



KNOWLEDGE AND ATTITUDES TOWARDS COVID-19 AMONG THE ROMA COMMUNITY IN BULGARIA

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ABSTRACT

Introduction: The COVID-19 pandemic has negatively affected all aspects of public life, as well as all of the country's population. The Roma community is specific and vulnerable to communicable diseases, in particular to COVID-19.

Aim: To study the knowledge and attitudes of people from the Roma ethnic community about the coronavirus infection.

Methods: In July-August 2020 in Parvomay, Sliven, and Plovdiv through individual interviews "face to face" 105 respondents with Roma background were interviewed. A structured anonymous questionnaire was used, including 12 closed-ended questions.

Results: The majority of respondents (80%) indicated that they know what a coronavirus infection is, as the main source of information was television (83.8%). The virus is considered a danger by 65.7%, and 73.7% of the respondents tend to follow certain measures (washing hands, wearing masks, etc.) to protect themselves. To the specific question of how they protect themselves, the answers varied from drinking brandy (9.5%), frequent ventilation (24.8%), and washing hands (58.1%) to wearing masks (63.8%). Only 1/3 of the respondents were willing to receive the vaccine and 45.3% were to be tested for the infection.

Conclusion: Adherence to basic preventive measures is not optimal, including vaccination, and this necessitates the need for field meetings, trust building and communication techniques to inform the community.

Key words: coronavirus, SARS-CoV-2, attitudes, behavior, Roma ethnicity

INTRODUCTION

Since first being recorded in late 2019 in China, SARS-CoV-2 has spread to more than 200 countries around the world, causing 6.5 million deaths and 616 million infections (1). Numerous news reports and analyses have drawn attention to the critical situation caused by the social, economic, and political consequences of the pandemic for the most defenseless and vulnerable social groups in Europe and above all many local Roma

communities (2, 3). Approximately 12 million Roma live in Europe, and they are among the most disadvantaged groups on the continent (4). In the countries of Central and Eastern Europe, a large percentage of them live in segregated settlements, characterized by poor living conditions and a higher burden of infectious and non-infectious diseases. In recent years, numerous data have been published related to the outbreak of epidemics of infectious diseases, including vaccine-preventable among them (5, 6). Marginalized people also have lower awareness and knowledge related to infectious diseases which can cause poor health conditions and unsafe protective practices (7). The pandemic made the long-term unresolved issues in the Roma neighborhoods in Bulgaria

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stand out even further and led to a severe crisis in some settlements (8). Multi-member families in many Roma neighborhoods live in crowded houses, sometimes even in a single room. That is why even where the Roma follow social distancing rules towards people outside the household, the Roma living in overcrowded neighbourhoods are exposed to a higher risk of infection.

Although the vaccination drive is ongoing, it is important to ensure that people will continue to adopt preventive and promotive behaviours such as washing hands regularly, social distancing, and wearing a mask (9). For promoting preventative practices and attitudes, knowledge about the disease is especially important (10). In a situation of a not fully clear risk, people may be prone to misinterpret in many wrong ways their personal experience, which makes communication by the official national and local authorities dealing with the pandemic even more important.

AIM

To analyze the knowledge and attitudes of individuals from the Roma ethnic community in Bulgaria regarding the coronavirus infection in the first year of the pandemic spread of SARS-CoV-2.

MATERIALS AND METHODS

During the months of July-August 2020, 105 respondents were surveyed "in the field" in

Parvomay, Sliven and Plovdiv through individual "face-to-face" interviews. A structured anonymous questionnaire was used, including 12 closed-ended questions. Some of the questions had more than one answer.

The questionnaire was developed within the project "Mentoring support for students of Roma origin studying health specialties", supported by the Active Citizens Bulgaria Fund under the FM of the EEA 2014-2021.

Standard descriptive statistics were used to summarize the demographic characteristics. Quantitative variables were presented by the mean and standard deviation (mean \pm SD) or median (25th percentile; 75th percentile), based on the sample distribution. Qualitative variables were presented as numbers absolute/relative frequencies, totals, and percentages (n, %). The statistical significance was set at $p < 0.05$. Statistical analyses were performed using SPSS Statistics v. 26 software (IBM Corp. Released 2019. Armonk, NY (New York): USA).

RESULTS

Most respondents (80%) indicated that they know what a coronavirus infection is, as their main source of information was television (83.8%) (**Table 1**).

Table 1. Knowledge and perceptions of the respondents regarding COVID-19.

Questions	N,%
Do you know what a COVID-19 infection is?	
Yes	84 (80)
No	5 (4.8)
I do not know	15 (14.3)
Which is your main source of information? *	
Television	88 (83.8)
Friends, neighbors	4 (3.8)
Internet	34 (32.4)
Health mediators	11 (10.5)
The pastor	8 (7.6)
Do you know anybody who has been infected with COVID-19?	
Yes	49 (46.7)
No	56 (53.3)
Do you consider the virus a danger?	
Yes	69 (65.7)
No	36 (34.3)
Do you think that it is important to follow the guidelines for social distancing and prevention?	
Yes	77 (73.3)
No	28 (26.7)
* Option to choose more than one answer	

Ninety-four of the respondents (89.5%) have running water in their homes and, accordingly, a practical opportunity to observe hand hygiene.

Table 2 presents the practices for the prevention of COVID-19 among the respondents.

Table 2. Preventive practices of the respondents regarding COVID-19

Question	N, %
How do you protect yourself from COVID-19? *	
I wash my hands frequently	61 (58.1)
I wear a mask	67 (63.8)
I stay at home predominantly	29 (27.6)
I drink brandy	10 (9.5)
I ventilate the rooms frequently	26 (24.8)
I live as usual	16 (15.2)
Where do you supply yourself with masks from ?	
I made a mask out of cloth	36 (34.3)
I buy masks from the pharmacy	74 (70.5)
I use a scarf	10 (9.5)
I have received free of charge masks	15 (14.3)
I do not use a mask	7 (6.7)
How often do you wear a mask?	
Every day	65 (61.9)
1-2 times a week	13 (12.4)
If somebody is ill	15 (14.3)
I don't wear a mask	12 (11.4)

The responses of the respondents were various, regarding the possibility of free testing for COVID-19. 63.8% of them are unwilling or unsure whether they would be examined for free. Just a third (n=34, 32.4%) of the participants plan to get vaccinated for COVID-19. Respondents who considered the virus to be a threat were more willing to get vaccinated in comparison with those who had the opinion that the virus is not dangerous (Pearson χ^2 test = 11.319, p = 0.001). Knowing somebody who has become infected with COVID-19 was another factor that we found was influencing in a positive direction the intention to receive the vaccine by our respondents (Pearson χ^2 test = 14.579, p = 0.001).

DISCUSSION

The awareness and attitudes of the residents of the examined neighbourhoods to the Covid-19-related health issues do not differ significantly from the ones established by other surveys about the Bulgarians in general (11). In our study, 65.7% of the respondents claimed that they consider the virus to be a threat, and this is in accordance with a similar study done among the Roma community (8). The main source of information about the virus for our participants was television (83.8%). A study done by the John Hopkins Center for Communication Programs states that exposure to information

from radio or television is associated with more trust in the information source (12). Therefore, it is vital to tap into the potential of these communication platforms to disseminate the right information in a timely manner.

In the context of the COVID-19 pandemic, diverse hygienic measures were both advised and enforced by the authorities. Some of these practices were considered common before the pandemic (washing hands and clothes), while some are novel for most individuals, wherever they live (wearing masks and gloves, use of different means of disinfection). It is a notorious fact that the Roma settlements lack running water and stable/safe access to electricity. In our study, only a small share of the respondents stated that they don't have access to running water (10.5%). Moreover, in a lot of the Roma neighborhoods, there is a problem with the sewage system and garbage disposal which can also pose a risk for the spread of infectious diseases and for compliance with hygienic measures (8). Corburn et al (13) discussed how informal settlements are poorly prepared to manage the pandemic and offered suggestions to minimize the risk of the virus.

However, in the present study, the respondents showed a relatively high level of compliance with the practices for the prevention of COVID-

19, as 61.9% stated that they wear a mask every day. A study in Serbia established lower compliance with preventive measures in the studied Roma neighborhoods (14).

In our study, only 32.4% of respondents planned to receive the COVID-19 vaccine. COVID-19 vaccine hesitancy among migrant or ethnic minority groups has been mostly investigated in comparison with native populations. There appears to be a deep hesitancy toward COVID-19 vaccinations among Roma. Although no exact data on vaccine uptake among Roma in Europe are available as health authorities in this region do not collect such data on the basis of ethnicity, some studies in the USA have shown vaccination rates among ethnic minority groups are generally lower, and experts expect it to be the same with Roma (15). Understanding the motives of COVID-19 vaccine acceptability in people with unstable housing, including minorities and migrants, is, therefore, crucial to tailor public health communication and outreach, as claimed by the World Health Organization “No one is safe until everyone is safe” (16). In our study, fear of COVID-19 and knowing someone having the disease were positively associated with the intention to receive the COVID-19 vaccine. Similarly, several recent cross-sectional studies found that fear of COVID-19 is positively related to vaccination willingness (17,18). A study from the USA indicated that those who personally knew someone who had been hospitalized or had died as a result of having COVID-19 had a higher intention to get vaccinated compared to those without that experience (19), which was also confirmed by our analysis.

CONCLUSIONS

The knowledge, attitude and practices related to COVID-19 are not optimal in the studied group of respondents from the Roma community. Compliance with basic preventive measures is low, including vaccination. This requires field meetings, provision of effective risk communication messages to these communities through alternative channels, trust-building and communication techniques to inform the community.

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