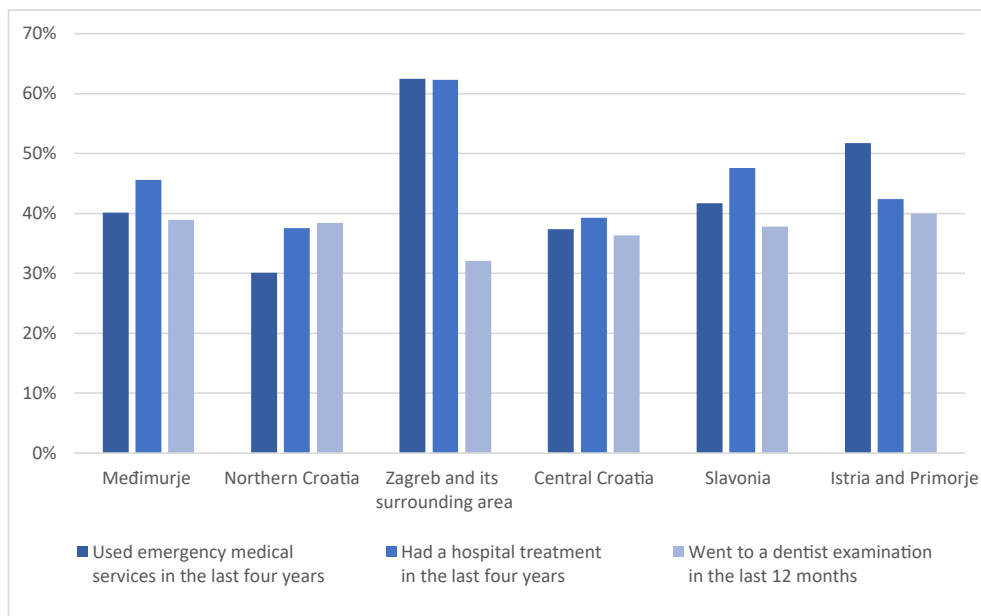


FIGURE 21. Percentage of persons who used different medical services in the previous period by region

TABLE 50. Comparison by type of settlement: percentage frequency and reasons for not using healthcare services in case of need

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C, η^2]
Percentage of persons who have used emergency medical services at least once in the last four years	41.0 %	45.7 %	51.4 %	41.3 %	42.9 %	0.11	
Average satisfaction with the emergency medical service [1–5]	4.4	3.8	4.3	3.8	4.1	p<0.05	0.05
The average number of visits to a general practitioner and family doctor in the last four years	16.0	21.0	28.7	25.6	20.7	0.28	
Average satisfaction with the work of general practitioners and family doctors [1–5]	4.2	3.8	4.2	4.2	4.1	0.89	
Percentage of persons who have been hospitalized at least once in the last four years	45.9 %	44.2 %	48.6 %	47.3 %	46.3 %	0.78	
Average number of specialist examinations performed in the last four years	2.6	3.8	5.6	4.1	3.5	0.42	
Percentage of persons who were last examined by a dentist in the last 12 months	36.9 %	41.4 %	36.2 %	36.0 %	37.4 %	p<0.01	0.23

They prefer to go to the emergency room: “Through the emergency room they get completely everything.”

RNM members sometimes prefer to go to the emergency room than to the family doctor or pediatrician. They interpret this pattern of behavior as a consequence of the practicality and pragmatism of RNM members who have experience that a diagnostic service and treatment recommendations can be obtained more quickly and easily through the emergency health care system.

- *...but today children really have to be registered with a doctor, have their own way of providing their health care, but it is easier for them to go... to the emergency room through the unified emergency room, because they get completely everything done. [KNF, Međimurje County]*

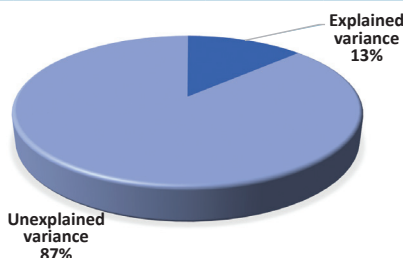
TABLE 51. Correlation between some sociodemographic characteristics and different aspects of the medical services usage by RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
Frequency of emergency medical care usage	0.07	0.17	-0.12	0.00	-0.07
Satisfaction with the emergency medical service [1–5]	0.00	0.04	-0.01	-0.13	0.05
Number of visits to general practitioners and family physicians in the last four years	0.08	0.22	-0.15	0.10	-0.06
Satisfaction with the work of general practitioners and family doctors [1–5]	0.06	0.05	-0.05	0.02	0.03
Frequency of hospitalizations	0.19	0.13	-0.14	0.00	-0.09
Number of specialist examinations performed in the last four years	0.08	0.13	-0.05	0.07	-0.10
Time passed since the last visit to the dentist	-0.06	0.01	-0.14	-0.20	-0.10

*Statistically significant correlations are printed in bold.

TABLE 52. Predictors of the use of medical care and services among RNM members

Predictors	Beta	P		R	R ²	R ² change	Significance of change
Gender	.15	.00	Block 1	0.35	0.13	0.13	0.00
Age	.23	.00	Block 2	0.37	0.14	0.01	0.15
Education	-.09	.02					
Basic household equipment	.12	.01					
Adequacy of housing	-.15	.00					
Distance from the health center	.00	.99					
Pollution	.08	.03					

**FIGURE 22.** Percentage of variance in the use of medical care and services among RNM members explained by predictors

Medical care and services, taken together in a composite variable, are used slightly more by older persons, more often by women and less educated persons with poorer living conditions. As can be seen, the findings are broadly consistent with those indicated by the correlation analysis.

Fear and aversion of going to the doctor: “The Roma do not like doctors.”

The reasons for delaying or not going to a medical examination are numerous. In addition to the unavailability of health care, material deprivation, lack of basic and additional health insurance, the distance of healthcare facilities, especially for specialist medical examinations, there are other important, partly culturally conditioned reasons. The collected qualitative data indicates a certain aversion to going to the doctor in Roma communities, which is conditioned by historical reasons and their specific origin. Going to the doctor is taboo, and RNM members often fear both the disease and the doctor, because doctors diagnose or detect the disease, and healthcare facilities, especially hospitals, are places where the disease is easily contracted and transmitted.

- *...So. I don't know about others, but I know about the Roma. The Roma don't like the doctors because they go to the doctor when they are sick. Even if they had constant health insurance, they would go only when they need to. They will not go to see the doctor for nothing, will they? This is a closed circle, a taboo, doctor this, doctor that. [RNM representative, City of Zagreb]*
- *I don't know. It's something hereditary. I can't explain it. But I can judge based on myself. I don't like doctors. That is something we've been dragging from the past and... It's basically fear of the disease and it's related to doctors. It's exactly that. I have to go to the doctor, and I will catch something there, and similar. [RNM representative, City of Zagreb]*

3.1.8.5. Trust and satisfaction with doctors

The accessibility of healthcare services depends largely on the doctors themselves. Of course, their professionalism and competence are crucial, but when it comes to the Roma population, it is also extremely important to establish appropriate communication, free of prejudice and discrimination. Such idea found its place in the NRIS, which states that one of the objectives in the field of health is to increase the sensibility of healthcare professionals to provide services to RNM members and improve communication with them. Trust in doctors is a concept that includes both competence and an appropriate approach.

The trust of RNM members in doctors, regardless of the region and the type of settlement in which they live, is extremely high. On average, they evaluate their competencies and professionalism as very good. Older persons and those with a lower level of education have slightly more trust.

How to approach RNM members: “The Roma either accept you or do not accept you.”

RNM representatives have concrete proposals for improving health based on raising the level of health literacy. They suggest that healthcare professionals and educators go to Roma communities making a direct contact and conversation with people given the great value of oral tradition in Roma culture, and talk about topics that are usually avoided in the family due to traditional and cultural beliefs. It is especially emphasized that for the success of educational activities it is necessary to build trust in the Roma community.

- *We should work on prevention, but in what way? In a way that you start talking to people. The Roma don't really care about the written word. It's just a paper to put in the heater, but if you get into contact with them and talk and spread your knowledge and opinions, they will accept that in a positive way. Trust me. They often tell me, we don't know that, we didn't know, nobody told us. But nobody is financing the Roma organizations to address this and do the fieldwork, you know? There could be a team that would hold lectures about, I don't know, needs, pregnancy, unwanted pregnancy prevention, early marriages, maintenance of the marriage cult, which should mean something to everyone – the cult of marriage – how to preserve the marriage, how to prevent a husband from beating, or harassing her or each other. That is, some stories they didn't hear from their grandparents, mom, dad or sister because that is a closed subject. Conducting the fieldwork is not financed by anyone. [RNM representative, City of Zagreb]*
- *...but not everyone can enter the Roma community. You have to know that the Roma either accept or don't accept. Depending on how much they value you, that means, how much they trust you and how much you are present in the community with that trust, you know? It is hard to gain it and easy to lose, people who made mistakes can get a brick to their head, a pole on the back... [RNM representative, City of Zagreb]*

TABLE 53. Comparison by region: trust in doctors

	Medimurje [N=287]	Northern Croatia [N=75]	Zagreb and its surround- ing area [N=105]	Central Croatia [N=109]	Slavonia [N=145]	Istria and Primorje [N=60]	Total [N=781]	Signifi- cance	Effect size [η^2]
1. Doctors generally do their job well.	4.19	4.27	4.22	4.33	3.94	4.13	4.17	0.46	
2. If I need medical assistance, I know I will get it.	4.60	4.44	4.51	4.41	4.32	4.27	4.47	0.68	
3. I trust the healthcare professionals.	4.39	4.24	4.30	4.32	4.05	4.08	4.27	0.41	
4. I have some negative experiences with doctors.	2.11	2.73	2.14	3.29	2.15	2.48	2.37	0.62	
Trust in doctors	4.26	4.05	4.23	3.94	4.03	4.00	4.13	p<0.05	0.02

Note: assessments range from 1 – “strongly disagree” to 5 – “strongly agree”; “Trust in doctors” is a composite variable [see the table in the Appendix].

TABLE 54. Comparison by type of settlement: trust in doctors

	Separated from a town or village [N=339]	On the out- skirts of a town or vil- lage [N=139]	Within a town or vil- lage [N=74]	Dispersed across a town or village [N=228]	Total [N=780]	Signifi- cance	Effect size [η^2]
1. Doctors generally do their job well.	4.21	4.01	4.18	4.21	4.17	0.65	
2. If I need medical assistance, I know I will get it.	4.58	4.33	4.30	4.45	4.47	0.72	
3. I trust the healthcare professionals.	4.39	4.10	4.05	4.28	4.27	0.78	
4. I have some negative experiences with doctors.	2.23	2.31	2.07	2.72	2.37	0.43	
Trust in doctors	4.23	4.03	4.11	4.06	4.13	0.10	

Note: assessments range from 1 – “strongly disagree” to 5 – “strongly agree”; “Trust in doctors” is a composite variable [see the table in the Appendix].

Approximately four-fifths of RNM members surveyed have no negative experiences with doctors. Depending on the issue, the percentage varies from just over half to nearly nine-tenths. What RNM members complain about the most is discrimination related to prolonged waiting for an examination, an experience cited by almost every other respondent. Such experiences are somewhat more frequent in Međimurje. On the other hand, only every tenth respondent complains about the wrong treatment. In general, we could conclude that the respondents have trust in doctors and that only a small number have experienced unprofessional or discriminatory behavior. None of the isolated predictors explain a more significant part of this perception. There are indications that the experience of unprofessional behavior, or at least the ability to perceive it, is more present among members of the RNM who are less materially deprived.

TABLE 55. Comparison by region: negative experiences due to unprofessional behavior of doctors

	Međimurje [N=287]	Northern Croatia [N=75]	Zagreb and its surrounding area [N=105]	Central Croatia [N=109]	Slavonia [N=145]	Istria and Primorje [N=60]	Total [N=781]	Signifi- cance	Effect size [η^2]
1. I had to wait for the appointment longer than other patients.	2.16	1.71	1.48	1.37	1.65	1.62	1.78	p<0.01	0.23
2. The doctor did not want to see me.	1.34	1.29	1.17	1.26	1.28	1.27	1.28	0.14	
3. The doctor was rude to me.	1.35	1.19	1.12	1.19	1.36	1.28	1.28	0.57	
4. The doctor did not understand my health problem.	1.39	1.38	1.26	1.26	1.46	1.50	1.38	0.41	
5. I got the wrong treatment.	1.14	1.13	1.10	1.16	1.15	1.17	1.14	0.61	
6. The doctor or the healthcare professionals did not treat me in a professional manner.	1.31	1.26	1.14	1.25	1.34	1.55	1.30	0.16	
Experience of unprofessional behavior of doctors.	1.45	1.33	1.21	1.26	1.37	1.40	1.36	p<0.01	0.03

Note: evaluations range from 1 – “no, never” to 3 – “yes, multiple times”; “Experience of unprofessional behavior of doctors” is a composite variable [see the table in the Appendix].

TABLE 56. Comparison by type of settlement: negative experiences due to the unprofessional behavior of doctors

	Separated from a town or village [N=339]	On the outskirts of a town or village [N=139]	Within a town or village [N=74]	Dispersed across a town or village [N=228]	Total [N=780]	Significance	Effect size (η^2)
1. I had to wait for the appointment longer than other patients.	2.07	1.71	1.58	1.44	1.78	p<0.01	0.13
2. The doctor did not want to see me.	1.33	1.40	1.17	1.18	1.28	p<0.05	0.40
3. The doctor was rude to me.	1.31	1.40	1.29	1.15	1.28	0.12	
4. The doctor did not understand my health problem.	1.38	1.54	1.40	1.27	1.38	0.06	
5. I got the wrong treatment.	1.12	1.17	1.23	1.13	1.14	0.63	
6. The doctor or the healthcare professionals did not treat me in a professional manner.	1.29	1.41	1.42	1.21	1.30	0.06	
Experience of unprofessional behavior of doctors	1.42	1.44	1.35	1.23	1.36	p<0.01	0.03

Note: evaluations range from 1 – “no, never” to 3 – “yes, multiple times”; “Experience of unprofessional behavior of doctors” is a composite variable [see the table in the Appendix].

TABLE 57. Correlations of some sociodemographic characteristics with trust in doctors and experiences with doctors among RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
Trust in doctors	-0.01	0.09	-0.09	-0.02	0.05
Experience of unprofessional behavior of doctors	0.03	-0.04	0.02	-0.03	-0.08

* Statistically significant correlations are printed in bold.

Trust in doctors is higher among the elderly, who, understandably, use medical services more often, but also among the less educated, who, perhaps due to the lack of knowledge, trust them more.

TABLE 58. Predictors of evaluation of unprofessional behavior of doctors

Predictors	Beta	P		R	R ²	R ² change	Significance of change
Gender	.06	.17	First block	0.16	0.02	0.02	0.05
Age	-.03	.50	Second	0.23	0.05	0.03	0.01
Education	.02	.73					
Basic household equipment	-.02	.65					
Adequacy of housing	-.08	.07					
Distance from the health center	-.06	.16					
Pollution	.10	.02					
Healthy diet	-.01	.87					
Unhealthy diet	.01	.89					
Alcohol consumption	.13	.00					
Smoking	-.07	.13					
Drug or opiate consumption	-.02	.69					
Healthy habits	.10	.03					

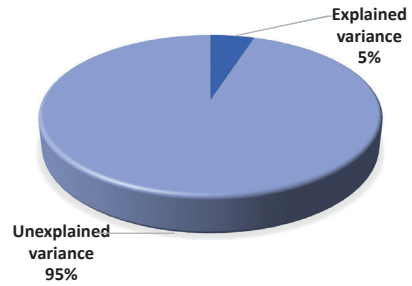


FIGURE 23. Percentage of variance in evaluation of unprofessional behavior of doctors explained by predictors

Note: sociodemographic, socioeconomic and locational predictors were entered in the first block of hierarchical regression analysis, while predictors related to healthy or unhealthy habits were entered in the second block

The perception of unprofessional behavior largely remains unexplained by predictors involved in regression analysis. Even significant predictors do not contribute significantly to the explanation of variance, suggesting that situations of distrust towards doctors are not only rare, but also the result of coincidence rather than systemic factors. Persons who consume alcohol to a greater extent, as well as those who invest in their healthy habits, have a slightly worse opinion about medical competencies and professional approach.

Clash of cultures: “If we want to make progress, we need to understand their priorities.”

Interestingly, healthcare professionals also recognize the problem of their insufficient cultural competence in their daily work with the RNM and the prejudices they have towards each other, both RNM patients and doctors from the majority population.

- *...and, in fact, somehow, I still have that first question about the relationship hanging in the air. My impression, after working very intensively with the Roma population for 20 years as a school doctor, is that there are still many prejudices on both sides, which stem mostly from being unfamiliar with the situations and customs of both. My experience is that whenever I try to force something that is culturally closer to the way we function and are raised, it doesn't work*

well. If we want to make progress, we have to understand what their priorities are, how they work, what does their culture determine. I can give advice to a girl who is 17 years old in the way I would advise my daughter, but she grows up according to completely different customs and principles, which can be seen in our county as well... [KNF, Međimurje County]

3.1.9. Health of persons with disabilities

RNM members with disabilities are a vulnerable group both by nationality and by disability. Therefore, an NRIS goal pays special attention to them. In this section we will look at possible critical points in the health care of such persons who are both more exposed to diseases and have difficult access to the healthcare system.

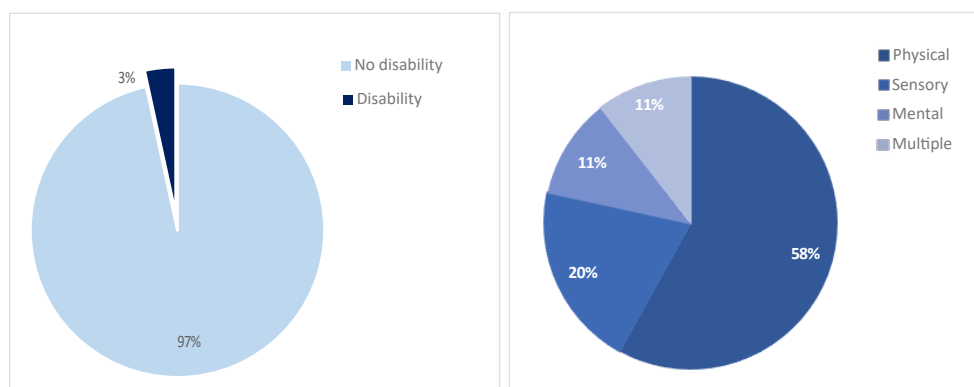


FIGURE 24. The share of persons with disabilities in the sample and their distribution according to the nature of the disability

Given that the sample included 162 persons with disabilities [PWDs], the data that we will briefly present can only be considered indicative. The heterogeneity of PWDs and their needs should be added to this, which further complicates making universal conclusions.

Approximately two-thirds of persons with physical disabilities are male, while women predominate among those with mental disabilities. Compared to the entire Roma population, PWDs are somewhat older, especially persons with multiple disabilities. It was found that physical disabilities do not, on average, constitute an obstacle to an education similar to that of the entire Roma population, but all other categories of PWDs have a poorer education, especially those with mental disabilities.

PWDs live in slightly poorer socioeconomic and living conditions compared to the already poor RNM population, which further complicates their situation. Persons with sensory disabilities are concentrated in the Međimurje region and in a locality separated from the village or town, while other PWDs are not concentrated in any single region or locality.

The general health status of PWDs is significantly lower than the health of the rest of the Roma population [$p < 0.01$; $\eta^2 = 0.09$], and it is especially impaired in those with multiple disabilities. Understandably, they visit doctors much more often, usually several times a month, while in the rest of the Roma population there are about a third of such regular users of medical services.

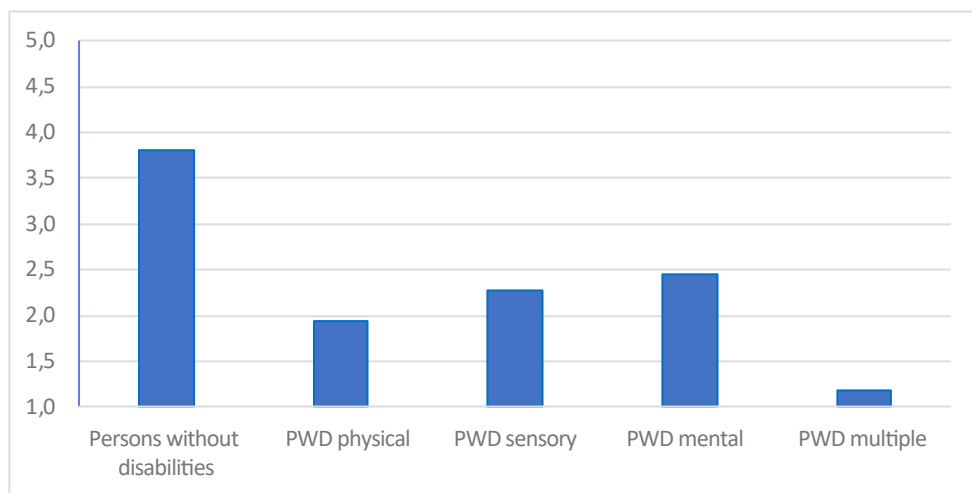


FIGURE 25. Evaluation of the general health status of RNM members with and without disabilities

Their health is also affected by a number of other diseases to which they are more susceptible than the rest of the population, probably due to their slightly older age.

What makes everyday life especially difficult for such people is the distance from medical care institutions. The distance of the place of residence from key institutions, such as health centers and pharmacies, is not different – it is neither greater nor smaller than the distance that other RNM members have to cross in order to reach them. In the case of the PWD population, however, this is a particularly serious obstacle for two reasons: 1) the frequency of visits to the doctor, which, as we have observed, is much higher than in the rest of the population and 2) the difficulties they have as PWDs in overcoming this distance. For most of these people, walking or cycling is probably not an option, so they depend on personal vehicles or public transport, and many of them probably have to be accompanied by another person when they visit the doctor, which makes access to healthcare services difficult.

3.2 Social welfare

It is difficult to separate health and health care and to look at them without addressing another key issue that threatens the quality of life of RNM members, namely poverty and destitution. For this reason, social welfare is inextricably linked to health issues addressed in the previous chapter, mainly as a means of overcoming material deprivation and scarcity, but also as a means of addressing other issues of social vulnerability that disrupt living conditions and quality of life.

In contrast to the general population, in which reliance on social assistance is a matter on an individual level or the result of current unfavorable circumstances, the Roma population is collectively and chronically socially disadvantaged. For the vast majority of RNM members it is difficult to cover their expenses, while many of them fall into the category of absolute poverty, making them unable to meet even basic living needs. For this reason, social welfare is crucial for helping the Roma population overcome the extremely unfavorable social and socioeconomic circumstances they face. This type of help and support in meeting the life necessities is necessary and essential to improve the quality of life and empower members of the RNM until their fuller integration into society.

3.2.1. Socioeconomic status and living conditions

Previous research found that a large proportion of the RNM lives in poverty, which is why poverty reduction of the Roma population is highlighted as a primary goal of the NRIS. In the current study, we expand the findings of the baseline study and analytically look at possible determinants and predictors of poverty. In this chapter, we will put the focus on describing the subject in relation to some potentially relevant variables such as region, type of settlement and others.

TABLE 59. Comparison of socioeconomic status by region: household income and expenditure, indebtedness, household equipment and adequacy of housing

	Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surround- ing area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [c, η^2]
Average monthly income per member (16+) of the household [HRK]	1070.67	1080.97	1427.19	744.25	901.26	1392.82	1070.39	p<0.01	0.05
Average household expenses last month [HRK]	3307.68	3690.98	4693.42	2984.05	3417.78	4775.45	3642.02	p<0.01	0.05
Percentage of indebted households	26.45	16.73	39.78	37.15	46.68	61.10	34.85	p<0.01	0.25
Basic household equipment	4.36	3.82	7.91	5.63	6.17	6.68	5.44	p<0.01	0.30
Adequacy of housing	3.16	2.96	3.75	3.22	2.62	2.84	3.11	p<0.01	0.07

RNM members from different regions vary according to their socioeconomic status. Those from Zagreb have the highest incomes, better household equipment and a more adequate housing. But because of the higher cost of living, they probably have higher expenses, and more often debt. The lowest monthly income per household member is found in Slavonia, and so is the worst housing, while the poorest level of household equipment is in Northern Croatia. There are also differences at the level of settlement type, but the findings are not consistent enough to indicate that the inhabitants of a particular type of settlement are more deprived than others. As expected, socioeconomic status is clearly positively related to the education level, but the correlations are relatively low.

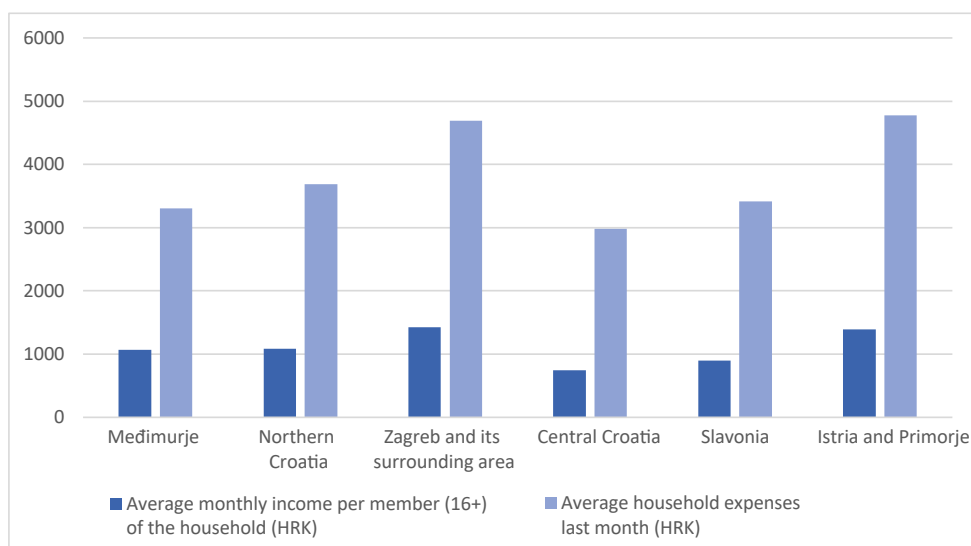


FIGURE 26. Average monthly income and expenditure in RNM households by region

TABLE 60. Comparison of socioeconomic status by type of settlement: household income and expenditure, indebtedness, household equipment and adequacy of housing

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C, η^2]
Average monthly income per member (16+) of the household [HRK]	1033.02	915.27	1327.00	1135.94	1069.79	p<0.01	0.01
Average household expenses last month [HRK]	3247.48	3290.79	3936.73	4411.26	3643.05	p<0.01	0.02
Percentage of indebted households	24.19	39.14	56.74	41.74	34.84	p<0.01	0.22
Basic household equipment	4.25	5.37	6.33	7.06	5.44	p<0.01	0.23
Adequacy of housing	3.09	2.68	2.76	3.50	3.11	p<0.01	0.04

TABLE 61. Correlation of some sociodemographic characteristics with indicators of socioeconomic status of RNM members

	Gender	Age	Education
Monthly income per member (16+) of the household (HRK)	-0.02	-0.15	0.17
Household expenses last month (HRK)	0.00	-0.05	0.06
Household indebtedness	0.01	0.03	0.10
Basic household equipment	0.01	0.12	0.18
Adequacy of housing	0.00	-0.01	0.13

*Statistically significant correlations are printed in bold.

The introduction already noted that almost all members of the RNM live in relative poverty, while a significant number of them fail to meet even basic needs with their income, which puts them in the category of absolute poverty. Such findings are confirmed by the existing research. Although there are certain differences in income levels according to region and type of settlement, it is safe to say that the Roma population in Croatia is relatively homogeneous in its poverty. Slightly larger differences exist in terms of indebtedness, household equipment and adequacy of the housing. In an effort to explain the differences in socioeconomic status with sociodemographic variables, we find a constant generator in education, which slightly but consistently influences the improvement of all aspects of socioeconomic living conditions. More precisely, we could state that education helps members of the RNM to be less poor.

3.2.2 Use and accessibility of social welfare services

Given the prevalence of poverty and social exclusion among RNM members, one of the central goals and priorities for alleviating existing problems is to increase the accessibility and timeliness of social welfare services. In this section, we will look at descriptive data on the use and accessibility of social welfare services in different regions and localities, as well as potential determinants of accessibility [both those related to beneficiaries and to types of services].

However, it is crucial to become aware of the extent of the existing gap between the RNM and the general population⁸⁵ in relying on various forms of social assistance. In the general population, no form of social assistance covers more than 2% of the population of Croatia. The guaranteed minimum benefit is used by approximately 2% of citizens, slightly less than 2% use a one-time benefit or allowance for assistance and care, approximately 1% of the population receives a housing benefit and the same number use the right to subsidize heating costs. About 0.6% of citizens are entitled to personal dis-

85 Croatian Bureau of Statistics [2018] *Statistical Yearbook of the Republic of Croatia 2018*. Zagreb: CBS RoC.

ability benefits, but all other forms of social assistance are extremely rare in the general population. Unlike the general population, most members of the RNM receive at least one form of social assistance, and often more than one at a time. More than half of the Roma population is covered by the guaranteed minimum benefit, and almost the same share is eligible for fuel allowance. Other forms of social assistance are represented to a lesser extent, but all categories are many times more common than in the general population.

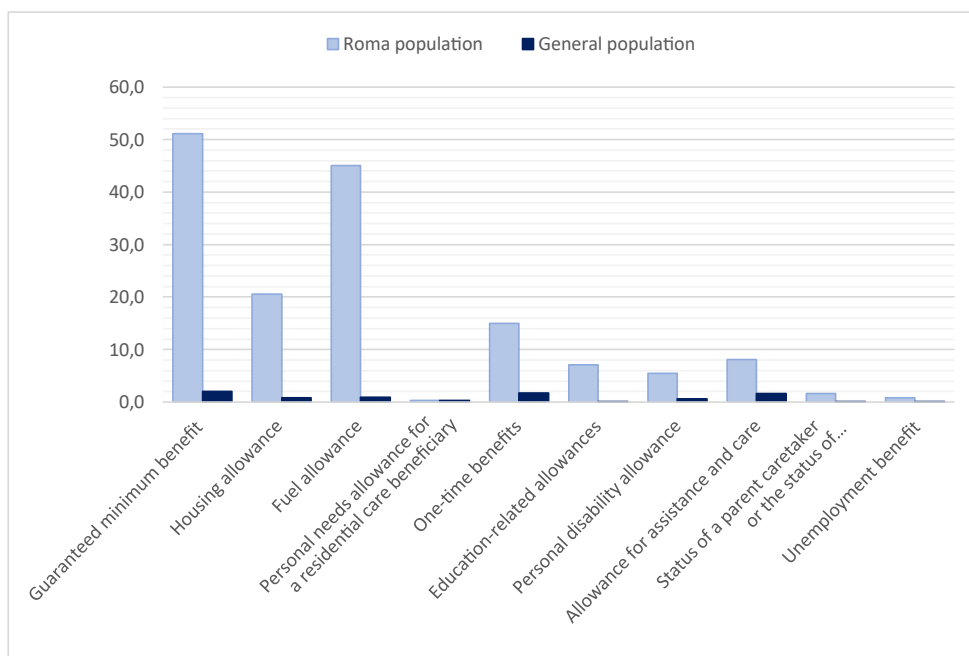


FIGURE 27. Percentage of Roma covered by various forms of social assistance in relation to the general population

TABLE 62. Comparison by region: percentage of RNM members using different forms of social assistance

	Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surround- ing area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C, η^2]
1. Guaranteed minimum benefit	50.35	62.00	32.93	61.17	68.91	22.30	51.09	p<0.01	0.27
2. Housing allowance	13.93	19.66	14.97	11.65	51.31	11.27	20.54	p<0.01	0.33
3. Fuel allowance	44.40	72.78	26.35	27.77	65.54	24.26	45.05	p<0.01	0.33
4. Personal needs allowance for a residential care beneficiary	0.22	0.57	0.00	0.19	0.75	0.25	0.32	0.12	
5. One-time benefits	12.23	19.85	14.97	12.23	10.61	33.58	15.03	p<0.01	0.17
6. Education-related allowances	10.32	4.91	3.59	6.80	4.00	7.35	7.07	p<0.01	0.11
7. Personal disability allowance	5.13	6.43	4.34	3.88	4.99	10.78	5.49	p<0.01	0.08
8. Allowance for assistance and care	11.91	2.46	9.13	1.17	7.62	6.86	8.14	p<0.01	0.14
9. Status of a parent caretaker and status of a caretaker	0.38	0.76	6.89	3.30	0.00	0.49	1.60	p<0.01	0.19
10. Unemployment benefit	0.76	0.00	1.80	2.72	0.00	0.00	0.84	p<0.01	0.10
11. Other form of social assistance	12.89	3.02	2.99	5.83	7.87	7.60	8.33	p<0.01	0.14
Average number of used forms of social assistance	1.50	1.89	1.15	1.31	2.14	1.17	1.55	p<0.01	0.06

Given the persistent and intractable problem of poverty coupled with the social exclusion of the RNM, the NRIS recognizes the improvement of social welfare services as an important means of alleviating this problem. The Strategy thus calls for raising the quality, accessibility and timeliness of the social services provision. In order to achieve these goals, it is planned to strengthen the capacity of social service provision to the Roma population.

The three most commonly used forms of social assistance are: the guaranteed minimum benefit, the fuel allowance and the housing allowance. All of them are used to a very different extent in various regions. The percentage of beneficiaries is in some cases drastically different, varying from only a dozen to more than 70%, depending on the region. The guaranteed minimum benefit is most often used in Slavonia, and least in Zagreb.

In terms of received housing allowance, Slavonia stands out from all other regions, while the right to fuel allowance is mostly used in Northern Croatia. According to the average number of used forms of social assistance, Slavonia stands out, while such assistance is least used by RNM members from Zagreb, Istria and Primorje.

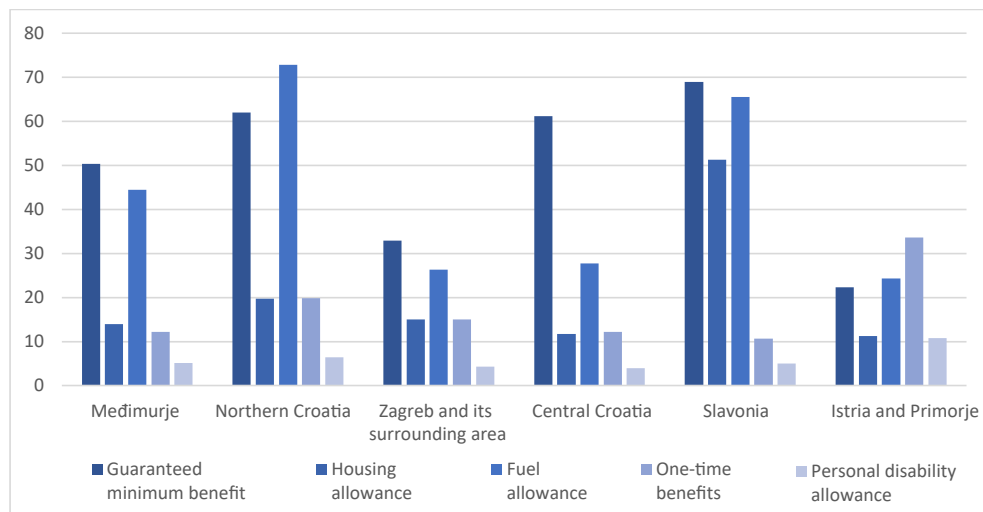


FIGURE 28. Percentage of RNM members using various forms of social assistance

TABLE 63. Comparison by type of settlement: percentage of RNM members using different forms of social assistance

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C, η^2]
1. Guaranteed minimum benefit	54.53	66.46	41.34	39.85	51.09	p<0.01	0.19
2. Housing allowance	13.62	36.93	30.02	18.83	20.53	p<0.01	0.22
3. Fuel allowance	48.21	61.43	39.72	32.26	45.05	p<0.01	0.20
4. Personal needs allowance for a residential care beneficiary	0.33	0.25	1.15	0.07	0.32	p<0.01	0.05
5. One-time benefits	16.23	12.31	22.86	12.19	15.01	p<0.01	0.09
6. Education-related allowances	8.83	6.78	5.31	5.04	7.07	p<0.01	0.07
7. Personal disability allowance	4.23	7.91	6.00	5.84	5.47	p<0.01	0.06
8. Allowance for assistance and care	10.32	7.66	3.70	6.42	8.15	p<0.01	0.08
9. Status of a parent caretaker and status of a caretaker	0.37	1.51	0.46	3.94	1.60	p<0.01	0.12
10. Unemployment benefit	0.65	1.76	0.00	0.88	0.84	p<0.01	0.05
11. Other form of social assistance	11.53	7.04	9.93	3.50	8.32	p<0.01	0.13
Average number of used forms of social assistance	1.57	2.03	1.51	1.25	1.55	p<0.01	0.03

The various forms of social assistance are most frequently used by members of the RNM who live on the outskirts of a town or village, while such assistance is least used by those dispersed across towns and villages. Although the differences are all statistically significant, the effect sizes suggest that they are not particularly pronounced.

TABLE 64. Correlation of some sociodemographic characteristics with the use of different forms of social assistance among RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
1. Guaranteed minimum benefit	0.01	0.05	-0.16	-0.19	-0.20
2. Housing allowance	0.02	0.09	-0.08	0.01	-0.11
3. Fuel allowance	0.02	0.03	-0.17	-0.21	-0.23
4. Personal needs allowance for a residential care beneficiary	0.00	0.00	-0.01	-0.05	-0.02
5. One-time benefits	0.01	0.00	-0.06	-0.08	-0.13
6. Education-related allowances	0.02	-0.03	0.00	0.03	0.03
7. Personal disability allowance	0.00	0.05	-0.05	-0.01	-0.04
8. Allowance for assistance and care	0.00	0.05	-0.05	0.02	-0.03
9. Status of a parent caretaker and status of a caretaker	-0.02	0.01	-0.02	0.09	0.08
10. Unemployment benefit	-0.02	-0.03	-0.01	-0.02	0.01
11. Other form of social assistance	0.01	-0.09	-0.01	-0.13	-0.04
Average number of used forms of social assistance	0.02	0.06	-0.17	-0.14	-0.21

* Statistically significant correlations are printed in bold.

As expected, sociodemographic characteristics are related to the likelihood of using all forms of social assistance. But, unexpectedly, the found correlations are all low. Particularly surprising are the low correlations with indicators of socioeconomic status. An aggregate measure that cumulates different forms of social assistance does not result in greater coherence either. Material deprivation and poor education are the best predictors of the use of social assistance, but the amount of variance explained in such a way is extremely small.

TABLE 65. Predictors of the use of social assistance among RNM members

Predictors	Beta	P		R	R ²	R ² change	Significance of change
Gender	.00	1.00	Block 1	0.27	0.07	0.07	0.00
Age	.02	.20					
Education	-.14	.00					
Basic household equipment	-.05	.02					
Adequacy of housing	-.18	.00					
Distance from the health center	.05	.01					
Pollution	-.04	.04					

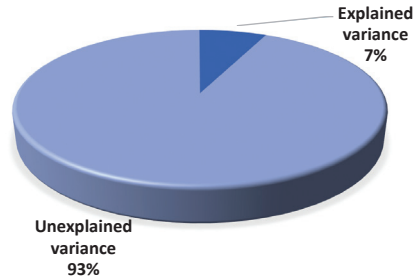


FIGURE 29. Percentage of variance in the use of social assistance among RNM members explainable by predictors

The attempt to identify the factors that best predict a single composite variable that combines all forms of social assistance has proved only partially successful. Namely, a very small proportion of variance is explained, and the factors that contribute the most to prediction are lower education and inadequacy of housing.

TABLE 66. Comparison by region: percentage of RNM members using different forms of social services

	Medimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surround- ing area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C, η^2]
1. Initial social service	2.57	14.37	9.43	14.37	9.49	8.82	7.83	p<0.01	0.17
2. Counseling and assistance	1.91	4.35	2.99	2.72	4.24	4.41	3.03	p<0.01	0.06
3. Home assistance	1.09	1.32	0.60	0.78	0.12	0.00	0.76	p<0.05	0.05
4. Psychosocial support	0.71	0.00	0.15	0.19	1.00	2.94	0.74	p<0.01	0.09
5. Early intervention	0.82	1.32	0.00	0.00	0.25	0.00	0.51	p<0.01	0.06
6. Assistance with inclusion into programs of upbringing and regular education	1.64	1.13	0.45	0.00	0.00	0.49	0.86	p<0.01	0.08
7. Day care	0.66	0.00	0.00	0.19	0.00	1.47	0.40	p<0.01	0.07
8. Accommodation	0.05	0.00	0.00	0.19	0.00	0.25	0.06	0.44	
9. Organized housing	0.05	0.19	0.00	0.00	0.00	0.00	0.04	0.58	
10. Support allowance	2.24	5.48	0.00	0.00	0.00	0.74	1.54	p<0.01	0.14
11. Foster care allowance	0.38	0.00	0.00	0.00	0.00	0.49	0.19	0.07	
12. Child benefit ["child allowance"]	81.65	84.88	54.49	46.02	69.91	63.48	70.79	p<0.01	0.28
13. Accommodation of women victims of violence in safe houses	0.05	0.00	0.00	0.00	0.00	0.25	0.04	0.40	
14. Psychosocial treatment due to domestic violence	0.05	0.95	0.00	0.00	0.00	0.25	0.15	p<0.01	0.08
15. Support in acquiring knowledge and skills for upbringing and parenting	0.00	0.38	0.00	0.00	0.62	0.00	0.15	p<0.01	0.06
16. Other social service	8.68	2.84	5.54	1.75	3.50	6.37	5.77	p<0.01	0.11
Average number of used social services	0.94	1.14	0.68	0.64	0.86	0.84	0.87	p<0.01	0.02

TABLE 67. Comparison by type of settlement: percentage of RNM members using different forms of social assistance

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C, η^2]
1. Initial social service	6.56	9.55	4.85	9.78	7.83	p<0.01	0.07
2. Counseling and assistance	3.16	4.02	3.00	2.26	3.03	0.14	
3. Home assistance	1.44	0.13	0.00	0.29	0.76	p<0.01	0.07
4. Psychosocial support	0.79	1.13	1.62	0.15	0.74	p<0.01	0.05
5. Early intervention	1.02	0.00	0.46	0.00	0.51	p<0.01	0.07
6. Assistance with inclusion into programs of upbringing and regular education	1.67	0.00	0.23	0.29	0.86	p<0.01	0.08
7. Day care	0.56	0.00	1.39	0.07	0.40	p<0.01	0.06
8. Accommodation	0.05	0.00	0.23	0.07	0.06	0.47	
9. Organized housing	0.09	0.00	0.00	0.00	0.04	0.49	
10. Support allowance	3.25	0.00	0.00	0.22	1.54	p<0.01	0.13
11. Foster care allowance	0.33	0.00	0.46	0.00	0.19	p<0.05	0.04
12. Child benefit ["child allowance"]	79.36	70.23	58.43	61.68	70.82	p<0.01	0.19
13. Accommodation of women victims of violence in safe houses	0.05	0.00	0.23	0.00	0.04	0.20	
14. Psychosocial treatment due to domestic violence	0.28	0.00	0.23	0.00	0.15	0.12	
15. Support in acquiring knowledge and skills for upbringing and parenting	0.09	0.63	0.00	0.00	0.15	p<0.01	0.06
16. Other social service	7.62	2.26	6.24	4.74	5.77	p<0.01	0.09
Average number of used social services	0.99	0.86	0.71	0.75	0.87	p<0.01	0.02

TABLE 68. Correlation of some sociodemographic characteristics with the use of different forms of social assistance among RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
1. Initial social service	-0.01	0.01	-0.06	0.05	-0.01
2. Counseling and assistance	0.02	0.03	-0.05	0.02	0.00
3. Home assistance	0.00	0.00	-0.01	-0.02	0.02
4. Psychosocial support	0.02	0.00	-0.02	0.00	0.00
5. Early intervention	0.02	0.00	-0.02	-0.05	0.05
6. Assistance with inclusion into programs of upbringing and regular education	0.01	-0.03	0.00	-0.04	-0.01
7. Day care	0.00	-0.02	-0.01	-0.06	-0.07
8. Accommodation	-0.03	0.00	0.02	0.01	0.00
9. Organized housing	-0.02	-0.02	0.00	0.00	0.01
10. Support allowance	0.01	0.00	-0.05	-0.08	0.07
11. Foster care allowance	0.00	-0.01	0.03	0.02	0.04
12. Child benefit ["child allowance"]	0.00	-0.30	-0.03	-0.12	-0.01
13. Accommodation of women victims of violence in safe houses	0.02	-0.02	-0.01	-0.01	0.01
14. Psychosocial treatment due to domestic violence	-0.01	-0.02	-0.01	-0.05	0.04
15. Support in acquiring knowledge and skills for upbringing and parenting	0.01	-0.02	-0.02	0.00	0.01
16. Other social service	-0.01	-0.07	0.02	0.03	0.07
Average number of used forms of social services	0.00	-0.20	-0.07	-0.08	0.00

*Statistically significant correlations are printed in bold.

TABLE 69. Predictors of the use of social services among RNM members

Predictors	Beta	P		R	R ²	R ² change	Significance of change
Gender	-.01	.75	Block 1	0.27	0.07	0.07	0.00
Age	-.23	.00					
Education	-.10	.00					
Basic household equipment	.00	.93					
Adequacy of housing	.02	.32					
Distance from the health center	.10	.00					
Pollution	.03	.08					

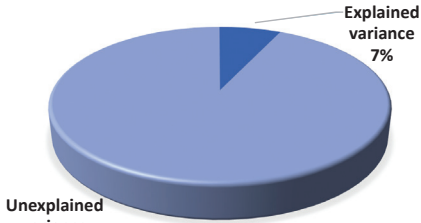


FIGURE 30.
Percentage of variance in the use of social services among RNM members explainable by predictors

Due to the extremely small subsamples, no significant associations with isolated predictors are to be expected, and the existing significant predictors are listed for guidance only. The only exception is perhaps the somewhat higher use of child benefit in settlements separated from a town or village compared to those within a town or village. In general, the only conclusion that can be drawn is that certain forms of social services are almost in no way correlated with the region or the type of settlement, as well as with sociodemographic characteristics. The regression analysis did not indicate a feature that significantly predicts the number of social services that a member of the RNM or his/her family will use.

TABLE 70. Comparison by region: percentage of RNM members using different forms of social assistance and average amounts

	Medimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surrounding area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Significance	Effect size (C, η^2)
Unemployment benefits [%]	6.8	1.5	4.4	5.3	0.1	0.2	4.0	p<0.01	0.14
Amount	1377.1	837.5	1209.5	2759.2	800.0		1566.6	p<0.01	0.36
Pensions [%]	3.5	0.0	6.8	4.5	6.1	13.0	4.9	p<0.05	0.15
Amount	1405.6		2539.1	1487.0	1073.2	1363.4	1497.9	p<0.01	0.21
Social assistance – all forms [%]	93.9	98.1	81.4	82.9	88.5	75.1	88.9	p<0.01	0.21
Amount	2583.1	2592.3	2317.3	2010.5	2488.1	2113.3	2448.3	p<0.01	0.01

TABLE 71. Comparison by type of settlement: percentage of RNM members using different forms of social assistance and average amounts

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C. η^2]
Unemployment benefits [%]	6.0	0.6	1.2	3.6	4.0	p<0.01	0.11
Amount	1330.5	1875.0	2500.0	2014.6	1566.6	p<0.01	0.14
Pensions [%]	3.5	2.3	7.4	8.1	4.9	p<0.05	0.11
Amount	1425.2	1528.2	1622.5	1503.7	1497.9	0.83	
Social assistance – all forms [%]	94.6	90.6	76.7	82.9	88.9	p<0.01	0.20
Amount	2571.3	2331.5	2457.2	2293.8	2449.3	p<0.01	0.01

Given the small number of beneficiaries of individual benefits, the combined indicator of different forms of social assistance is the best indicator of the differences between regions and types of settlements. Northern Croatia and Međimurje are in the lead when it comes to the percentage of beneficiaries and the average amount. Istria has the fewest beneficiaries. Settlements within a town or a village have the lowest number of social assistance beneficiaries. In all other types of settlements, the number of beneficiaries is much higher.

The use of social assistance and its amount depend on socioeconomic status, education and age. Somewhat paradoxically, some forms of social assistance are positively related to better material fittings and quality of housing.

TABLE 72. Correlations of some sociodemographic characteristics with the use of different forms of social assistance and amounts among RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
Unemployment benefits	0.00	-0.02	-0.01	-0.07	0.07
Amount	0.15	-0.14	0.28	0.40	0.06
Pensions	0.00	0.23	0.03	0.09	0.09
Amount	0.00	0.17	0.21	0.22	0.19
Social assistance – all forms	0.01	-0.13	-0.11	-0.12	-0.05
Amount	0.01	-0.14	-0.07	-0.09	-0.03

* Statistically significant correlations are printed in bold.

3.2.3 Social welfare measures aimed at child protection

The NRIS addresses the protection of child well-being in several sections. The measures include improvement of parenting skills, but also the recognition and prevention of the risk of negative phenomena such as domestic violence, sexual exploitation, neglect or human trafficking. In extreme cases, children are removed from dysfunctional families. The survey included issues that affect the problem mostly indirectly.

TABLE 73. Comparison by region: percentages of RNM members who heard rumors that in their vicinity children were removed from parents

	Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surround- ing area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C]
1. No	25.54	25.33	70.09	65.45	37.93	58.33	42.19	p<0.01	0.35
2. Yes, from someone in my family	9.68	18.67	4.67	2.75	4.83	8.47	7.88	p<0.01	0.16
3. Yes, from someone in the neigh- borhood, settlement	61.57	52.00	11.21	15.60	45.21	25.42	41.44	p<0.01	0.38
4. Yes, some- where else	11.23	5.33	6.54	5.50	8.28	5.08	8.17	0.27	
If they heard of such a case, do they know where the children were placed after removal from family?									
1. Fostered in a Roma family	25.36	8.00	0.00	0.92	2.76	3.39	10.77	p<0.01	0.34
2. Fostered in a non-Roma family	27.64	38.67	2.80	4.59	18.62	5.08	18.57	p<0.01	0.30
3. Placed in NGO [e.g. SOS Children's Village Croatia]	1.45	1.33	0.00	0.92	4.14	1.69	1.69	0.18	
4. Placed in a children's home	13.36	10.67	17.76	11.01	30.82	28.81	17.85	p<0.01	0.20
5. Placed elsewhere	0.73	2.67	0.00	0.92	0.00	0.00	0.65	0.23	

The removal of children from families is a problem that most respondents are aware of and have experienced, at least indirectly, through rumors. However, the percentages of those who have actually witnessed such situations in their vicinity vary greatly from region to region. It is not entirely clear whether this is only a perception or the actual situation in the region. Regardless, it is quite certain that people living in isolated Roma

settlements have more frequent opportunities to witness such situations, while those living in dispersed urban or rural areas do not encounter those events as often. Such cases are mentioned least in Zagreb, and most often in Northern Croatia. In settlements separated from a town or village, respondents are more aware and familiar with them, probably due to the large number of Roma families with whom they have contact. Another reason could be the close relations with neighbors and easier dissemination of information in such settlements.

TABLE 74. Comparison by type of settlement: percentages of RNM members who heard that some families in their vicinity had their children taken away from their parents

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C]
1. No	28.48	30.71	52.70	65.65	42.25	p<0.01	0.32
2. Yes, from someone in my family	10.24	6.47	8.22	5.24	7.89	0.16	
3. Yes, from someone in the neighborhood, settlement	57.78	48.20	34.25	15.65	41.37	p<0.01	0.34
4. Yes, somewhere else	9.73	11.51	4.11	5.24	8.18	0.06	
If they heard of such a case, do they know where the children were placed after removal from family?							
1. Fostered in a Roma family	21.28	2.16	5.48	2.62	10.78	p<0.01	0.28
2. Fostered in a non-Roma family	26.52	19.42	15.07	7.86	18.60	p<0.01	0.20
3. Placed in an association [e.g. SOS Children's Village Croatia]	1.83	0.00	6.85	0.87	1.69	p<0.01	0.14
4. Placed in a children's home	12.73	32.37	21.92	14.78	17.75	p<0.01	0.19
5. Placed elsewhere	1.22	0.00	0.00	0.44	0.65	0.36	

TABLE 75. Comparison by region: opinions of RNM members about the accessibility and timeliness of social welfare

	Medimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surrounding area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Significance	Effect size [C]
They were in contact with the employees of the social welfare center	63.5	64.9	52.8	73.4	68.8	69.5	65.0	p<0.05	0.12
Accessibility of social welfare, partly or fully	44.4	75.2	67.7	38.6	48.5	47.2	51.3	p<0.01	0.31
Timeliness of social welfare, partly or fully	78.8	88.5	84.8	70.7	89.0	67.9	80.7	p<0.01	0.25

TABLE 76. Comparison by type of settlement: opinions of RNM members about the accessibility and timeliness of social welfare

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C]
They were in contact with the employees of the social welfare center	62.5	74.1	75.3	59.6	64.9	p<0.01	0.13
Accessibility of social welfare, partly or fully	48.1	43.8	48.5	61.4	51.3	p<0.01	0.15
Timeliness of social welfare, partly or fully	79.9	82.9	81.1	80.7	80.7	p<0.01	0.07

Almost two-thirds of all respondents were in contact with employees of the social welfare center. But only every second respondent thinks that social welfare is at least partly accessible. The situation is somewhat more favorable in terms of timeliness, as approximately four-fifths of beneficiaries consider social welfare to be timely. The highest rating of accessibility is found in Northern Croatia, and the lowest in Central Croatia. Accessibility and timeliness were rated the highest among persons of lower socioeconomic status, who are also more frequent beneficiaries. However, the found correlations are all low.

TABLE 77. Correlation of some sociodemographic characteristics with the use of different forms of social assistance and amounts among RNM members

	Gender	Age	Education	Basic household equipment	Adequacy of housing
They were in contact with the employees of the social welfare center	-0.05	0.08	-0.09	-0.05	-0.15
Assessing the accessibility of social welfare	0.02	-0.05	0.00	0.11	0.07
Assessing the timeliness of social welfare	0.05	0.04	-0.03	0.06	0.08

* Statistically significant correlations are printed in bold.

3.2.4 Satisfaction with and attitudes towards the quality of social welfare

Various discriminatory practices, inappropriate communication coupled with the burdening of social workers with administrative work make social welfare services less accessible, thus having a negative effect on the satisfaction of beneficiaries. The section analyzes the level of general satisfaction, as well as attitudes towards the quality of services provided, along with possible determinants of such attitudes [those related to beneficiaries of services, regional centers and types of services].

The results show that respondents are generally dissatisfied with both social welfare services and the way they are treated by employees. Even though there are no significant differences between regions, the respondents seem to be more critical in Slavonia and show greater satisfaction in Northern Croatia. A lower level of satisfaction is noticeable in settlements on the outskirts of a town or village. Satisfaction with social workers is not related to sociodemographic characteristics, whereas persons living in better conditions are somewhat more satisfied with the amount of social assistance.

Understandably, data on satisfaction with social welfare services reflects a rather subjective perception, and not necessarily the objective reality. The finding that the level of satisfaction with social welfare is low in areas such as Zagreb, where there are highly specialized social workers and more available funds, is rather unexpected. Therefore, it would be desirable to analyze the existing gap between the satisfaction of beneficiaries on the one hand and the resources invested and the competence of staff on the other. One can speculate that dissatisfaction can sometimes be attributed to administrative barriers encountered by RNM members in their efforts to exercise their right to social assistance. On the other hand, social workers find themselves in a difficult situation since they must justify any type of social assistance based on the collected documentation without having the discretion to act according to their own subjective assessment. In addition, we cannot dismiss the assumption that dissatisfaction is sometimes the result of being better informed about one's own rights.

Another problem probably arises during the implementation of protection measures for which the social workers have legal authority. Such measures, for instance protecting women and children against violence, often provoke resistance and resentment. More-

over, they are perceived as something imposed from the outside and contrary to the tradition and cultural norms of the Roma community. Such problems are likely to further undermine trust in social workers and create an unfavorable opinion of them.

TABLE 78. Comparison by region: average satisfaction with social workers and social assistance

	Međimurje [N=1,784]	Northern Croatia [N=529]	Zagreb and its surrounding area [N=655]	Central Croatia [N=510]	Slavonia [N=799]	Istria and Primorje [N=407]	Total [N=4,684]	Signifi- cance	Effect size [C]
How satisfied are you with your relationship with the employees of the social welfare center?	2.61	2.83	2.98	3.03	2.48	2.90	2.74	0.30	
How satisfied are you with the received social assistance and/or service?	2.17	2.63	2.67	2.02	1.91	1.83	2.20	p<0.01	0.04
1. Generally, social workers do their job well.	2.93	2.96	2.38	3.04	2.67	2.73	2.81	0.30	
2. Social workers deal too much with paperwork and too little with people.	4.00	3.77	4.11	3.98	4.38	4.07	4.07	p<0.05	0.03
3. Social workers should perform on-site inspections to follow what do people spend their social assistance money on.	4.05	3.69	3.77	3.59	4.13	3.84	3.91	0.30	
4. Social workers should help unemployed Roma find work.	4.55	4.29	4.42	4.13	4.69	4.57	4.48	p<0.05	0.03
5. Social workers should go out in the field more often and see how some Roma families actually live.	4.65	4.29	4.54	4.13	4.84	4.48	4.55	p<0.01	0.08
6. Due to bad laws, social workers deprive people of their social rights and the social assistance that they need.	4.31	3.60	4.11	4.01	4.60	4.17	4.22	p<0.01	0.07
7. Social workers do not provide services to the Roma in accordance with their actual needs.	4.32	3.69	4.01	4.02	4.46	3.91	4.17	p<0.01	0.07
Satisfaction with social workers	1.87	2.23	1.91	2.17	1.65	1.95	1.92	p<0.01	0.08

Note: assessments range from 1 to 5; "Satisfaction with social workers" is a composite variable [see the table in the Appendix].

TABLE 79. Comparison by settlement type: average satisfaction with social workers and social assistance

	Separated from a town or village [N=2,104]	On the outskirts of a town or village [N=793]	Within a town or village [N=430]	Dispersed across a town or village [N=1,355]	Total [N = 4,682]	Significance	Effect size [C]
How satisfied are you with your relationship with the employees of the social welfare center?	2.79	2.25	2.74	3.02	2.74	p<0.01	0.03
How satisfied are you with the received social assistance and/or service?	2.25	2.01	2.03	2.29	2.20	p<0.05	0.02
1. Generally, social workers do their job well.	3.09	2.41	2.96	2.58	2.81	p<0.05	0.02
2. Social workers deal too much with paperwork and too little with people.	3.94	4.39	3.91	4.11	4.07	p<0.01	0.03
3. Social workers should perform on-site inspections to follow what do people spend their social assistance money on.	3.94	4.07	3.90	3.78	3.91	0.15	
4. Social workers should help unemployed Roma find work.	4.49	4.68	4.42	4.34	4.48	p<0.05	0.02
5. Social workers should go out in the field more often and see how some Roma families actually live.	4.56	4.72	4.61	4.41	4.55	p<0.01	0.03
6. Due to bad laws, social workers deprive people of their social rights and the social assistance that they need.	4.15	4.64	4.19	4.06	4.22	p<0.01	0.04
7. Social workers do not provide services to the Roma in accordance with their actual needs.	4.24	4.41	4.08	3.95	4.17	p<0.05	0.02
Satisfaction with social workers	1.97	1.64	1.98	1.99	1.92	p<0.01	0.05

Note: assessments range from 1 to 5; “Satisfaction with social workers” is a composite variable (see the table in the Appendix).

TABLE 80. Correlation between some sociodemographic characteristics and satisfaction with social workers and social assistance among RNM members [assessments 1–5]

	Gender	Age	Education	Basic household equipment	Adequacy of housing
Satisfaction with the relationship with the employees of the social welfare center	.011	-.027	-.027	.014	.043
Satisfaction with the received social assistance and/or service?	.020	-.078	.030	.013	.173
Satisfaction with social workers	.013	-.066	-.033	-.044	.067

* Statistically significant correlations are printed in bold.

4.

Final considerations and conclusions



4. Final considerations and conclusions

4.1. Health and health care of RNM members

Even though the right to a healthy life is guaranteed by the Constitution, research conducted in Croatia and across Europe has been pointing out for decades that RNM members find it more difficult to exercise this right due to several factors, primarily their social and economic status, and that they are at much greater risk of poorer health than the general population. It is clear that the application of law alone, without a real understanding of the root of the existing inequality and mechanisms for its maintenance, will not contribute to a solution. In other words, the mere proclamation of equal rights will not eliminate deep-rooted inequality.

With the aim of fully integrating the Roma and improving their social status, the Government of the Republic of Croatia has drawn up a core document titled *the National Roma Inclusion Strategy from 2013 to 2020* [NRIS] addressing the issues of health, health care and social welfare. In the area of health and social welfare, clear goals and objectives have been set, indicating the direction of improving the position of RNM members and establishing criteria for monitoring progress in their achievement. The goals and tasks proclaimed by the NRIS also determine the thematic framework of the existing study designed to monitor the progress in achieving the set program and to identify obstacles along the way. However, monitoring of the indicators alone would reduce such a study to a merely clerical job without the ambition to understand the mechanisms of change, and, even more so, the reasons of its absence thus far. Therefore, we adopted the baseline model and observed the level of achievement of goals as a manifestation of deeper causes, trying to overcome the fragmentation of individual indicators and gain a comprehensive insight.

The baseline model [Figure 1] identifies several interdependent levels of RNM health determinants that intertwine and influence health outcomes in a complex, often indirect, way. At the very root of deprivation there are global social factors responsible for the permeated marginalization of the RNM present for decades, such as discrimination and segregation. In our baseline model, we take them as global and distant causes of all proximal causes and adverse health outcomes, such as greater prevalence of disease, onset

of disease at a younger age, and shorter life expectancy. These broad social factors are largely responsible for social exclusion as an overarching construct that combines poverty, lack of education, unfavorable living conditions, and the isolation to which members of the RNM are exposed as a community. The proximal and direct causes of unfavorable health outcomes often lie in the behavior of individuals, in their habits and practices which, however, cannot be viewed separately from the wider social context.

The model would be incomplete without the inclusion of Roma culture and traditions, which perceive health in a specific way. The cultural knowledge of RNM members about health and disease is often in contradiction with the medical perspective, and this may explain the seemingly irrational and contradictory behaviors of RNM members.

In the study, we sought to answer the question of the accomplishment of the NRIS goals and offer recommendations for improving the implementation of the tasks set by the Strategy. In doing so, we sought to offer a broader perspective and a more layered analysis of the observed changes, using existing data on the general population and previous research on the Roma population.

However, special care must be taken when interpreting and analyzing the data. The first reason for this is the demographic incomparability of the Roma and the general population due to significant age difference. The Roma population is much younger, with a higher proportion of children and young people compared to their share in the general population. Therefore, the health picture of the researched population, which is largely based on age-related diseases and conditions, appears to be much better than it actually is. Another limitation is the lack of a clear and appropriate frame of reference. The inability to compare indicators related to the Roma population with identical data simultaneously collected for the general population greatly reduces the range of conclusions. This problem is less pronounced when comparing average values, but immense when attempting to estimate the possible impact of unfavorable socioeconomic and environmental conditions on health. Regression analyses, in which we tried to provide answers to questions about the importance of these factors, strongly underestimate their impact for purely technical reasons. We analyzed data from a relatively homogeneous population which shares a similar level of poverty and material deprivation. The estimates are therefore highly biased, underestimating the impact of all forms of social exclusion and deprivation, and therefore have only an orientational value.

In the context of the overall goal of the NRIS, it was important to evaluate the progress in health improvement of RNM members. The study analyzed the subjective evaluation of RNM health, which included self-reports related to the health of each household member, the incidence of long-term diseases and health-related limitations, the incidence of childhood diseases, the incidence of specific health problems and diseases in the last 12 months as well as women's reproductive health. Self-reports related to healthy and unhealthy habits and the accessibility of healthcare services were also analyzed.

Through our research, we aimed to contribute to monitoring the accomplishment of the set general and specific goals related to the improvement of RNM health in the NRIS, with emphasis on ensuring equal access to health services and implementation of measures and activities related to RNM inclusion at all levels. To this end, the research focused on the analysis of baseline data in relation to a number of relevant variables such as age, region, type of settlement, education, suitability of housing and other factors. Given the complexity and interconnectedness of social and cultural factors that directly or indirectly affect the health of RNM members, the study analyzed three conceptual levels of impact on health, the individual level, the level of community and the wider social context. To the extent permitted by the available data, the impact of social and cultural factors at all three levels was analyzed, taking into account that the mechanisms of action and influence of these factors are both direct and indirect.

The subjective evaluation of the **health status of the interviewed RNM members** on average ranged between good and very good. The subjective assessment of health among the RNM mostly depends on age, education and adequacy of housing. Members of the RNM who are younger, those who completed at least secondary school and live in appropriate housing on average evaluate their own health as better. However, the regression analysis conducted in this study confirmed that most of the variance in subjective evaluation of general health is still explained by age, while adequacy of housing and education show less influence. Chronological age is the most important determinant of subjective health evaluation because it is directly related to the ability to perform daily activities and to the quality of life. It is almost certain that the smaller impact of housing quality and poor education on the subjective perception of health among the RNM is a consequence of the aforementioned homogeneity of the Roma considering general material deprivation, poverty and social exclusion.

Available data from other studies indicate a trend for self-evaluation of RNM health status to be similar to that in the general population. However, this finding must be taken with caution for at least two reasons. First, older age is directly related to the poorer functioning of organs and organ systems that is inevitably accompanying the physiological aging process, and thus the general deterioration of health. Given that the Roma population is significantly younger than the general population, it can be assumed that the existing similarity still hides the poorer general health status of members of the RNM. Second, a subjective assessment of the health status primarily points towards the knowledge or awareness of health, and not necessarily an actual or objective health condition confirmed by diagnostic and clinical procedures. Compared to a survey conducted in 2011,⁸⁶ the number of RNM members who describe their health as poor or very poor has slightly increased. Such result may indicate a negative trend and failure of improving RNM health, but the questionable comparability of samples calls for caution as well as the inability to follow if there is a similar trend in the general population.

86 Mihailov, Dotcho (2012) *The health situation of Roma communities*. Op. cit.

An unfavorable trend, however, was indicated by the frequency of chronic diseases in the Roma population. Compared to the survey conducted in 2011,⁸⁷ the incidence of chronic diseases has increased, and their emergence has shifted towards younger age groups. It was found that the prevalence of long-term diseases in the middle age group of 35 to 64 years is approximately 5–10% higher than the prevalence recorded six years earlier. The findings are particularly alarming for members of the RNM over the age of 45 as it has been found that one in two people of that age suffers from some chronic disease. The gap in relation to the general population has thus deepened further.

The results of the study suggest that not only **age** but also other factors such as **region, type of settlement**, and education are important when considering the **incidence of long-term diseases**. Just as in the health self-evaluation, age is a key determinant of the number of long-term diseases. However, long-term diseases are somewhat more common in Istria and Primorje and in settlements within a town or village, which may be partly due to the slightly older Roma population living there. It is important to note that education is a protective factor against long-term diseases, as concluded in the RNM health model. It is reasonable to assume that a higher level of education implies a higher level of health literacy, as well as a stronger motivation to adopt healthy habits and medical recommendations with regard to disease prevention and health protection.

Among adult RNM members, the most common **health problems and diseases in the last 12 months** are related to spine or chronic back or neck issues, high blood pressure, and cardiovascular problems. These diseases are not equally common in different **regions** or **types of settlements**. However, based on the conducted analyses, it is not possible to distinguish whether the identified differences are a reflection of diverse cultural traditions, customs and habits that are nurtured in certain regions or types of settlements, or the cause of a higher share of some risk categories, primarily elderly.

It seems that cardiovascular diseases are somewhat less common among members of the RNM in Northern Croatia and Međimurje and outside towns and villages. Given that these are regions with the relatively youngest Roma population, such data can be explained at least in part by the age disparity of regions. The same goes for spinal diseases. In addition to **age**, which is a significant predictor in the occurrence of almost all diseases included in the study, education is more important. As mentioned above, it has the role of a protective factor against chronic, especially cardiovascular diseases. Indicators of destitution and poverty, poor household equipment and inadequate living conditions have played a less important role in the emergence of the disease in the last 12 months.

Regression analysis conducted in this study confirmed that **age** is an important and unavoidable predictor of all categories of diseases from which respondents suffered in the last 12 months. As regards diseases of the musculoskeletal system, age is the only significant predictor, while in diseases of the vascular system, age is an extremely dominant factor in increasing the risk of the disease.

87 Ibid.

Education has proven to be a predictive factor only in the case of women's reproductive health, which is a particularly important finding because it confirms the necessity of informing and educating Roma women to improve their health. Socioeconomic, environmental, and locational factors that we assumed to be unfavorable to health and increase the risk of developing at least some diseases, such as those of the respiratory system, did not prove to be significant predictors in this study. However, it should be noted that this finding does not necessarily mean that these factors do not play an important role in the development of the disease, but perhaps only that members of the RNM are equally exposed to them.

Healthy habits, such as attention to hygiene, diet and physical activity are unexpectedly positively associated with diseases of the cardiovascular system, the urinary tract and the reproductive health of women. This does not mean that healthy habits increase the likelihood of these diseases, but rather indicates with reasonable certainty that RNM members begin to consider healthy habits only when they fall ill, even though these habits should otherwise be an integral part of disease prevention.

Comparisons between the Roma and general populations concerning the presence of disease indicate some expected but also inconsistent differences. It is quite clear that the data is veiled by age differences between the two populations, which makes RNM members appear healthier and less susceptible to disease. The observed differences may also be due to the fact that the research takes into account diseases diagnosed by the medical profession which may not have obvious symptoms, so it is not possible to identify the presence or type of disease based on personal experience or the experience of relatives. This, in addition to the stated age differences, could be the reason why the data shows that high blood pressure is more common in the general than in the Roma population. On the other hand, asthma is more common among members of the RNM. It is an example of a disease that commonly occurs in childhood, so that age differences do not play a major role in its frequency. It is accompanied by pronounced respiratory problems, which usually require medical attention that is often urgent. Most other diseases are more present in the general population, most likely as a result of differences in the demographic structure and a higher representation of younger age groups in the Roma population. Coronary diseases and kidney diseases, which are more common among members of the RNM, deviate from this pattern.

The NRIS is especially concerned with the protection of children's health, and one of the most important goals is to reduce the incidence of diseases associated with unsatisfactory hygiene standards or those included in the vaccination program.

In children under the age of 14, the most common **childhood diseases** are the flu, chickenpox, and diarrhea lasting less than 14 days. Certain childhood diseases are more present in certain regions and types of settlements, but, based on the collected data, it is not possible to determine whether the observed differences are a reflection of systemic factors or random statistical fluctuations. When it comes to diseases outside the scope of

the vaccination program, and especially those as common as the flu or diarrhea, it is not possible to conclude whether their higher occurrence is due to poor living conditions or if it is merely a coincidence. However, when it comes to diseases included in the vaccination program, there is a significant link between the likelihood of contracting them and **education and adequacy of the housing**. This finding suggests that the higher incidence of diseases included in the vaccination program is due to lesser vaccination coverage of children from less educated and/or poor families.

Improving the reproductive health of women has been recognized as an NRIS objective, mainly due to the problem of early sexual debut of RNM members and the unfavorable consequences that result from it. The biggest challenges in improving the reproductive health of RNM women are the relatively low frequency of gynecological examinations, teenage pregnancies and abortions. The number of abortions is by far the largest in Zagreb, where it is probably easier to organize one. The number of miscarriages is highest in Slavonia and Istria, and the lowest number, obviously related to the average age, is in Northern Croatia. **Age** is the strongest predictor of the number of births and abortions due to the higher number of pregnancies that can be carried out over a longer period of time during a woman's reproductive life. **Education** is a protective factor against unfavorable outcomes during and after pregnancy, thus showing that mothers with higher levels of education are less likely to have abortions and have a lower incidence of stillbirths and infant deaths. Such findings are probably the result of better care and concern for one's own and the child's health. However, it is possible that pregnant women and young mothers are less educated and have poor socioeconomic conditions and are additionally exposed to unfavorable environmental conditions that adversely affect the fetus or newborn. Such an assumption is supported by correlations between the number of abortions and the **adequacy of housing**.

Numerous studies have proven the devastating impact of domestic violence on women's physical and mental health,⁸⁸ and, given the traditional and patriarchal culture, Roma women are presumably at increased risk of becoming victims of such violence. Indeed, the research suggests a relationship between exposure to violence and general health, as well as a number of diseases: of the cardiovascular system, the musculoskeletal system, the respiratory system, and mental and reproductive health. However, the observed correlation is low and is lost when other predictors are included in the regression analysis. It should be noted that the impact of violence is likely to be greatly underestimated, as is its prevalence in the Roma population. Most members of the RNM state that they have never experienced any form of domestic violence, which primarily indicates the unsuitability of the survey methodology in researching such sensitive topics.

One of the most effective ways to improve health is to adopt healthy habits and reject the unhealthy ones. For that reason, the NRIS states the raising of the level of awareness

88 Ellsberg, M., Jansen, H. A., Heise, L., Watts, C. H. and García-Moreno, C. [2008] Op. cit.; Herrenkohl, T. I., Hong, S., Klika, J. B., Herrenkohl, R. C. and Russo, M. J. [2013] Op. cit.

of responsibility for one's own health as an objective. The results of previous research and research conducted in other countries show that RNM members are more likely to resort to some unhealthy habits compared to the general population. The baseline data study showed that smoking is widespread among RNM members, just as the consumption of unhealthy or low-quality food and drinks. The current study confirms these findings by showing that the number of smokers among RNM members is twice as high as in the general population, while among men this percentage increases by more than half in the 15–24 age category. During adulthood, the percentage of smokers in the Roma population does not fall below 60% among men nor below 55% among women.

The findings suggest that neither the **region** nor the **type of settlement** has a major impact on the different types of addiction among RNM members. Alcohol is consumed to a somewhat greater extent in Northern Croatia and Međimurje, and cigarettes in Northern Croatia and Zagreb. Although less prone to alcohol and nicotine, in Istria RNM members resort more to the consumption of narcotics. **Age** is a slightly more important factor in alcohol and cigarette consumption. In both cases, consumption increases from early youth to middle age and then declines. The observed decline may be due to the earlier mortality of people who consumed alcohol and nicotine excessively during their lifetime, and another possibility is that the consumption of alcohol and nicotine is reduced in old age due to medical recommendations. As expected, a significantly higher percentage of men consume alcohol than women, and they are also more likely to smoke than women. Furthermore, smoking is more common among people with lower education and those of lower socioeconomic status and among residents in lower quality housing.

As in most previous comparisons, one gets the impression that neither the region nor the type of settlement plays a key role in the diet of RNM members, i.e. they do not contribute to a greater extent to a healthy or unhealthy diet. There are certain differences, but they are significantly less pronounced than those between groups that differ in financial status, education or age. **Sociodemographic characteristics** are largely related to the diet of RNM members, especially their **socioeconomic status**.

People of higher socioeconomic status, especially if it is measured by adequate housing, strive for a diet that contains a variety of foods. There are no differences in the quality but in the quantity of the diet, i.e. wealthier RNM members more often consume unhealthy and healthy foods alike. More educated people are also more likely to consume all foods rather than to selectively consume healthier ones. These findings can be at least partially explained by the cultural model of health in Roma communities. Specifically, the Roma associate health and happiness with abundance, and that is why people of higher weight are considered both happier and healthier as body weight indicates health, happiness and material wealth. It is also interesting to note that age is associated with less frequent consumption of unhealthy foods. This finding can be explained by the fact that younger people are less inclined to the traditional concepts of health, happiness and abundance, i.e. they are more willing to accept a healthy diet and lower body weight as a more desirable model of a person's appearance.

Given the multidimensional deprivation of RNM members, especially in the field of material goods, it is to be expected that some of the advocated values will not be realized due to practical obstacles, usually material ones. The results show that it is very important for RNM members to practice healthy habits, hygiene, healthy diet and physical activity. Although such results are valid for all regions, Northern Croatia still differs slightly from other regions due to the slightly lower importance of healthy habits.

The accessibility of health care occupies one of the central places in the NRIS and is also an indicator that reflects the social concern and the seriousness of the intention to improve the position of the RNM. It reflects the degree of marginalization and social exclusion at the same time. Accessibility can be operationalized by a number of indicators. It is perhaps most clearly reflected in the coverage of the Roma population with health insurance, vaccination coverage of children and the frequency of use of healthcare services when needed. The accessibility of healthcare services is influenced by the kindness of the medical staff, the attitudes towards healthcare professionals and especially the **region** in which RNM members live. Unlike urban areas such as Zagreb, pharmacies are only rarely accessible to those who live outside cities and villages, with most of them being in Međimurje. The average distance of a pharmacy varies from less than 3 km in Zagreb and its surrounding area to almost 7 km in Istria and Primorje. It was noted that health and medical assistance do not come to the settlements in Istria and Primorje, so according to this criterion, this region greatly differs from all others included in the sample.

Health insurance coverage was monitored through two indicators that provided mostly consistent findings. First, each household member was asked if they have a valid health insurance. Then a part of the households was additionally asked if there is a person in the household who does not have any form of health insurance. If we assume that there is no more than one person without insurance in households, both data should converge on the same estimate – that the percentage of persons without insurance is approximately 7–8% among RNM members, i.e. that health insurance coverage is 92–93%. Although far from full coverage, it is still a big shift compared to the results recorded in 2011 when the coverage was a modest 82% or even ten percent lower. The lowest coverage is in Northern Croatia, and the highest in Zagreb. As many as a quarter of the surveyed participants state that there is a person in the household who does not have any health insurance, and most of them are in Northern Croatia. The reasons for non-coverage by health insurance are diverse, with not registering with HZZO being most widespread. This is, of course, a generic explanation that combines a number of different justifications. It is also important to emphasize that less educated and poorer RNM members are less likely to have health insurance.

It is very commendable that the vast majority of children have been vaccinated against infectious diseases and registered with a pediatrician. Equally high vaccination coverage was recorded in the survey conducted in 2011, so we cannot say that there are positive developments, but we can conclude that the situation has remained favorable. On the

other hand, almost half of the members of the RNM have not undergone a gynecological examination during the last 12 months, and the so-called pap smear was not performed by more than two-thirds of them. However, the frequency of gynecological examinations increases with age and to some extent with education and socioeconomic status.

Among RNM members, the inability to cover costs is often cited as a reason for the inaccessibility of a medical service or medicine. Almost two thirds of households have encountered such a situation, and this applies equally to all regions and types of settlements. RNM members of a better socioeconomic status are only slightly less often exposed to it. Other reasons for not contacting a doctor are the distance to the health facility, waiting for the problem to go away on its own and lack of time.

Residents of some regions and types of settlements differ in terms of the frequency of use of certain medical services, such as emergency medical care, hospital admission or specialist examination. Older generations are much more likely to need medical attention, examinations and hospital admissions. Women also need medical care more often, probably due to pregnancy and childbirth. On the contrary, people with a higher level of education are less likely to use all forms of medical care, probably because of better investment in their own health throughout their lives before the need for emergency care or hospital treatment arises.

Trust in doctors is generally high among RNM members, regardless of the region and the type of settlements in which they live. On average, they evaluate their competencies and professionalism as very good. Older persons and those with a lower level of education have slightly more trust. Approximately four-fifths of RNM members surveyed have no negative experiences with doctors. What RNM members complain about the most is discrimination related to prolonged waiting for an examination, an experience cited by almost every other respondent. Such experiences are somewhat more frequent in Međimurje. On the other hand, only every tenth respondent complains about the wrong treatment. In general, RNM members trust doctors, and only a small number have experienced unprofessional or discriminatory behavior. The experience of unprofessional behavior, or at least the ability to perceive it, is more present among RNM members who are less materially deprived.

Given the briefly summarized results of the research, it can be concluded that age and education are primarily related to the health picture of the RNM, while the region, type of settlement and other economic factors are of secondary importance. Such a finding, as noted earlier, is largely caused by the nature of the data relating exclusively to the Roma population. Material deprivation, unfavorable housing and living conditions cannot prove to be important determinants of health if according to them respondents are homogeneous. This holds true for the RNM members surveyed, who are, so to say, relatively equal in their poverty. If such analysis included the general population living in better conditions, we would certainly have drastically different findings. Therefore, the findings should be interpreted exclusively as predictors of health **within** the Roma population.

4.1.1. Age

For RNM members, chronological age is the most important determinant of subjective evaluation of health and disease occurrence, and a strong predictor of the number of births and abortions, as well as healthy and unhealthy habits. Considering that age is an important biological factor directly related to poorer functioning of organs and organ systems, greater occurrence of health problems and worsening of chronic diseases, reduced ability to perform daily activities and poorer quality of life, a strong link between age and subjective health evaluation is expected, as well as a link between age and disease in the RNM. It is also an expected finding that age is a significant predictor of the number of births and abortions due to the higher number of pregnancies that can occur in a longer period of time during a woman's reproductive life and that the number of gynecological problems also increases with age, due to the number of births and occurrences of diseases that require medical attention. Age is also an important factor in the acquisition of healthy and unhealthy habits, with alcohol and cigarette consumption increasing from early youth to middle age and declining in old age, most likely due to earlier mortality of people who lived unhealthily or due to chronic diseases and/or application of medical recommendations related to disease course control. An extremely important finding is that younger RNM members are more willing to accept a healthy diet.

The results of the research undoubtedly indicate that in order to achieve the goals of the NRIS aimed at increasing the accessibility of healthcare services with an emphasis on particularly vulnerable groups and raising awareness of responsibility for one's own health, care must be taken to take appropriate measures and activities for each age group of RNM members. For example, older RNM members are extremely vulnerable to long-term and chronic diseases, just as young women are vulnerable in the context of reproductive health. RNM members from younger and middle age groups more often consume addictive substances, which is recognized by both NRIS and AP. This phenomenon needs to be investigated in more detail in order to find an effective way not only to improve preventive action for reducing the prevalence of consumption of all addictive substances, but also to ensure that younger generations of RNM adopt more healthy habits.

Given that the Roma population is significantly younger than the general population, it is necessary to interpret comparisons of subjective health assessment and the frequency of some diseases with extreme caution because it is very likely that similarity between the general and Roma population hides poorer general health of RNM members.

4.1.2. Education

Current research confirms that education is an important factor related to the health status of each household member, the incidence of long-term diseases, unhealthy habits, childhood diseases included in the vaccination program, chronic diseases, and women's reproductive health. Research confirms that education is a systematic protective factor in the health of RNM members and at the same time is closely related to other socioec-

onomic factors that affect health. It is reasonable to assume that a higher level of education implies a higher level of health literacy, as well as a stronger motivation to adopt healthy habits and medical recommendations related to disease prevention and health protection. It should also be kept in mind that education in this research is most often related to the adequacy of housing, which is one of the most important indicators of the socioeconomic status of an individual and a family.

For example, in the case of childhood diseases included in the vaccination program, there is a significant correlation with a lower probability of contracting some of them with **higher education and adequacy of housing**. This suggests that the higher incidence of diseases included in the vaccination program is due to less vaccination coverage of children from less educated and/or poor families. Smoking is more common among people with lower education and those with lower financial status and lower quality housing. **Education** also has the role of a protective factor against chronic, especially cardiovascular diseases and adverse outcomes during and after pregnancy. Members of the RNM with a higher level of education are more likely to perform gynecological examinations, have fewer miscarriages and have a lower incidence of stillbirths and infant deaths, most likely due to better care for their own and the child's health. The observed correlations between the number of abortions and the **adequacy of housing** indicate the possibility that pregnant women and young mothers who are less educated and have poor socioeconomic conditions are additionally being exposed to unfavorable environmental conditions that adversely affect the fetus or newborn.

The results of the research unequivocally confirm the importance of education and the need to improve health literacy among RNM members, especially those with lower levels of education, in order to raise awareness of responsibility for their own health, in line with NRIS and AP goals. It is important to point out that the NRIS also recognizes the importance of increasing the sensibility of healthcare workers as regards the Roma population and improving the communication of the Roma population with family doctors. This implies additional education of healthcare workers and strengthening their cultural health competence to better understand the health needs of the RNM, as well as the specifics of Roma culture related to their understanding of health, prevention and treatment of diseases.

4.1.3. Region and type of settlement

The results of the research indicate the relationship between region and type of settlement with long-term and chronic diseases and certain childhood diseases. However, based on the collected data it is not possible to conclude whether the observed differences are a reflection of systemic factors or random statistical fluctuations. Regardless, the region inhabited by members of the RNM and the type of settlement are closely related to the accessibility of health care. Pharmacies are least accessible in Međimurje and Northern Croatia, as well as in settlements outside towns and villages. Pharmacies are most acces-

sible in Zagreb and Istria and Primorje. A satisfactory finding is that the distance from the health center is fairly uniform in different regions, but the fact that health and medical assistance do not visit the settlements inhabited by RNM members in Istria and Primorje is worrying, which is not the case in other regions. It should also be emphasized that RNM members mostly complain of discrimination related to prolonged waiting for a medical examination, which is most pronounced in Međimurje. These results suggest the need for a deeper understanding of regional specifics in access to health care and the application of positive regional measures and activities in regions where there are problems in access to health services or the experience of discrimination against RNM patients.

4.1.4. Socioeconomic factors

The conducted multivariate analyses did not confirm the importance of socioeconomic indicators of poverty, marginalization, discrimination, social exclusion and other unfavorable factors in the incidence of analyzed diseases and healthy and unhealthy habits. The most probable reason for this seemingly unexpected finding is the relative homogeneity of Roma communities in terms of material deprivation, unfavorable housing conditions and a high level of social exclusion. We therefore reiterate that the obtained findings concerning the importance of socioeconomic factors are related and can be generalized only within the Roma population, i.e. only when members of the RNM are compared with each other, not when compared to the general population.

4.1.5. Key findings

- RNM members mostly evaluate their general health as good. Although the average score does not lag behind the general population, such a finding is most likely an illusion created by the significantly younger age of the Roma population.
- The self-evaluation of the RNM members' general health condition is mostly influenced by age.
- The incidence of diseases lasting longer than six months among RNM members is significantly increasing since youth, and in the 45–54 age category every other person suffers from them. Compared to the general population, chronic diseases occur at a younger age, and the increase in incidence with age is steeper.
- The incidence of chronic diseases in the Roma population increased compared to 2011, widening the gap in relation to the general population.
- Despite the importance they declaratively attach to healthy habits, RNM members are more likely to resort to unhealthy habits such as smoking or unhealthy diet.
- RNM members often consume unhealthy foods, probably guided by the cultural model of health of the Roma community, according to which health, happiness and abundance are equated with each other.
- The number of smokers among members of the RNM is twice as high as in the general population.

- During adulthood, the percentage of smokers in the Roma population does not fall below 60% among men or below 55% among women.
- The health insurance coverage of the Roma population has increased significantly, from 82% recorded in 2011 to 92–93% estimated in the existing study.
- Vaccination coverage of children, as well as the percentage of children registered with a pediatrician, remained at a very high level compared to previous surveys.
- The physical accessibility of health and medical care varies greatly depending on the region and the type of settlement and is an obstacle in places without public transport.

4.2. Social welfare of RNM members

In the field of social welfare, the NRIS considers the issue of RNM on a broad platform that recognizes not only poverty as the most prominent problem but also a number of other related issues that include family relationships, quality of life and negative phenomena related to women and children. Therefore, the NRIS states that a goal is to reduce the poverty of the Roma population and improve the quality of social services, and also defines three objectives. The first objective is focused on raising the quality, accessibility and timeliness of social services. In order to achieve this objective, there is a planned strengthening of capacities of existing social welfare services for Roma population. The second objective is to raise the level of quality of life of Roma families in which special attention is paid to the well-being of children and youth. To achieve this objective, the need for RNM education to improve parenting skills and quality of life within the family, especially children, is emphasized. The third objective focuses on recognizing and preventing the risk of negative phenomena like human trafficking, sexual exploitation and violence, mainly directed at women and children.

The current study expands the findings of the baseline study in the field of social welfare, with special attention paid to analyzing the importance of potentially relevant variables such as region, type of settlement and other sociodemographic factors with regard to various indicators of socioeconomic status, use and accessibility of social welfare services, social welfare measures aimed at protecting children and satisfaction and attitudes about the quality of social welfare services.

Region proved to be a significant variable in the analyses of the **socioeconomic status** indicators used. RNM members from Zagreb have the highest incomes, better equipped households and more adequate housing, but they also have higher expenses and are more often indebted. Roma in Slavonia have the lowest monthly income per household member and the least adequate housing, while Roma in Northern Croatia have the poorest household equipment. Analysis of the type of settlement did not give consistent findings, so it cannot be claimed that the inhabitants of a certain type of settlement are more

deprived than others. Socioeconomic status is positively related to the level of education, but the observed correlations are relatively low, which, similar as in case of health, is a consequence of the shrunk variance of both variables.

Almost all members of the RNM live in relative poverty, while a significant number of them fail to meet even basic needs with their income, which puts them in the category of absolute poverty. Regardless of certain differences by regions and by the type of settlement in the **amount of income**, it should be emphasized that the RNM in Croatia is relatively homogeneous in its poverty. Slightly larger differences are present as regards **indebtedness, household equipment and adequacy of housing**. It should be emphasized that the results of this research confirm that **education** affects the improvement of all aspects of socioeconomic living conditions, i.e. that education helps members of the RNM to be less poor.

Given the prevalence of poverty and social exclusion among the RNM, one of the central goals and priorities of NRIS for alleviating existing problems is to increase the accessibility and timeliness of social welfare services. The NRIS calls for raising the quality, accessibility and timeliness of social services and anticipates strengthening the capacity of existing services for the provision of social services to the Roma population.

The three most commonly used forms of social assistance are: the **guaranteed minimum benefit, fuel allowance** and the **housing allowance**. This research confirms that **region** is an important determinant of the use of certain social assistance measures. The guaranteed minimum benefit is most often used in Slavonia, and least in Zagreb. The housing allowance is most commonly used in Slavonia, and the fuel allowance is most commonly used in Northern Croatia. According to the average number of used forms of social assistance, Slavonia stands out, while such assistance is least used by RNM members from Zagreb and Istria and Primorje. Certain differences in the use of the type of social assistance with regard to the **type of settlement** were also noticed. The various forms of social assistance are mostly used by RNM members who live on the outskirts of a town or village, while such assistance is least used by those dispersed across towns and villages.

As expected, **sociodemographic characteristics** are associated with the likelihood of using all forms of social assistance, but the correlations found are low. Socioeconomic scarcity and poor education are the best predictors of the use of social assistance, but the amount of variance explained in this way is extremely small because the Roma population is relatively homogeneous according to both indicators.

With the exception of child allowance, various forms of **social services** are used extremely rarely. Due to extremely small subsamples, no significant correlations of certain forms of social services with the region or with the type of settlement, nor with socio-demographic characteristics, were observed. The regression analysis did not indicate any feature that significantly predicts the number of social services that a member of the RNM or his/her family will use.

Given the small number of beneficiaries of individual benefits, the **combined indicator of different types of social assistance** is the best indicator of differences between **regions and types of settlements**. Northern Croatia and Međimurje are in the lead when it comes to the percentage of beneficiaries and the average amount. Istria has the least beneficiaries. In settlements within a town or a village, there is the least number of social assistance beneficiaries. In all other types of settlements, the number of beneficiaries is much higher.

The use of social assistance and its amount depends on socioeconomic status, education and age. Somewhat paradoxically – some forms of social assistance are positively related to better material fittings and quality of housing.

NRIS pays special attention to the protection of child well-being. Some of the measures to be encouraged include the improvement of parenting skills, but also the recognition and prevention of the risk of negative phenomena such as domestic violence, sexual exploitation, neglect or human trafficking. In extreme cases, children are removed from dysfunctional families. The removal of children from the family is a problem that most respondents are aware of and they have experienced such a situation at least indirectly, through rumors. Such cases are the least mentioned in Zagreb, and the most in Northern Croatia, mostly in settlements separated from a town or village, perhaps because in such settlements there are close relations with neighbors, which makes it easier to disseminate information.

Nearly two-thirds of all respondents were in contact with social welfare center employees, but only one in two felt that social welfare was accessible, at least in part. Approximately four-fifths of beneficiaries consider social welfare to be timely. The highest rating of accessibility is found in Northern Croatia, and the lowest in Central Croatia. Accessibility and timeliness were rated the best among persons of lower socioeconomic status who are also more frequent beneficiaries, but the established correlations are all low, so this finding must be taken with caution.

Various discriminatory practices, inappropriate communication, coupled with burdening of social workers with administrative work make social welfare services less accessible thus having a negative effect on the satisfaction of beneficiaries. RNM members are generally dissatisfied with both social welfare services and the way they are treated by employees. Even though there are no significant differences between regions, the respondents are somewhat more critical toward social workers in Slavonia and more lenient in Northern Croatia. A lower level of satisfaction is noticeable in settlements on the outskirts of a town or village. Satisfaction with social workers is not related to sociodemographic characteristics, whereas persons living in better conditions are somewhat more satisfied with the amount of social assistance.

4.2.1. Key findings

- The RNM is homogeneous in its poverty.
- Education affects the improvement of all aspects of the socioeconomic living conditions of the RNM.
- The combined indicator of different types of social assistance varies among regions and types of settlements. Roma from Northern Croatia and Međimurje lead in terms of the percentage of beneficiaries and the average amount, and the least beneficiaries of various types of social assistance live in Istria and in settlements within a town or village.
- According to the perception of respondents, the removal of children from families is least common in Zagreb and predominates in Northern Croatia and in settlements separated from a town or village.
- Nearly two-thirds of all respondents were in contact with social welfare center employees, but only one in two felt that social welfare was accessible, at least in part. Approximately four-fifths of beneficiaries consider social welfare to be timely. The highest rating of accessibility is found in Northern Croatia, and the lowest in Central Croatia.
- RNM members are generally dissatisfied with both social welfare services and the way they are treated by employees. A lower level of satisfaction is noticeable in settlements on the outskirts of a town or village. Satisfaction with social workers is not related to sociodemographic characteristics, whereas persons living in better conditions are somewhat more satisfied with the amount of social assistance.

4.3. Study limitations

The collected data, conducted analyses and presented results and conclusions should be observed in the light of certain limitations of the study. Data on health, health care and social welfare, as well as most other data from the research, were collected using self-reports from respondents who, in addition to answering on his/her behalf, also answered on behalf of his/her family. Therefore, we cannot speak of objective data, but rather of a subjective assessment that is to some extent distorted in relation to the actual situation. Such a methodology implies an excellent knowledge of the respondent, which is often an unrealistic expectation and thus it is possible that the prevalence of some diseases is underestimated due to poor knowledge, education or irregular medical examinations. The method of self-reports is also sensitive to social desirability, i.e. the tendency of respondents to deny or diminish participation in behaviors that will present them in an unfavorable light. As a result, the survey probably underestimated undesirable behaviors such as alcohol and narcotics consumption or resorting to violence.

The second limitation of the study is interpretive and refers to the lack of comparative data collected by the same methodology. Although in the analysis we use different data sources collected by the CBS, CNIPH, UNDP and other organizations for comparison, such comparisons are mostly indicative. A precondition for firm conclusions is the standardization of data acquisition for the Roma and general population that would be mutually comparable and collected continuously over time.

4.4. Summary of recommendations for improving the health and social welfare of the RNM in the Republic of Croatia

4.4.1. Improvement of data measurement, monitoring and collection with more comprehensive inclusion of scientific knowledge

- **Improve and expand the measurement and monitoring model.** The current study demonstrated that data collection for monitoring the attainment of NRIS objectives should be performed regularly, according to a standardized protocol, so as to ensure a comparison according to key variables with the general population. Without such organized monitoring, the possibility of comparison is reduced, while the identification of important mechanisms through which variables of material deprivation affect health is completely or largely disabled.
- **Ensure the implementation of research on the health status of the Roma population** based on the relevant data from the health care system, for example by the CNIPH.
- **Collect RNM health data longitudinally as well.** In order to monitor health changes over time, we recommend an effort to organize a smaller panel sample in which the health of the same members of the RNM would be continuously monitored for a longer period of time.
- **Evaluate measures to improve health and social welfare** through pilot projects and quasi-experimental designs before introducing interventions on the entire population.
- **Collect subjective and objective data on the health of the RNM, organize physical on-site examinations with the analysis of biological samples.** This measure is conceived as a simultaneous improvement of the health measurement model and assistance in the prevention, early detection and treatment of diseases while increasing the accessibility of medical services.
- **Investigate cultural models of health and disease** in different RNM subgroups in the Republic of Croatia [with regard to age, gender, level of education and

socioeconomic status]. The study found that the cultural model of RNM health is often a neglected determinant of health care and a link that is missing in a better understanding of the health of that population.

- **Introduce healthcare professionals to current cultural models of health and disease** in the RNM so that their cultural competencies concerning health are aligned with the cultural knowledge of members of the Roma community, without stereotyping and discriminatory attitudes and behaviors.

4.4.2. Targeted measures and activities for each age group of RNM members

- **Improve the management of chronic diseases in older RNM members** [e.g. support for regular therapy, adherence to medical instructions and health protocols after the end of the acute phase of the disease].
- **Intensify care for the reproductive health of young women RNM members** [e.g. through the support of older women, the support of educated women or women who have a high level of health literacy, successfully care for their health and the health of their children].
- **Encourage younger RNM members** to adopt healthy and reject unhealthy habits and reduce substance abuse.

4.4.3. Health literacy of RNM members

- **Use the influence of more educated RNM members** to improve community health.
- **Strengthen health literacy**, especially among less educated members of the RNM.
- **Use the influence of prominent people** in Roma communities to ensure the success of educational campaigns and educational workshops to raise RNM health literacy.
- **Visit Roma communities and build trust to raise health literacy**, use primarily face-to-face meetings and direct communication [use written materials as a secondary, additional way of education].
- **Improve health through sustainable and long-term programs that come from the community**, that respond to community needs and are implemented by community members in a useful way.

4.4.4. Equality in access to healthcare and social welfare services

- **Investigate and analyze the observed differences in the regional accessibility of healthcare and social welfare services**, such as the lack of visits of health and medical assistance in Istria and Primorje, cases of extended waiting for a medical examination in general and in Međimurje, as well as differences in the accessibility of social welfare in Northern and Central Croatia.

- **Apply and extend positive local and regional knowledge** and experiences to those regions where there are problems in access to healthcare and social services or experience of discrimination in healthcare and social welfare.

4.4.5. Elimination of institutional discrimination, racism and inequality

- **Take all necessary steps to reduce or eliminate any form of institutional discrimination** in line with the study findings and recommendations aimed at achieving better results of National Roma Inclusion Strategy after 2020 in different European countries. In this regard, we emphasize the importance of the recommendations given by the *European Public Health Alliance*, EPHA]:⁸⁹
 - ▷ **take measures to prevent all forms of antigypsyism, institutional racism and discrimination**, with an emphasis on the prevention of hate crimes and hate speech, in the virtual and real environment
 - ▷ **base activities and measures on the principles of diversity and intersectoral approach** to protect all vulnerable subgroups of RNM members, especially those exposed to double discrimination
 - ▷ **integrate health inequality perspectives into all policies**
 - ▷ **protect the rights and health of mobile workers belonging to the RNM.**

89 EPHA [2020] *Leaping forward. Adapting the post-2020 EU Roma Framework to the real needs of beneficiaries*. <https://epha.org/wp-content/uploads/2019/11/leaping-forward-nris-2020.pdf> [Retrieved 23 June 2020]

5. Literature



5. Literature

- Ajduković, M. and Franz, B. S. [2005] Behavioural and emotional problems of children by type of out-of-home care in Croatia. *International Journal of Social Welfare* 14 [3], 163–175. <https://doi.org/10.1111/j.1468-2397.2005.00356.x>
- Bagić, D., Burić, I., Dobrotić, I., Potočnik, D. i Zrinščak, S. [2014] Romska svakodnevnica u Hrvatskoj. Everyday life of Roma in Croatia: challenges and potentials for transformation, 2014. [report]. Zagreb: UNDP, UNHCR and UNICEF.
- Bridgeland, J. M., Dilulio, J. J. and Burke Morison, K. [2006] *The silent epidemic: Perspectives of high school dropouts*. Washington DC: Civic Enterprises.
- Croatian Bureau of Statistics [2018] Statistički ljetopis Republike Hrvatske 2018. [Statistical Yearbook of the Republic of Croatia 2018] Zagreb: CBS.
- D'Andrade, R. G. [1987] Modal Responses and Cultural Expertise. *American Behavioral Scientist* 31: 194–202.
- Ellsberg, M., Jansen, H. A., Heise, L., Watts, C. H. and García-Moreno, C. [2008] Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence [An observational study]. *Lancet* 371, 1165–1172.
- EPHA [2019] Closing the life expectancy gap of Roma in Europe. <https://epha.org/wp-content/uploads/2019/02/closing-the-life-expectancy-gap-of-roma-in-europe-study.pdf>
- EPHA [2020] Leaping forward. Adapting the post-2020 EU Roma Framework to the real needs of beneficiaries. <https://epha.org/wp-content/uploads/2019/11/leaping-forward-nris-2020.pdf>
- European Commission [2014] Roma health report: Health status of the Roma population. Data collection in the Member States of the European Union.
- Fraser, A. [1992] *The Gypsies*. Oxford: Blackwell Publishers.
- Goodenough, W. H. [1996] Culture. In: D. Levinson and M. Ember (ed.) *Encyclopedia of Cultural Anthropology*, 291–299. New York: Henry Holt.
- Handbook for action in the area of health services with the Roma community* [2006] Madrid: Ministry of Health and Consumer Affairs, Fundación Secretariado Gitano.
- Harlow, C. W. [2003] *Education and correctional populations*. Bureau of justice statistical special report. Washington DC: US Department of Justice.
- Herrenkohl, T. I., Hong, S., Klika, J. B., Herrenkohl, R. C. and Russo, M. J. [2013] Developmental Impacts of Child Abuse and Neglect Related to Adult Mental Health,

- Substance Use, and Physical Health. *Journal of Family Violence* 28 [2], 191–199. <https://doi.org/10.1007/s10896-012-9474-9>
- Honer, D. and Hoppie, P. [2004] The enigma of the Gypsy patient. *RN* 67 [8]: 33–37.
- Croatian National Institute of Public Health [2016] *Europska zdravstvena anketa u Hrvatskoj 2014. – 2015. [European Health Interview Survey in Croatia 2014–2015] European Health Interview Survey [EHIS]*.
- Keesing, R. M. [1974] *Theories in Culture*. *Annual Review of Anthropology* 3: 73–97.
- Kocze, A. etc. [2014] *Toolkit on programming the structural funds for Roma inclusion in 2014–20*.
- Kunac, S., Klasnić, K. and Lalić, S. [2018] *Roma Inclusion in the Croatian Society: A Baseline Data Study*. Zagreb: Center for Peace Studies.
- Lehti A. and Mattson, B. [2006] Handbook for action in the area of health services with the Roma community. *Family practice* 18 [4]: 445–448.
- Marmot, M. [2017] Social justice, epidemiology and health inequalities. *European Journal of Epidemiology* 32 [7], 537–546. <https://doi.org/10.1007/s10654-017-0286-3>
- Martinović Klarić, I. [2009] *Kromosom Y i potraga za novom domovinom [Y Chromosome and Search for the New Homeland]*. Zagreb: Sveučilišna knjižara.
- McDowell, I. [2006] *Measuring Health: A Guide to Rating Scales and Questionnaires*. New York: Oxford University Press.
- Mihailov, D. [2012] *The health situation of Roma communities: Analysis of the data from the UNDP/World Bank/EC Regional Roma Survey 2011*. Roma Inclusion Working Papers. Bratislava: United Nations Development Programme.
- Milas, G., Ferić, I. and Šakić, V. [2010] Osuđeni na socijalnu isključenost? Životni uvjeti i kvaliteta življenja mladih bez završene srednje škole. [Destined to Social Exclusion? Conditions and Quality of Life of High School Dropouts] *Društvena istraživanja [Social Research]* 19, 669–689.
- Monden C. [2014] Subjective Health and Subjective Well-Being. In: Michalos A. C. [ed.] *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer.
- Nutbeam, D. [2000] Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, 15 [3], 259–267. <https://doi.org/10.1093/heapro/15.3.259>
- Racz, A. and Kajtazi, V. [2019] Stavovi pripadnika romske populacije na području Bjelovarsko-bilogorske županije o obiteljskom nasilju [Attitudes of the Roma Population in the Bjelovar-Bilogora County on Domestic Violence]. *Journal of Applied Health Sciences* 5[1], 61–70. <https://doi.org/10.24141/1/5/1/5>

- Sutherland, A. [2002] Cross cultural medicine: A decade later. The Roma [Gypsies] and healthcare in the U. S. *The Patrin Web Journal*, 1–10.
- Swidler A. [1986] Culture in Action: Symbols and Strategies. *American Sociological Review* 51 [2]: 273–286.
- Thoits, P. A. [2010] Stress and Health: Major Findings and Policy Implications. *Journal of Health and Social Behavior* 51[1_suppl], S41–S53.
<https://doi.org/10.1177/0022146510383499>
- UNDP [2012] The health situations of Roma communities. Analysis of the data from the UNDP/World Bank/EC Regional Roma Survey.
- Vivian, C. and Dundes L. [2004] The crossroads of culture and health among the Roma [Gypsies]. *J Nurs Scholarsh* 36 [1]: 86–91.
- WHO Regional Office for Europe [2008] *The Tallinn Charter “Health Systems for Health and Wealth”*. Copenhagen, WHO Regional Office for Europe. http://www.euro.who.int/_data/assets/pdf_file/0008/88613/E91438.pdf
- Wiley, A. S. and Allan, J. S. [2009] *Medical Anthropology. A Biocultural Approach*. Oxford: Oxford University Press.

5.1. Acts and strategic documents

- European Commission [2011] *An EU Framework for National Roma Integration Strategies up to 2020*.
- Government of the Republic of Croatia *National Roma Inclusion Strategy from 2013 to 2020* Zagreb.
- Government of the Republic of Croatia, Ministry of Health of the Republic of Croatia [2012] *National Health Development Strategy 2012–2020*
- Government of the Republic of Croatia, Office for Human Rights and the Rights of National Minorities [2013] *Action Plan for the Implementation of the National Roma Inclusion Strategy for the period 2013–2015*.
- Office for Human Rights and the Rights of National Minorities of the Government of the Republic of Croatia [2019] *2019 and 2020 Action Plan for the Implementation of the National Roma Inclusion Strategy from 2013 to 2020*.
- World Health Organization [2006] *Constitution of the World Health Organization – Basic Documents*. Forty-fifth edition, Supplement, October 2006.

6. Appendix



6. Appendix

TABLE 81. A summary and description of the composite indicators, scales, and indexes used in the study

Name of the scale or index	Included items	Range (method of merger and calculation)	Reliability [Cronbach's α]
Basic household equipment (9 items)	A5_1_Electricity	0-9 (sum), used and categorized version for crossing: 0 to 2=1 3 to 5=2 6 to 8=3 9=4	0.80 (very good)
	A5_2_Water obtained through the water supply system		
	A5_4_Sewers		
	A5_6_Kitchen in the house/apartment		
	A5_8_Bathroom with shower or bath in the house/apartment		
	A5_10_A toilet in the house/apartment		
	A5_12_Refrigerator		
	A5_14_Washing machine		
	A5_22_Car or van		
Housing adequacy (4 items)	A7_1_Damp walls, floors or foundations	1-5 (5-sum)	0.71 (good)
	A7_2_The roof is leaking		
	A7_3_Rotten window frames		
	A7_4_The space does not have enough light, it is too dark		
Violence against women (11 items)	F19.1_Shouted at you, insulted or mocked you.	1-5 (average), used categorization: 1: absent >1: present	0.95 (excellent)
	F19.2_Accused you of being unfaithful to him.		
	F19.3_Threatened to physically injure you.		
	F19.4_Threw things at you.		
	F19.5_Intentionally pushed you roughly, pulled your hair, by your ears, etc.		
	F19.6_Put you in a situation where you do not have money for basic necessities (food, utilities, clothes, etc.).		
	F19.7_Put you in a situation where you have to hide that you bought something.		
	F19.8_Put you in a situation where you have to beg him for money.		
	F19.9_Acted as if all the money was only his, not shared.		
	F19.10_Slapped you, hit you with his hand or foot, beat you.		
	F19.11_He had sex with you against your will.		

Inappropriate punishment of children [4 items]	R7_1_I send him/her to a corner or another room.	0–4 [sum]	0.43 [bad]
	R7_4_I shout at him/her.		
	R7_5_I hit him/her.		
	R7_6_I beat him/her.		
Physical punishment of children [2 items]	R7_5_I hit him/her.	0–2 [sum]	0.35 [bad]
	R7_6_I beat him/her.		
Presence of child separation problems [5 items]	2_Yes, from someone in my family	0–5 [sum]	0.59 [marginal]
	3_Yes, from someone in the neighborhood, settlement		
	1_Fostered in a Roma family		
	2_Fostered in a non-Roma family		
	4_Placed in a children's home		
Family health insurance [2 items]	B11 Do they have a valid health insurance (valid health card)?	0–2 [B11-1+2-F2]	0.68 [acceptable]
	F2 Is there anyone in your household who does not have any form of health insurance?		
Diseases in the vaccination program [9 items]	2_Measles	0–9 [sum]	0.20 [bad]
	3_Pertussis		
	4_Rubella		
	6_Mumps		
	7_Tuberculosis		
	10_Diphtheria		
	11_Tetanus		
	13_Hepatitis		
	15_Poliomyelitis		
Cardiovascular diseases	1_Heart or blood vessel problems	0–3 [sum]	0.53 [marginal]
	2_Hypertension		
	5_Stroke or the effects of a stroke		
Mental disorders	17 Mental disorder	0–2 [sum]	0.47 [bad]
	18 Behavioral disorder		
Respiratory diseases	3 Asthma	0–2 [sum]	0.54 [marginal]
	4 Lung problems		
Diseases of the urinary system	14 Bladder control issues	0–2 [sum]	0.55 [marginal]
	15 Kidney problems		
Diseases of the musculoskeletal system	6 Osteoarthritis (including arthritis)	0–2 [sum]	0.22 [bad]
	7 Spinal problems and chronic back or neck problems		

Frequency of use of medical assistance [4 standardized items]	F3 In the last four years, have you personally ever used emergency medical care? F4 In the last four years, how many times have you been to a general and family doctor [so-called general practitioner]? F5 In the last four years, have you personally ever been in hospital, i.e. spent at least one night in hospital? F6 In the last four years, how many times have you had a specialist examination [e.g. examination of the eyes, abdomen, lungs, any ultrasound, X-ray, etc.] without spending the night in the hospital?	The sum of standardized z-values	0.64 [acceptable]
Regularity of gynecological examinations	F10 Regularity of gynecological examinations F10.1 When was the last time you did the so-called pap smear [test to determine the risk of cervical cancer]?	0–10 [10-sum]	0.78 [good]
Reproductive health of women	F14_2 Had a miscarriage F15_1 Had a stillborn child F16.1 Complications related to pregnancy and childbirth F16.2 Diseases of the reproductive organs [uterus, ovaries, fallopian tubes]	2–6 [sum]	0.53 [marginal]
Healthy habits	F40.9 Importance of hygiene F40.11 Importance of a varied diet F40.12 Importance of physical activity	3–15 [sum]	0.65 [acceptable]
Healthy diet [2 items]	6_Fish and seafood 9_Fruits and vegetables	1–5 [average]	0.47 [bad]
Unhealthy diet [6 items]	1_Greasy and extremely spicy food 2_Chocolate and candy 3_Fast food [pizza, fries, hamburgers, hot-dogs, etc.] 4_Soft drinks 5_Snacks [chips, etc.] 8_Meat products [salami, pâté, etc.]	1–5 [average]	0.80 [very good]
Used social assistance [10 items]	1_Guaranteed minimum benefit 2_Housing allowance 3_Fuel allowance 4_Personal needs allowance for a residential care beneficiary 5_One-time benefits 6_Education-related allowances 7_Personal disability allowance 8_Allowance for assistance and care 9_Status of a parent caretaker and status of a caretaker 10_Unemployment benefit	0–10 [sum]	0.57 [marginal]

Used social services [15 items]	1_Initial social service	0–15 [sum]	0.37 [bad]
	2_Counseling and assistance		
	3_Home assistance		
	4_Psychosocial support		
	5_Early intervention		
	6_Assistance with inclusion into programs of upbringing and regular education		
	7_Day care		
	8_Accommodation		
	9_Organized housing		
	10_Support allowance		
	11_Foster care allowance		
	12_Child benefit ["child allowance"]		
	13_Accommodation of women victims of violence in safe houses		
	14_Psychosocial treatment due to domestic violence		
	15_Support in acquiring knowledge and skills for upbringing and parenting		
Accessibility of social welfare [2 items]	A18_Do you think that social welfare is available to you, i.e. that you and your family can receive all social services and forms of social assistance to which you are entitled? A19_Do you think that social welfare is timely, i.e. that you and your family receive all social services and forms of social assistance to which you are entitled on time?	2–6 [sum]	0.44 [bad]
Satisfaction with social workers [7 items]	1_Social workers generally do their job well [vice versa].	1–5 [6-average]	0.68 [acceptable]
	2_Social workers deal too much with paperwork and too little with people.		
	3_Social workers should perform on-site inspections to follow what do people spend their social assistance money on.		
	4_Social workers should help unemployed Roma find work.		
	5_Social workers should go out in the field more often and see how some Roma families actually live.		
	6_Due to bad laws, social workers deprive people of their social rights and the social assistance that they need.		
	7_Social workers do not provide services to the Roma in accordance with their actual needs.		

Trust in doctors [4 items]	1_ Doctors generally do their job well.	1–5 (average)	0.67 (acceptable)
	2_ If I need medical assistance, I know I will get it.		
	3_ I trust the healthcare professionals.		
	4_ I have some negative experiences with doctors. [vice versa]		
Unprofessional behavior of doctors [6 items]	1_ I had to wait for the appointment longer than other patients.	1–3 (average)	0.77 (good)
	2_ The doctor did not want to see me.		
	3_ The doctor was rude to me.		
	4_ The doctor did not understand my health problem.		
	5_ I got the wrong treatment.		
	6_ The doctor or the healthcare professionals did not treat me in a professional manner.		

About the authors

Goran Milas [1963, Mumbai, India], a psychologist by education, is a scientific advisor and full professor at the Ivo Pilar Institute of Social Sciences, where he has been permanently employed since 1992. He has extensive research and teaching experience, as well as a scientific career that spans from 1989 onwards. During this period, he participated as the head or associate in numerous scientific and over a hundred of applied research projects in the field of social sciences. As a researcher, he dealt with a wide variety of social topics and issues, with a special emphasis on the scientific methodology. He has participated in projects funded by the World Bank, UNDP, UNICEF, the International Organization for Migration, the European Commission, the European Social Fund, the Croatian Science Foundation, the Ministry of Science and Education, the Ministry of Labor and Social Welfare and others. In the last five years, he has participated in numerous and diverse projects, such as those dealing with stress and coping of young people, cultural heritage and identity, quality of life of Croatian veterans and the dynamics of reproductive and sexual health of young people. During his scientific career, he published three books and about sixty scientific papers, most of them in prestigious scientific journals. He has had a long teaching career, during which he taught many, mostly methodological, courses in undergraduate, graduate and doctoral studies at the Faculty of Croatian Studies, the Faculty of Education and Rehabilitation, the Study Center for Social Work, VERN university and other higher education institutions. He received the 2006 Annual National Award for Science in the field of social sciences.

Irena Martinović Klarić [1969, Slavonski Brod], is a scientific advisor with tenure, and has been the executive director of the Croatian Science Foundation since 2019. Her articles are published in international genetics, anthropological and interdisciplinary scientific journals, and she also participates in the implementation of university programs in anthropological studies. She is involved in the organization and work of dozens of domestic and international scientific meetings and conferences, as well as the implementation of a number of scientific research projects funded by the Smithsonian, Royal Society, European Social Fund, International Organization for Migration, Ministry of Science and Education and the Croatian Science Foundation. During her postdoctoral training, she led the Wenner-Gren Foundation's "Population Structure and Genetic History of the Roma in the Western Balkans" project, which researched the origins and historical migrations of the Roma and the impact of isolation, segregation and discrimination on shaping the modern genetic and population structure of the Roma population in the Balkans. She published a scientific book on the genetic identity of the Bayash Roma titled "Y Chromosome and Search for the New Homeland. Tracing the Y Chromosome Legacy from South-Asian to Balkan Wastelands and Obliquities: Genetic History and Reality of the Bayash Roma".

