



Prejudices of Nurses Towards Roma as Patients in the Healthcare System of the Republic of Croatia

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Abstract

Due to deeply rooted prejudices, the Roma are the most vulnerable and multiply discriminated ethnic group and national minority, facing discriminatory challenges in various spheres of society, including our healthcare system. These challenges limit the quality of healthcare, potentially increasing the risk of disease progression and premature death. The study aimed to analyze the prejudices of nurses and medical technicians towards members of the Roma national minority and to assess their correlation with certain socio-demographic characteristics and beliefs of the respondents.

The study included 536 nurses employed in the healthcare system across all three levels, working directly with patients. Based on the opinions collected on 29 provided statements about the status and treatment of Roma as patients, 19 statements were isolated through exploratory factor analysis and classified into four detected and interpretable reliable factors. These factors were named: "Roma within the healthcare system", "Protecting Roma from the consequences of discrimination", "General prejudices against Roma", and "Attitudes of nurses and medical technicians towards Roma patients", which together explain 60.7% of the total variance.

The analysis showed that some nurses share the same general prejudices towards Roma as the general population. Respondents with a higher level of education, older age, and those living in the Medimurje County and Northern Croatia expressed statistically significantly more negative attitudes toward Roma than younger, less educated individuals and those living in other parts of Croatia. Additionally, belong-

ing to the majority population resulted in more negative attitudes towards Roma compared to respondents from national minorities.

Respondents who had personal and professional contact with Roma on some factors exhibited less negative attitudes than those who had no such contact. Respondents from the right-wing political spectrum expressed more negative attitudes towards Roma, while religiosity did not show statistical significance.

Introduction

The Roma national minority (hereinafter: RNM) is a group characterized, as in most European countries and the Republic of Croatia, by deeply rooted negative perceptions and discrimination that manifest across various societal domains, including healthcare (1). This is substantiated by long-term reports from the public defender, which document attitudes, levels of awareness, and forms of discrimination, showing that the Roma are the group facing the most prejudice in Croatia (2). Specifically, as a result of cultural, ethnic, and racial prejudices prevalent among the majority population, the RNM experiences significant limitations in daily life, including access to high-quality medical care. This is particularly concerning given the RNM's multiple vulnerabilities, high prevalence of chronic non-communicable diseases, injuries, pregnancy and childbirth complications, and infant mortality rates exceeding the national average. Consequently, the RNM has a significantly shorter average life expectancy than the majority population - over 10 years shorter in Croatia compared to the general population, and even more significant discrepancies across most EU countries (3).

The relationship between healthcare workers and the RNM is further complicated by the specifics of Roma culture and their unique perspectives on health, illness, and treatment. Roma are often perceived as a distinct group that resists collaboration during medical care, with interactions frequently seen as problematic, time-consuming, and resource-draining (4).

Although healthcare systems emphasize the need for an individualized approach to every patient, gen-

eralized attitudes towards the Roma fail to account for individual differences. Such attitudes often arise without objective data about the subject of the attitude (5) or prior to or independently of personal experience (6).

Prejudice can be defined as a "logically unfounded, persistently held attitude toward various objects, accompanied by different emotions" (7). Ethnic prejudice, as part of the cognitive and emotional components of attitudes towards specific groups, is characterized by a relatively simplistic and rigid understanding of the characteristics of the RNM. This oversimplification reflects an inherent human tendency to reduce complexity for easier comprehension (7).

Prejudice is deeply ingrained in socialization processes, from primary family influences to secondary experiences in school, during formal education, through media, or from other sources (8). Healthcare professionals, including nurses, are not exempt from the influence prejudices and stereotypes have on their behavior towards patients in professional settings.

Studies on prejudice towards the RNM, particularly among nurses as the most prominent healthcare professionals within the healthcare system, are scarce globally and have yet to be conducted in Croatia. This research, therefore, represents a contribution to illuminating this issue (9).

Aim

To analyze the prejudices of nurses and nursing technicians toward members of the Roma National Minority (RNM). The secondary objective was to examine the relationship between specific sociodemographic characteristics, personal religious and political beliefs, and the presence of personal and professional contacts with members of the RNM and the expressed prejudices towards this group.

Methods

Participants

The study included 536 nurses and nursing technicians employed within the Croatian healthcare system at all three levels of healthcare provision. Of the total number of participants, 83.2% were women, and 16.8% were men.

The average age of the participants was 30.9 years (SD=10.181), with the youngest being 20 and the oldest 64. The most significant representation was within the 23-27 age group (40.1%), while 36 participants (8.7%) were aged 52 years or older.

Regarding place of residence, 59.7% of participants reported living in urban areas, while 40.3% resided in rural areas.

The majority of participants, 56.5%, were from Zagreb and its surrounding area, followed by participants from Slavonia (16.4%), Dalmatia (7.8%), Northern Croatia (8.4%), and Međimurje (4.3%), with the latter two regions being home to significant RNM populations. Fewer participants were from Lika, Kordun, and Banija (4.9%), with the lowest representation from Istria, Primorje, and Gorski Kotar (1.7%).

Most participants (95.3%) identified as members of the majority population, while 4.7% identified as belonging to other national minorities, though none identified as RNM.

In terms of work experience, the largest group had 2-5 years of service (35.3%), followed by 6-10 years (18.5%) and less than one year (14.6%). Participants with 11-15 years (6.9%), 16-20 years (6.3%), and 21-25 years of experience (6.7%) were similarly distributed, with a slightly higher proportion reporting 26 or more years of service (11.7%).

Regarding educational background, 75.2% of participants held secondary-level nursing qualifications, 16.8% had higher vocational qualifications, and 6.9% had university degrees. A small proportion (1.1%) had additional non-nursing qualifications, though this group was excluded from further analysis due to its size.

Political and Religious Beliefs

In terms of political orientation, 5.6% identified as left-leaning, either "slightly left of center" (3.7%) or "strongly left of center" (1.9%). Conversely, 13.2% identified as right-leaning, including 8.2% who "clearly supported center-right parties" and 5.0% who were "slightly right of center". The majority (52.4%) considered themselves "apolitical", while 25.2% chose not to disclose their political beliefs.

Regarding religious beliefs, 65.1% identified as religious, with 40.7% stating they were "religious but do not accept all teachings of their faith" and 24.4% fully adhering to their faith's teachings. Additionally, 12.5% identified as "non-religious but not opposed to religion", 5.2% were "indifferent to religion", and 3.7% stated they were "unsure about their beliefs". A minority (0.6%) identified as "non-religious and opposed to religion", while 12.9% did not answer this question. For clarity in analysis, religiosity was categorized into three groups: religious, non-religious, and other (those unsure, indifferent, or who did not respond).

Contact with the RNM

Personal and professional contact with the RNM was another critical area of inquiry. Among participants, 42.7% reported having acquaintances or friends who are members of the RNM, while 57.3% did not. Additionally, 75.6% had direct professional contact with the RNM, whereas 24.4% did not.

Instruments

The survey was conducted using questionnaires previously employed in published studies, with minimal modifications to address the specific characteristics of participants working in biomedicine and healthcare (10-14).

The first section of the questionnaire collected data on participants' sociodemographic characteristics, including gender, age, healthcare profession, length of professional experience, type of residence (urban/rural), and county of residence.

The second section asked participants to indicate whether they identified as members of a national minority. It also explored self-assessed political orientation and personal religiosity.

The third section focused on prejudices towards the RNM. Based on a literature review and findings on

typical prejudices against the Roma, 29 statements were developed, tailored to the specific context of participants employed in biomedicine and healthcare (10-14). Participants rated their agreement with each statement using a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree").

Procedure

The study was conducted online using Google Forms between April 1 and May 1, 2023, as a cross-sectional study conducted simultaneously. The sample was non-probabilistic, representing a limitation due to the inability to generalize findings to the entire population of nurses in Croatia. Data collection employed the snowball sampling method, initiated by public invitations to participate via Alumni clubs, the official websites of higher education institutions training nurses, and the official websites of professional chambers.

Statistics

Descriptive and inferential statistical methods were used to process the data. Given statistically significant deviations from normal distribution (as verified by the Kolmogorov-Smirnov test), non-parametric methods were applied to analyze differences and assess associations. These included the Kruskal-Wallis H test for differences across two or more groups (15), post hoc Dunn's test, and Spearman's rho correlation coefficient.

Results

The core theme of this study centers on prejudices regarding the Roma National Minority (RNM) 's position and relationship with the society they live in and their role as users of the Croatian healthcare system. Before analyzing the collected attitudes and examining the relationship between sociodemographic characteristics and prejudices, the factorial structure of the questionnaire was assessed.

An exploratory factor analysis (EFA) was conducted to reduce the initial set of 29 items to a smaller number of latent dimensions. This analysis aimed to identify the underlying structure of the relatively large number of variables (16). The analysis yielded a factor solution with Promax rotation, explaining 60.7% of the total variance. Four interpretable and reliable factors were identified, with Cronbach's alpha coefficients ranging from 0.77 to 0.92. A total of 19 items were retained from the original 29 statements.

Specifically:

- The first factor accounted for 38.7% of the explained variance and included items related to attitudes about how the healthcare system should interact with the RNM (see Table 1). This factor was labeled "Roma within the Healthcare System" (Extracted Factor 1).
- Items with the highest correlations with this latent dimension pertained to the treatment of RNM in hospitals or clinics within the healthcare system.

The table below presents the arithmetic means for the statements grouped under Factor 1, which reflects attitudes towards the treatment and integration of the Roma National Minority within the healthcare system.

The analysis of results from Table 2 shows that nurses/technicians generally disagree with the given statements. The least accepted statement among all those provided was *"During abortion procedures or gynecological surgeries, it is reasonable to discreetly perform sterilization to reduce the number of children born to Romani women"* (M=1.94) and *"Special clinics or restricted visiting hours for Roma should be established to avoid their mixing with other patients"* (M=2.10).

Table 1. The first extracted factor "Roma within the Healthcare System"

Claims:	Correlation with the 1st component
It is justified to place Roma individuals in separate "Roma rooms" in hospitals.	0.98
Special clinics should be established or access to Roma patients should be time-restricted to avoid their mixing with other patients.	0.91
During abortion procedures or gynecological surgeries, it is reasonable to discreetly perform sterilization to reduce the number of children born to Romani women.	0.91
I am afraid that regular patients will leave if it becomes known that we accept Roma individuals as patients.	0.83
Spending public money on the treatment of Roma individuals is an unnecessary expense and waste of funds.	0.71
Roma individuals are illiterate and uneducated, and it is entirely pointless to discuss prevention and health with them.	0.62
Roma individuals do not earn income or pay taxes and contributions, so it is unfair for them to have access to the same level of healthcare as those who contribute to the healthcare system through their earnings.	0.37
The proportion of total explained variance: 38.70% Cronbach's alpha: 0.92	

On the other hand, a moderate agreement was reached for the statement, *"Roma individuals do not earn income or pay taxes and contributions, so it is unfair for them to have access to the same level of healthcare as those who contribute to the healthcare system through their earnings."* (M=2.73), which may indicate that some believe RNM members should have a different approach in the healthcare system.

The next five items shown in Table 3 share a common theme: statements related to attitudes toward *"Protecting Roma from the Consequences of Discrimination"* (Extracted Factor 2).

Table 2. Mean values for statements grouped under factor 1: "Roma within the healthcare system"

Claims:	M
It is justified to accommodate Roma individuals in separate "Roma rooms" in hospitals.	2.03
Special clinics should be established, or access for Roma patients should be time-limited to prevent their mixing with other patients.	2.10
During abortion procedures or gynecological surgeries, it is reasonable to discreetly perform sterilization to reduce the number of children born to Romani women.	1.94
I fear that regular patients will leave if it becomes known that we accept Roma individuals as patients.	2.16
Spending public funds on the treatment of Roma individuals is an unnecessary expense and waste of funds.	2.26
Roma individuals are illiterate and uneducated, and it is entirely pointless to discuss prevention and health with them.	2.44
Roma individuals do not earn income or pay taxes and contributions, so it is unfair for them to have access to the same level of healthcare as those who contribute to the healthcare system through their earnings.	2.73

Table 3. The second extracted factor "Protecting Roma from the consequences of discrimination"

Claims:	Correlation with the 2nd component
Roma individuals require enhanced healthcare as they are an extremely vulnerable group.	0.76
It is shameful that Roma individuals in our country live up to 10 years less than the majority population.	0.67
Roma individuals receive less state and public funding than they should.	0.67
Greater support should be offered to Roma individuals than what is currently provided.	0.65
Roma individuals are more exposed to discrimination by healthcare professionals than any other national minority group.	0.46
Proportion of total explained variance: 11.50% Cronbach's alpha: 0.77	

This component accounts for 11.5% of the variance (Table 3). On the one hand, the factor is homogeneous as it gathers all statements formulated affirmatively and is also entirely consistent in content.

The table below presents the average values for the statements categorized under Factor 2, which reflects attitudes towards protecting the Roma National Minority from the effects of discrimination.

Table 4. Mean values for statements grouped under factor 2: "Protecting Roma from the consequences of discrimination"	
Claims:	M
Roma individuals require enhanced healthcare as they are an extremely vulnerable group.	2.7
It is shameful that Roma individuals in our country live up to 10 years less than the majority population.	3.16
Roma individuals receive less state and public funding than they should.	2.58
Greater support should be offered to Roma individuals than what is currently provided.	2.81
Roma individuals are more exposed to discrimination by healthcare professionals than any other national minority group.	2.93

The highest average value, indicating moderate agreement among nurses/technicians, is expressed for the statement "It is shameful that Roma in our country live up to 10 years less than the majority population" (M=3.16), followed by "Roma individuals are more exposed to discrimination by healthcare professionals than any other national minority group" (M=2.93).

The third extracted component accounts for 8.0% of the variance, and the statements comprising it can best be characterized as general prejudices against the Roma National Minority. Therefore, this factor is called "General Prejudices Against Roma" (Extracted Factor 3) (Table 5).

These are four items related to negative characteristics that are often attributed to all members of the Roma National Minority, namely that they do not have a positive attitude towards work and that they have many children whom they do not take proper care of.

Table 5. Third extracted factor "General prejudices against Roma"	
Claims:	Correlation with the 3rd component
Roma individuals do not have a positive attitude towards work.	0.88
Roma individuals usually have many children, for whom they do not provide adequate care.	0.79
There are very few responsible and reasonable Roma individuals.	0.77
The increasing number of Roma and the growth of the Roma population pose a threat to societal security.	0.66
Proportion of total explained variance: 8.00%	
Cronbach's alpha: 0.87	

Table 6. Overview of average values for statements grouped under factor 3 "General prejudices against Roma"	
Claims:	M
Roma individuals do not have a positive attitude toward work.	3.10
Roma individuals usually have many children, for whom they do not provide adequate care.	3.55
There are very few responsible and reasonable Roma individuals.	3.08
The increasing number of Roma and the growth of the Roma population pose a threat to societal security.	2.74

The highest level of agreement was obtained for the statement "Roma individuals usually have many children, for whom they do not provide adequate care" (M=3.55), where it is evident that, on average, nurses generally agree with this statement (Table 6). Additionally, moderate agreement was found with the statement that "Roma individuals do not have a positive attitude towards work" (M=3.1) and that "There are very few responsible and reasonable Roma individuals" (M=3.08).

The next three statements, which represent three items of factor component 4, all concern prejudices about Roma's behavior in direct communication with the healthcare team and as patients. This component explains only 2.8% of the variance (Table 7). Given the common theme of these three statements, this factor was named "Healthcare Workers' Attitude Towards RNM Members as Patients."

Table 7. Fourth extracted factor "Healthcare workers' attitude towards RNM members as patients"

Claims:	Correlation with the 4th component
Roma individuals do not listen to what healthcare professionals tell them, either because they do not understand or do not wish to understand the advice given, and instead act according to their own preferences.	0.96
Roma individuals are unlikely to take medication regularly or attend routine check-ups and therapy.	0.70
I must pay particular attention to Roma individuals as patients because communication with them is very challenging due to the language barrier.	0.49
Proportion of total explained variance: 2.80%	
Cronbach's alpha: 0.82	

Like the first component, this one also relates explicitly to Roma in the context of healthcare. Unlike the first component, which relates to the healthcare system, the fourth component pertains to the interpersonal level of the relationship between Roma and healthcare workers, including issues related to examinations and therapy, as well as difficulties that may arise in communication with them and some specific behaviors within healthcare interventions.

Table 8. Overview of mean values for statements grouped under factor 4 "Healthcare workers' attitude towards RNM members as patients"

Claims:	M
Roma individuals do not listen to what healthcare professionals tell them, either because they do not understand or do not wish to understand the advice given, and instead act according to their own preferences.	3.17
Roma individuals are unlikely to take medication regularly or attend routine check-ups and therapy.	2.96
I must pay particular attention to Roma individuals as patients because communication with them is very challenging due to the language barrier.	2.96

As shown in Table 8, the highest average agreement for this factor is with the statement, "Roma individuals do not listen to what healthcare professionals tell them, either because they do not understand or do not wish to understand the advice given, and instead act according to their own preferences" (M=3.17). However, the other two statements also indicate moderate agreement from healthcare workers regarding potential communication difficulties with RNM members (M=2.96) and questionable adherence to the instructions they receive from healthcare professionals (M=2.96).

Additional analyses were conducted to examine the relationship between the factors obtained and specific sociodemographic variables, and the results are presented in Table 9.

The analyses showed no statistically significant differences based on gender and the size of the settlement (city/village) where nurses/technicians live for all four extracted factors (Table 9). Furthermore, it was shown that respondents with an undergraduate professional or university nursing degree have more negative attitudes (except for Factor 2) than those with a high school or higher education.

For Factor 2, "General Prejudices towards Roma" the analysis of differences showed no statistically significant differences regarding religiosity or personal and professional contact with Roma (Table 9). However, it was found that those who are not members of a national minority and those positioned on the right side of the political spectrum (compared to those who positioned themselves on the left, as well as those who are apolitical or did not answer this question) have more negative attitudes, while the difference compared to those in the center was not statistically significant. Similar results regarding political orientation were obtained for the remaining factors. Respondents on the right side of the political spectrum have more negative attitudes.

Regarding other sociodemographic characteristics, it was found that for Factor 1, respondents from Međimurje and Northern Croatia had statistically significantly more negative attitudes (higher score on this factor) than all others. In contrast, respondents from Zagreb and its surroundings had more negative attitudes than respondents from all other regions (except for Međimurje and Northern Croatia, with respondents from Međimurje having the most negative attitudes). Factors 3 and 4 also found that respond-

Table 9. Results of the analyses for individual sociodemographic characteristics with respect to the 4 extracted factors

	F1	F2	F3	F4
Gender	K-W=0.0334 df=1 $p=0.8548$	K-W=0.0004 df=1 $p=0.9833$	K-W=1.5872 df=1 $p=0.2077$	K-W=0.047 df=1 $p=0.828$
Education	K-W=15.371 df=2 $p=0.0004$	K-W=4.9887 df=2 $p=0.08255$	K-W=15.536 df=2 $p=0.0004$	K-W=29.721 df=2 $p=0.000$
Settlement	K-W=0.0466 df=1 $p=0.829$	K-W=0.0195 df=1 $p=0.8889$	K-W=0.737 df=1 $p=0.3906$	K-W=1.554 df=1 $p=0.2125$
Region - aggregated	K-W=23.434 df=2 $p=0.0000$	K-W=2.529 df=2 $p=0.2824$	K-W=24.962 df=2 $p=0.0000$	K-W=18.548 df=2 $p=0.0000$
Ethnic Minority Affiliation	K-W=12.135 df=1 $p=0.0005$	K-W=5.2598 df=1 $p=0.0218$	K-W=8.695 df=1 $p=0.0032$	K-W=1.501 df=1 $p=0.2205$
Religiosity - aggregated	K-W=13.319 df=2 $p=0.0013$	K-W=0.31211 df=2 $p=0.8555$	K-W=0.57406 df=2 $p=0.7505$	K-W=4.7408 df=2 $p=0.0934$
Political Engagement	K-W=64.611 df=6 $p=0.0000$	K-W=30.645 df=6 $p=0.0000$	K-W=69.07 df=6 $p=0.0000$	K-W=58.142 df=6 $p=0.0000$
Friendship with Ethnic Minority Members	K-W=30.46 df=1 $p=0.000$	K-W=0.687 df=1 $p=0.4073$	K-W=18.472 df=1 $p=0.000$	K-W=28.349 df=1 $p=0.000$
Personal Contact with Ethnic Minority Members	K-W=16.401 df=1 $p=0.000$	K-W=3.2247 df=1 $p=0.07254$	K-W=1.305 df=1 $p=0.2533$	K-W=5.361 df=1 $p=0.02059$

K-W – Kruskal-Wallis H test

ents from Međimurje or the northern part of Croatia have more negative attitudes (compared to all other regions). In contrast, the differences among other regions were not statistically significant.

Looking at the religiosity of the respondents, statistically significant differences were found only for Factor 1, "Roma within the healthcare system", in the direction that those who are religious or non-religious have more positive attitudes (lower average factor score) on this factor compared to those who defined their relationship to religion in other ways ("I am indifferent to religion", "I think about it a lot, but I am not sure whether I believe or not", and "I do not wish to answer this question"). No statistically significant differences were found for the remaining three extracted factors.

Considering personal and professional contacts with Roma and belonging to a national minority, for Fac-

tors 1, 3, and 4, respondents who have no personal contact with Roma have more negative attitudes. In contrast, professional contact showed statistically significant results only for Factors 1 and 4. Negative attitudes were expressed by respondents who do not belong to a national minority (except for Factor 4).

Table 10 presents the results of additional analyses that examined the correlation between age and work experience with the four extracted factors. These analyses reveal how demographic factors such as age and years of work experience influence attitudes toward the different factors related to prejudices and perceptions of Roma within the healthcare system.

Regarding the relationship between age and work experience, statistically significant correlations were not found only for the 2nd factor (Table 10). Older respondents and those with more work experience

Table 10. Overview of the relationship between age and work experience with the extracted factors

	F1	F2	F3	F4
Age	$\rho=-0.149$ $\rho=0.0005$	$\rho=-0.003$ $\rho=0.9438$	$\rho=-0.1398$ $\rho=0.0012$	$\rho=-0.20629$ $\rho=0.000$
Work experience	$\rho=0.2005$ $\rho=0.000$	$\rho=0.03477$ $\rho=0.4218$	$\rho=0.1647$ $\rho=0.0001$	$\rho=0.2115$ $\rho=0.000$

show a more negative attitude towards the Roma National Minority (RNM) in terms of the remaining three factors. It is important to note that this correlation is very weak in both cases.

Discussion

This study aimed to explore the prejudices nurses have towards members of the Roma National Minority (RNM). To investigate these prejudices, a newly constructed questionnaire for assessing nurses' attitudes towards the Roma minority was used. After conducting exploratory factor analysis, four interpretable and reliable factors were identified, named "Roma within the healthcare system", "Protecting Roma from the consequences of discrimination", "General prejudices towards Roma", and "Nurses' attitudes towards members of the RNM as patients".

Roma are an ethnically, linguistically, and culturally diverse group with a long history of severe discrimination and marginalization (17, 18), which may present a challenge for healthcare professionals. The results indicate that nurses also exhibit prejudices in some aspects of their thinking about members of the RNM in the healthcare system. Although some statements point to slightly negative attitudes (e.g., "It is justified to place RNM in separate 'Roma rooms' in hospitals", $M=2.03$, or "During abortion procedures or gynecological surgeries, it is reasonable to discreetly perform sterilization to reduce the number of children born to Romani women", $M=1.94$), it is concerning that some respondents gave higher ratings. Separation of Roma during hospitalization was a practice in many European countries until recently (19). The statement regarding the sterilization

of Romani women describes a criminal, eugenics-inspired shameful practice that was systematically carried out in some countries, such as Slovakia and the Czech Republic, against the RNM in the 20th century (20), and such treatment of Romani women was also conducted in concentration camps (21). This is also the statement with the least agreement in our sample. The highest degree of agreement was found for the statement that Roma, on average, have more children than members of the majority population and that they do not take adequate care of them ($M=3.55$). Although a large number of children is a fact for most Romani families, especially those living in segregated Romani settlements, it does not necessarily mean that the parents do not care for their children. However, those Romani families assimilated into larger urban areas tend to have fewer children than "traditional" Romani families (22). Moderate agreement with certain statements likely reflects the general societal attitude towards the RNM, such as "Roma do not have a positive attitude towards work" ($M=3.1$) and "There are very few responsible and reasonable Roma" ($M=3.08$).

Regarding Roma as a patient in the healthcare system, nurses recognize the difficulties that may arise in communication due to the language barrier. They also moderately agree that Roma do not listen to healthcare workers' advice, either because they do not understand the instructions or because they prefer to act according to their own will. What is positive is that they find it shameful that Roma have a shorter life expectancy than the majority population. However, due to the formulation of the statement, it remains to be explored whether they consider this a shame for society or the Roma themselves.

Research on beliefs and prejudices in this population is rare, so the results of this study can only be tentatively viewed in light of the findings on the perception of Roma published in just a few studies. Heaslip et al. conducted a qualitative study involving nursing

students from four European countries (UK, Spain, Belgium, and Turkey), who articulated a broader societal stigma associated with the RNM in all four countries. Negative attributes were expressed through prejudices about the RNM as a group focused on crime, aggressive, violent behavior, or the choices these communities made regarding how they chose to live their lives. The study showed that the attitudes expressed were influenced by broader societal perceptions and personal and professional lived experiences (23).

Additionally, a study conducted in the Greek public health sector indicated that a significant portion of employees tended to exhibit prejudices towards Roma, which negatively affected their treatment of Roma when they tried to access necessary health-care services (24). In our study, however, only 8.8% of respondents believe that "spending public money on treating Roma is an unnecessary expense and a waste of money". In comparison, more than half of the respondents (56.9%) disagree or largely disagree with this statement.

Previous research has shown that both adults and children and adolescents in our society express high levels of prejudice towards the Roma National Minority (RNM) (25,26). In many European countries, prejudices against Roma are widespread and severe on personal, institutional, and national levels, especially in Eastern Europe, where Roma represents a significant ethnic minority. This is confirmed by studies showing that unfavorable views of the Roma population are widespread in Central and Eastern Europe (worst rated in Italy, best in Sweden, with Poland in the middle) (27). Reports from Italy (28), Spain (29), Hungary, Slovakia (11), and the UK (30) also support this.

Research from Hungary and Slovakia reveals a generally high level of prejudice towards the RNM among the general population (31,32), specific ideological groups (33) such as the extreme right (34), and even professional groups like the police (35) and health-care workers (36).

A particular goal of this study was to analyze the relationship between prejudice towards the RNM and some socio-demographic characteristics of the respondents, as well as the existence of personal and professional contacts with members of the RNM, affiliation with the majority nation or national minority, and self-assessment of the respondent's position on the political spectrum and religiosity.

Gender and place of residence (city/village) were not statistically significant, but a significant, though very weak, correlation was found with age (older respondents had more negative attitudes). Likewise, for most factors, no differences were found based on religiosity, except for the factor where there was no difference between religious and non-religious respondents. However, both groups had more positive attitudes compared to those who defined their relationship with religion in other ways ("I am indifferent to religion", "I think about it a lot, but I am unsure whether I believe or not", and "I do not want to answer this question"). Regarding political orientation, all factors showed that respondents who positioned themselves on the right side of the political spectrum had more negative attitudes.

The results can be partially compared with results from similar studies conducted among nurses, such as the one in Poland, which showed that the level of distance towards the RNM did not significantly correlate with age, work experience, life in another country, nursing specialization, working in another country, participation in cultural events, gender, or religion (37).

Research has shown that positive contact between members of different groups is one of the most effective ways to reduce prejudice (38). According to Allport's contact hypothesis, contact with an out-group should lead to better intergroup relations and reduced social distance (39). This was only partially confirmed in our study. On the "General prejudices towards Roma" factor (F2), there were no differences in assessments based on prior personal or professional experience with the RNM. On the other hand, on factors 1, 3, and 4, respondents with no personal/friendship contact with members of the RNM had more negative attitudes. In contrast, professional contact was statistically significant only for factors 1 and 4. More hostile attitudes were expressed by respondents who were not members of national minorities (except on factor 3, where no statistically significant differences were found).

Positive intergroup contact generally leads to positive experiences with the out-group, exposing group members to information that challenges their existing stereotypes, which further leads to changes in beliefs, attitudes, and behavior towards the out-group (40). However, we found more negative attitudes in regions of Croatia where more members of the RNM live. Consequently, there is a higher likeli-

hood that healthcare workers will have more personal and professional contact with Roma. Statistically, significantly more negative attitudes were found in respondents from Međimurje and Northern Croatia compared to all other regions. It also appeared that belonging to the majority nation was associated with more negative attitudes on most factors (except for factor 4, "Nurses' attitudes towards members of the RNM as patients"), which we can, among other things, link to fewer contacts with members of national minorities. The issue of attitudes and prejudices towards Roma is complex and requires further research.

Some studies have indicated a connection between religiosity and ethnic distance and intolerance, with prejudices expressed stronger towards national and ethnic groups arising from higher religiosity (41), which was not confirmed in this study.

Additionally, the results of this study do not fully align with the findings of studies that have established that as the level of education rises, the level of intergroup anxiety decreases (24). Nurses with bachelor's degrees showed more negative attitudes towards the RNM than those with a secondary education. This may suggest that under the influence of dominant societal attitudes, educated healthcare workers risk becoming carriers of the same anti-Roma prejudices and negative attitudes as the general population. However, it is positive that nurses with higher levels of education showed more positive attitudes. Since nurses with higher education also tend to have more extended work experience, be older, and show more negative attitudes towards the RNM than those with lower education and younger age, future analyses should investigate the interconnection between these three characteristics.

It was also confirmed that there is a significant relationship between political orientation (42) and prejudice towards certain marginalized groups in society. The results of this study showed that respondents who positioned themselves on the right side of the political spectrum expressed more negative attitudes toward the RNM across all four extracted factors.

The unacceptability or unwillingness of society to address the growing prejudices towards the Roma National Minority (RNM) in order to ensure equal opportunities for them, especially in the healthcare system (43), is unacceptable. Given the developments in Europe, including Croatia, where more members of

other national minorities are entering the workforce and long-term becoming users of the healthcare system, the more negative attitudes we found on some statements should be viewed in a broader social context and the current climate toward people who are not members of the majority nation.

Roma, who have been subjected to multiple forms of discrimination for centuries due to prejudice, still often cannot enjoy the same rights and opportunities or the same level of protection that EU legal achievements provide to other EU citizens. To achieve this, intercultural awareness and dialogue need to be encouraged through training healthcare workers about the specific health needs of Roma.

Furthermore, it is necessary to confront negative stereotypes about the RNM, including those in the media and online platforms such as social media, where scientific research and publications can significantly contribute (44,45).

Only through targeted work can intercultural differences be overcome. This can be achieved by providing continuous training to healthcare workers on the health needs of the RNM while not forgetting past tragedies and immoral practices. This can be achieved by supporting scholarships and other incentives to attract more Roma into the healthcare sector while being mindful of the sensitivities of Roma men and women (22,46,47).

The limitations of this research include the convenience sample, which is reflected in the younger age structure of the sample, and the relatively small number of nurses from different regions of Croatia, which led to a small number of respondents in some categories. One reason might be the online data collection, which likely attracted those with higher digital literacy. Additionally, better operationalizing certain variables such as religiosity and political orientation should be considered.

Conclusion

Considering that nurses are often the first point of contact with patients and the largest subgroup within the healthcare worker population, it is crucial to identify their prejudices towards members of the RNM in the healthcare system.

A questionnaire on nurses' prejudices towards the Roma National Minority was applied, and through exploratory factor analysis, four interpretable and reliable factors were identified, named "Roma within the healthcare system", "Protecting Roma from the consequences of discrimination", "General prejudices towards Roma", and "Nurses' attitudes towards RNM members as patients". The results show that some nurses share the same general prejudices towards the RNM as the general population. Given that they are healthcare workers who encounter Roma both as patients and in the healthcare system, the existence of prejudices could result in inadequate care for RNM patients and lead to worse health outcomes.

The analysis of the relationship between specific socio-demographic indicators and beliefs and prejudices towards the RNM revealed that gender and the size of the settlement where respondents live were insignificant. Statistically significant differences were found based on the level of education and the region of residence, with respondents with higher education levels and those living in Međimurje County and Northern Croatia exhibiting more negative attitudes towards the RNM than those with lower education or living in other parts of Croatia. Additionally, belonging to the majority population was associated with more negative attitudes than those expressed by members of national minorities included in this study. Statistically significant differences in attitudes were also found between respondents who had personal and professional contacts with members of the RNM compared to those who did not, with such contacts contributing to less negative attitudes. Respondents from the right-wing political spectrum and those from the majority population expressed statistically significantly more negative attitudes, while religiosity did not show statistical significance.

To improve Roma's position in realizing their fundamental right to universal and free healthcare guaranteed by the Constitution, it is necessary to first elimi-

nate prejudice among healthcare workers at all levels toward the RNM. This is essential to correct these prejudices and ensure full equality for all RNMs who have access to the same healthcare rights available to the majority population.

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PREDRASUDE MEDICINSKIH SESTARA O ROMIMA KAO PACIJENTIMA U SUSTAVU ZDRAVSTVA REPUBLIKE HRVATSKE

Sažetak

Zbog duboko ukorijenjenih predrasuda, Romi su najranjivija, višestruko diskriminirana etnička skupina i nacionalna manjina koja se u raznim sferama društva, pa tako i u našem zdravstvenom sustavu, suočava s diskriminacijskim izazovima koji ograničavaju kvalitetu zdravstvene skrbi, uslijed čega se može povećavati rizik od progresije bolesti i prerane smrti. Cilj istraživanja bio je analizirati predrasude medicinskih sestara prema pripadnicima romske nacionalne manjine, te analizirati njihovu povezanost s određenim sociodemografskim obilježjima i uvjerenjima ispitanika. Istraživanjem je bilo obuhvaćeno 536 medicinskih sestara zaposlenih u sustavu zdravstvene zaštite na sve tri razine, koje neposredno rade s pacijentima. Iz prikupljenih stavova o 29 ponuđenih tvrdnji o položaju i odnosu prema Romima kao pacijentima, eksploratornom faktorskom analizom izdvojeno je 19 tvrdnji razvrstanih u četiri detektirana i interpretabilna pouzdana faktora koji su nazvani „Romi unutar zdravstvenog sustava“, „Zaštita Roma od posljedica diskriminacije“, „Opće predrasude prema Romima“ i „Odnos medicinskih sestara prema pripadnicima romske nacionalne manjine kao pacijentima“, kojima se objašnjava 60,7 % ukupne varijance. Analiza je pokazala da dio medicinskih sestara dijeli iste opće predrasude prema Romima kao i opća populacija, pri čemu ispitanici s višom razinom završenog obrazovanja i starije životne dobi te oni koji žive na području Međimurske županije i/ili sjeverne Hrvatske iskazuju statistički značajno negativnije stavove prema Romima od mlađih, niže obrazovanih i onih koji žive u drugim dijelovima Hr-

vatske. Također, pripadnost većinskom stanovništvu donosi negativnije stavove prema Romima nego što ih iskazuju pripadnici nacionalnih manjina. Oni ispitanici koji su imali privatne i profesionalne kontakte s pripadnicima romske nacionalne manjine u dijelu faktora iskazuju manje negativne stavove od onih koji su ih nisu imali. Negativnije stavove prema Romima iskazuju ispitanici s desnog političkog spektra, dok se religioznost nije pokazala statistički značajnom.

Ključne riječi: Romi, predrasude, medicinske sestre, diskriminacija, zdravstveni sustav
