

Special Article

Roma as a Venerable Population Group and the Development of an Indicative Vaccination Program for the COVID-19

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Abstract

The COVID-19 pandemic has shown in the most compelling way the need to vaccinate socially vulnerable and minority groups of the population. Factors that make their ability to participate in medical care limited or not accessible at all, expose them to a higher risk of being infected and getting sick from COVID-19. One of these groups with high rates of morbidity and mortality are the Roma population.

Their inclusion in vaccination programs is extremely important because it protects them as a vulnerable group, protects society as a whole, builds a protective shield against the risk of disease spreading, helps to decongest the health system and contributes to the acquisition of collective immunity. In order to achieve the vaccination goal, the collaboration of the state with the Public Health bodies as well as with the various stakeholders (Non-Governmental Organizations, municipalities, etc.) is deemed necessary. As regards the Roma population, the implementation of a vaccination program follows the five steps of the decision-making process.

At a time when the pandemic highlighted as the first priority the strengthening of the public health system, special importance must be given to social cohesion and to equal accessibility to health care system for all, in order to protect the whole of society.

Keywords: COVID-19, vaccination, social vulnerable groups, stakeholders decision making, GANTT

Introduction

The COVID-19 pandemic exposed and highlighted all the vulnerabilities and existing inequalities, in equal extend to low and high income countries (Kaojaroen, et al., 2021). These inequalities have a greater impact on vulnerable groups of the population, whose participation in social and economic life becomes more difficult either due to socio-economic problems or due to some physical, mental or intellectual disability.

These groups are divided into two categories:

a) to the "vulnerable groups of the population" whose inclusion in socio-economic life is made difficult by physical and psychological causes or by delinquent behavior. These groups include people with

disabilities (PWD), chronically suffering from serious pathological problems or mental patients, prisoners/released from prison, HIV-positive people and drug addicts.

b) to the "minority groups of the population" whose integration into the labor market is difficult due to various socio-economic reasons. These groups include immigrants, refugees, homeless people, Roma, the illiterate, etc. (Government Gazette 4019/2011 , 2011).

The account of COVID-19 pandemic as well as the concern about emerging mutations of the virus have highlighted the urgent need to protect these vulnerable groups through vaccination (Zard, et

al., 2021). In particular, 8.67 billion doses of the vaccine against COVID-19 have been granted worldwide to date. In Greece the amount of complete vaccinations rises up to 6.9 million, while 3.3 million booster doses of the vaccine have also been carried out (Our World in Data, 2021)(Figure 1- Appendix). However, the European Center for Disease Prevention and Control (ECDC), in a related report shared a few months ago, referred to the low levels of vaccination observed among vulnerable

population groups (ECDC, 2021). In particular, worldwide more than 80% of refugees and immigrants as well as other marginalized groups are treated as the last wheel of the train by official agencies, regarding their access to vaccines (Zard, et al., 2021).In addition, despite the fact that these population groups are at increased risk of becoming infected with COVID-19, detailed data on their vaccination status are not widely available.

Appendix

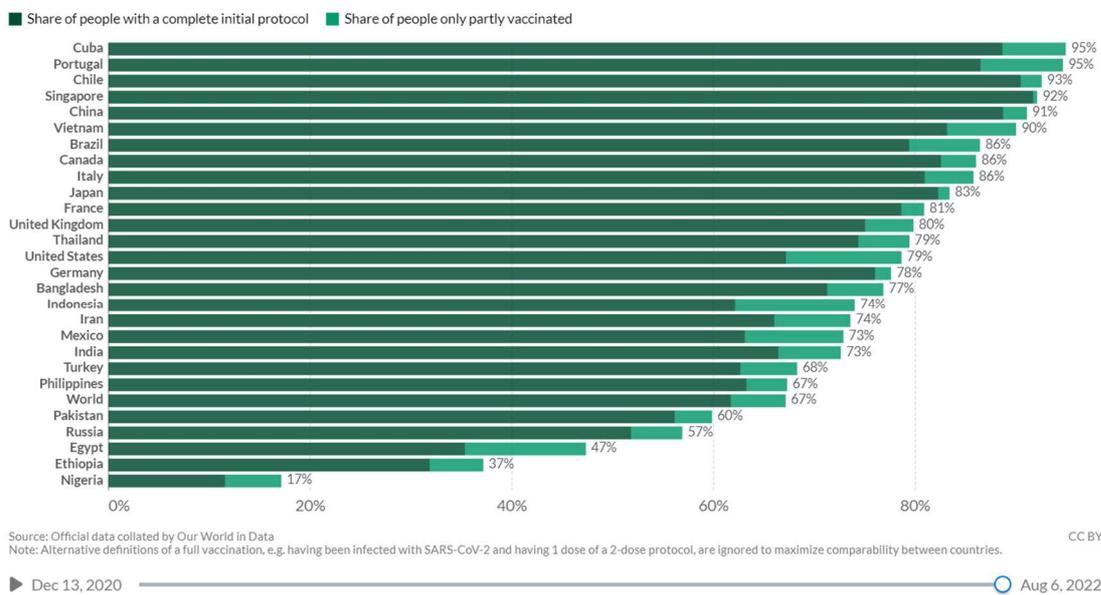


Figure 1: Vaccination rates against COVID-19 among European Union countries

Therefore, the purpose of this paper is to document the necessity and importance of vaccination of these vulnerable groups of the population, as well as to examine the reasons why these populations show low levels of vaccination. As an example, Roma people were chosen for which the stakeholders who take part in the implementation of their vaccination coverage will be identified and also the decision-making process will be analyzed in order to develop a realistic proposal for the implementation of the vaccination to this group.

What is the importance of vaccinating vulnerable groups of the population and what are its benefits? Socially vulnerable populations, such as immigrants, refugees who do not have

official documents and people who do not have a permanent residence, often face serious discrimination and prejudice, living socially marginalized and even stigmatized (WHO, 2021). The limited or no access to social and public goods (work, housing, education, medical care, social security), the economic and political exclusion, their living in overcrowded conditions, as well as their possible high prevalence of underlying diseases, has exposed these groups at a higher risk of becoming infected and severely ill with COVID-19 (Kaojaroen, et al., 2021). All these factors create an unfavorable environment with several risks, which make these populations a potential public health danger (ECDC, 2021). In addition, people with disabilities (whether physical or mental) may be at increased risk of

contracting COVID-19, as the multiple barriers they face in accessing healthcare such as the limited ability to implement physical and social distancing and the obstruction of programs instituted by the government to support them (e.g. "Help at Home Program"), make them vulnerable to infection and serious illness. Starting from the fact that the COVID-19 pandemic creates a dead-end situation, where high levels of inequality and discrimination affect the spread of the virus, as well as from the fact that these groups of the population are almost excluded from the various social policies, it should be considered seriously, the necessity of vaccination for these vulnerable groups (WHO, 2020).

Vaccination is one of the greatest achievements of Public Health in the 20th century, it is the primary prevention measure for the elimination of communicable diseases, saving millions of lives annually. Vaccination against COVID-19 protects not only the people that chose to be vaccinated but also those around them, thus reducing the risk of spreading the disease.

The ultimate goal is to achieve "herd immunity," in which most of the population is fully vaccinated and immune to COVID-19, so that the chances of the disease spreading from person to person are reduced to minimum. Vaccine also constitutes the shield against the virus, protects vulnerable groups and by extension, leads to the decongestion of the Health System (<https://vaccination-info.eu/>, 2020). In order to achieve the above, it is of utmost importance that the vaccination process is equally accessible to all people.

What are the reasons for the low levels of vaccination and how can the barriers be removed? The main reason is the multiple obstacles faced by these populations, as they are often excluded from the National Health System and the National Immunization Program, due to insufficient legal rights for health care (Declich, et al., 2021).

The lack of basic documents (identity, residence permit, social security number), bureaucracy, lack of trust and information as well as the spreading of news with the aim of creating prevention regarding the benefits and safety of vaccines, the complicated registration procedures (such as through the Online), the lack of cooperation with Non-Governmental Organizations (NGOs), the inability to understand the language especially for

populations from foreign countries, and even the fear of arrest, detention or deportation, are the main obstacles these populations face (Declich, et al., 2021). To promote and protect Public Health, Health Systems should be culturally sensitive to the needs of these populations. Governments should ensure that these groups of people are included in vaccination programs against COVID-19. Special arrangements should be made for those who are excluded from the health system, in order to facilitate their access to vaccines.

Mechanisms should be created in which governments will cooperate with NGOs and Civil Society Organizations in order to ensure the practical implementation of the measures taken. It is also extremely important to be able to map these vulnerable groups in order to facilitate the distribution of vaccines through the creation of mobile vaccination units. Also, the health and administrative staff should be adequately trained in order to be able to respond to the needs of these groups and to be able to provide them with the necessary information.

Furthermore, Public Health agencies as a monitoring group should ensure the detection and elimination of incorrect information and misinformation. The integration of these groups in the vaccination programs against COVID-19 is of utmost importance not only to protect the group, but also to protect the entire society from the risk of further outbreaks (Declich, et al., 2021) (Kaojaroen, et al., 2021)

Which stakeholders are involved in the vaccination coverage of the Roma minority?

The Roma is the largest ethnic minority in Europe. It is estimated that their population in Europe reaches 10 to 12 million. Of these, approximately 6m. are citizens of the European Union. In Greece their population is estimated at approximately 265,000 (2.47% of the general population).

A large part of these people lives in very poor socio-economic conditions and even today are still victims of prejudice and social exclusion (European Commission, 2020). More particularly, they face limited access to education, reduced employment opportunities and consequently low levels of income, lack of stable housing due to their frequent movements, poor hygiene and living conditions, lack of physical distance as well as limited access to health care.

As a consequence, these conditions lead to high rates of morbidity and mortality as well as lower life expectancy (European Parliament, 2020) (Bulbul, 2020). The abovementioned factors have made the Roma population particularly vulnerable to COVID-19. In researches conducted in Slovakia and Hungary, countries with high percentages of Roma population, high rates of morbidity and mortality from COVID-19 were observed, while 98% of the deaths concerned people over the age of 65. The situation is likely to be similar in other European countries (Holt, 2021).

These data, as well as the general mistrust of these population groups towards the authorities and the difficulties in understanding information about vaccination, have pushed governments to work with stakeholders in order to inform and provide the necessary assistance to help these vulnerable groups. The NGOs help inform the Roma camps, about the vaccination against COVID-19 by making the necessary appointments (<https://www.klimaka.org.gr>, 2021).

Task force of the National Public Health Organization and the Ministry of health carry out visits to Roma camps in order to perform rapid tests and urge residents to be vaccinated immediately at the nearest Health Center, while in some cases vaccinations are carried out on site by mobile units (Ministry of health, 2021). The goal is to support these people and improve their living conditions as well as to reduce the spread of the disease.

The Municipalities, in an effort to provide health support, they organize campaigns through specially designed programs with the aim to support the vulnerable groups of the population and in order to inform but also to carry out on-site vaccinations with the help of mobile units to Roma living in camps (KODIP, 2021). Doctors of the World, for their part, offer vaccinations as well as the necessary medical care (<http://www.csringreece.gr/>, 2013)

Indicative proposal to vaccinate Roma through the decision-making process. An Organization in order to achieve its goals, is ought to make daily decisions which are divided into two main categories. In the planned decisions which occur frequently and are repeated and in the unplanned ones that occur intermittently and there is probably no experience in solving them from a previous decision. The levels of decision-making

in an organization are three and correspond to the three levels of management:

- a) strategic decisions which are made at the upper level,
- b) managerial decisions taken at the middle level and c) operational decisions, taken at the lower level of management (Koutouzis, et al., 1999).

In order to implement the vaccination of the vulnerable Roma group, a logical procedure consisting of five steps should be followed:

- Identification of the problem. As far as the Roma are concerned, access to quality and free Health is quite difficult. A large percentage of this population is undocumented, uninsured and not entitled to free medical services. As a result, the COVID-19 pandemic has brought to the surface the need to immunize this population, as their unsafe sanitary living conditions and high morbidity rates have intensified the spread of the virus, increased their mortality rates, and as a consequence have further burdened the National Health System. Recognizing that the State's effort to vaccinate the population against COVID-19 began under difficult and adverse conditions, a similar priority should be given to groups of the population, who are more exposed and vulnerable, such as the Roma, whose vaccination rates remain low.
- Definition of requirements and performance criteria: Appropriate measures should be taken by the state to enable access to medical care for all Roma regardless of whether they have health insurance or legal documents. An important role is played by the medical and nursing staff who will lead this effort. New jobs may need to be announced for people to staff this effort. Also, a mapping of this population should be done in order to be able to determine the number of human resources that will be employed and also to be able to make a cost budget plan. Finding resources for the acquisition of the special equipment required as well as for its maintenance could be done from the state budget, donations from charitable institutions or a European Union (EU) fund. A key

performance criterion is to vaccinate as many Roma as possible.

- Finding alternative solutions: The available alternatives are as follows: 1. Vaccination will be carried out by a mobile unit of EODY which will be transferred to the camp and provide mass vaccinations. 2. Vaccination will be carried out in specially designed centers of the Municipalities. In both cases it is recommended that the vaccination is carried out with Johnson & Johnson which consists of one dose.
- Evaluating the solutions and choosing the most suitable: The most suitable solution seems to be the first one. The mobile stage transition seems to be the more effective because there are Roma who, either due to a poor economic situation or due to aggravated health problems, are unable to move. As a result, the possibility of cancellation of the appointment or non-attendance of the interested party is minimized by the on-site presence of the mobile unit at the camp. In addition, the single-dose vaccine is more suitable for a population that is difficult to be reached twice due to its high migration rates. Finally, this specific vaccine does not require special storage and maintenance conditions (such as deep freezing) but is stored at 2 0C to 8 0C, which facilitates its transport (<https://www.jnj.com/>, 2021)
- Decision-taking and implementation of the decision: The steps for the

implementation of the vaccination of the Roma are as follows: First, those involved should clearly define the objectives to be achieved within a certain period of time, e.g. six months and secondly. Those goals should be realistic and specific. The government should cooperate with NGOs, municipalities and stakeholders who will organize information campaigns, help in the "mapping" of Roma camps, issue and organize the necessary documents as well as the appointment system. It is considered necessary to issue a Temporary Social Security Registration Number (SSN) exclusively for the purpose of vaccination, for those persons who do not have a Tax Registration Number, passport or Police Identity Card. The final stage is the implementation and operation of the program, checking its effectiveness as well as possible problems (e.g. existence of adverse effects after vaccination) which may arise. Mobile units manned by specialized medical and nursing personnel will visit the camps in order to provide the necessary medical instructions and services and in order to undertake the vaccination process (Government Gazette 5825/2021, 2021). Care should be taken by the stakeholders for the distribution of the certificates of the relevant vaccination documents (Table 1).

Table 1: GANTT chart of implementation of a vaccination program for the Roma population.

Task scheduling	Months					
	1 ^o	2 ^o	3 ^o	4 ^o	5 ^o	6 ^o
Goal setting						
Mapping the camps & conducting awareness campaigns by stakeholders and N.G.O.						
Issuance of necessary documents (Temporary SSN)						
Activation of necessary documents & booking the vaccination appointment						

Implementation of COVID-19 vaccination from mobile units			
Distribution of the vaccination certificates with the help of the stakeholders			

Conclusion: The implementation of a COVID-19 vaccination program for the vulnerable Roma population, is essential as their low levels of vaccination, poor hygiene and living conditions, and high prevalence of underlying diseases make them vulnerable to become infected and seriously ill from COVID-19.

Based on the above planning, the implementation of such a program is possible with costs that will be granted either from donations, or from a state fund, or from an EU fund, as well as the contribution of the stakeholders will also play a decisive role. A related study has shown that the vaccination coverage of Roma children at the national level is low. It is much lower than the vaccination level of the general child population of Greece.

The Roma vaccination program against COVID-19 can be a springboard and contribute significantly to the formation of a comprehensive program for the systematic vaccination of Roma children in Greece (Papamichail, 2018). In an era marked by new challenges for Public Health, special emphasis should be placed on the protection of people (regardless of race, religion, political beliefs and socio-economic status) in vulnerable situations, whose right to free and unfettered access to health is not guaranteed.

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