

**European Journal of Social Sciences Studies** 

ISSN: 2501-8590 ISSN-L: 2501-8590 Available on-line at: <u>www.oapub.org/soc</u>

DOI: 10.46827/ejsss.v9i1.1512

Volume 9 | Issue 1 | 2023

# CORONAVIRUS (COVID-19) VACCINATION: OPINIONS AND ATTITUDES OF SOCIAL WORKERS. A GREEK NATIONAL SURVEY

Manolis Nikolaos Mentis, Eleni Mavroeidi, Anastasia Malevskaia, Nikolaos Karalis, Georgia Konstantopoulou<sup>i</sup> Department of Education and Social Work, School of Humanities and Social Sciences, University of Patras, Greece

#### Abstract:

There is a general belief that vaccines constitute the most effective form of limiting the spread of diseases and protecting public health. Yet, as highly effective tools as vaccines may be, studies reveal that the rates of support and acceptance of vaccinations during the COVID-19 pandemic from public health personnel in Western countries indicate hesitancy among them. As professional Social Workers are part of the public health personnel who are priority groups for many vaccinations, the present study focused on their opinions and attitudes towards vaccination and their role in motivating their beneficiaries. The purpose of this quantitative Greek National Survey among 771 Social Workers, members of the Association of Social Workers of Greece (ASGLE), who are professionally active in Greece, was to understand and analyze their attitudes towards the available vaccines against COVID-19 and compulsory vaccination. Through the online self-completion questionnaire, which was used for the collection of data, the survey also aimed to evaluate the Social Workers' knowledge and sources from which they received information about Covid-19, their motivational sources, their views on compulsory vaccination of health professionals and their views on motivating their beneficiaries with regards to vaccination.

**Keywords:** social workers, vaccination, Covid-19, SARS-CoV-2, attitudes, Greek National Survey

<sup>&</sup>lt;sup>i</sup> Correspondence email: <u>gkonstantop@upatras.gr</u>

### 1. Introduction

The rapid spread of the SARS-CoV-2 virus has been attributed to the hyperactivity of current lifestyles, globalization and the accessibility of Wuhan, the first epicentre of the virus (Musselwhite, Avineri & Susilo, 2020). Since the first outbreak, the COVID-19 pandemic has rapidly evolved into a situation with profound lifestyle implications. In addition to the devastating health consequences for individuals directly affected by the virus, the COVID-19 pandemic has had a significant impact on the way people live and work, profoundly affecting their physical and mental well-being (Giubilini, 2020). This includes Social Workers in Greece and worldwide. They themselves not only had to adapt to the new reality created by the coronavirus but they also had to help society citizens meet the new challenges (Parker, et al., 2021). But what is the role of Social Workers in order to urge those they serve to do the same and protect their health? These are just some of the questions that will be answered in the following survey with the purpose to clarify the views of Social Workers who are members of the Association of Social Workers of Greece on vaccination against coronavirus.

Throughout history, there have been several pandemics, such as smallpox (1896), tuberculosis (1850) and the plague (1817). Relatively recent pandemics include the Spanish flu (1918), the HIV5 pandemic (1980), the 2009 influenza and the coronavirus pandemic (Covid-19) (Alcoforado, 2020). It is important to note that an epidemic disease whose number of new cases remains constant over time (stable incidence) is not considered a pandemic (Butter et al., 2021), while influenza pandemics should not be confused with re-emerging seasonal influenza (Alcoforado, 2020). In the last century, people have experienced four flu pandemics, and the globalization processes and advances in medicine and epidemiology during this period have changed the way people experience each of these epidemics (Giubilini, 2020). While advances in the prevention, control and treatment of infectious diseases have improved our ability to respond to such outbreaks, globalization processes related to human behavior, demographics and population movements have increased the threat of pandemic outbreaks that contribute to the spread of diseases (Schrading et al., 2021). In Greece, the first case of SARS-CoV-2 occurred on 26 February 2020 and subsequent confirmed cases reached 89 by 10 March (health.gov.au, 2022). The first death was recorded on 12 March and it was of a male citizen aged 66 years. From 10 March to 4 May, the Greek government put in place a series of measures to prevent and limit the spread of the virus resulting in the lowest rates of illness and deaths among all European countries. Initially, a Decree laid down the necessary measures to avoid and prevent the spread of Covid-19, which included a mandatory clinical and laboratory assessment of persons showing symptoms and their restrictions in case of clinical verification. Subsequently, a Decree on the protection of citizens against the SARS-CoV-2 virus suspended the operation of educational institutions, catering establishments, art and cultural venues, sports facilities and shopping centres throughout the country. This was followed by a ministerial Decree on the prohibition of religious services and rituals in places of worship (ERTNEWS, 2022). Subsequently, a joint ministerial Decree was published in the Government Gazette 986/B/22-3-2020, which stipulated the restriction of the movement of citizens with certain exceptions. Somewhere between the end of the second pandemic wave and the beginning of the third, a rapid announcement was made informing the Greek citizens about the first vaccines against the pandemic (ERTNEWS, 2022). In late December 2020, the European Medicines Agency (EMA) recommended that the European Commission grant the conditional marketing authorization for the vaccine, followed by an urgent EU approval. This started the process of vaccinating the citizens in the European Union.

The function of vaccines is based on the proper priming of the individual's immune system (the body's natural defenses) to recognize a specific disease and protect against it (Moris & Schizas, 2020). Vaccination protects vaccinated individuals and those around them who are vulnerable to disease by reducing the risk of spreading the disease among family members, classmates, colleagues, friends, neighbours and others in the community (Rodger & Blackshaw, 2022). When a large proportion of the population has acquired immunity to an infectious disease, it is unlikely that the disease will spread from person to person. This is known as 'collective immunity' (also known as 'herd immunity') (Zakar et al, 2022; Papini et al., 2022). In this way, vaccines indirectly protect other individuals in the population who cannot be vaccinated, e.g., infants, very young children, the elderly medicated for health conditions, individuals allergic to the vaccine components, individuals with compromised immune systems, individuals in treatment and cancer patients (Bowen, 2020). This means that all people benefit from those who have been vaccinated because the disease cannot spread easily in the community. For example, to ensure collective immunity against measles, public health authorities recommend vaccinating 95% of the population with two doses of the measles vaccine (the MMR vaccine, which protects against measles, mumps and rubella) (CDC, 2020). Pursuing this further, immunization programs not only help reduce the social, psychological and societal burden of the disease on the population, but they also reduce the pressure on the health and social care systems and allow individuals to participate in productive activities such as education and work.

The profession of Social Workers provides crucial services to people during disasters, pandemics and other emergencies (Narayan, 2021). Social Workers play a fundamental role in disaster response, recovery and disaster preparedness planning for future events. Thus, appropriate professional social work services should be mandatory during emergencies and pandemic outbreaks (Brinkerhoff, 2014). There can be no doubt that in such situations, Social Workers provide the best possible care and assistance to those in need, which of course includes adequate planning (Luo, 2021). In this respect, the role of Social Workers includes supporting the social inclusion of the most vulnerable groups in the social policy service system in the face of a pandemic (Cudjoe & Abdullah, 2020). Specifically, the UK began delivering its Covid-19 vaccination program on 8 December 2020, with health and social care workers (H&SCWs) given high priority for vaccination (Sadie Bell et al., 2022). Despite well-documented occupational exposure

risks, however, there is evidence of lower uptake among some H&SCW groups. The International Federation of Social Workers (IFSW) (2020), noted that it is the responsibility of social workers to advocate for the strengthening and advancement of the health and social service system, as this is important in order to protect people from the virus, reduce inequalities and the social and economic challenges in society (Butter, 2021). Also, Social Workers have a key role to play in mobilizing communities, organizations/groups and facilitating linkages between state-created and community-based care systems (Manolescu, 2021). In this regard, the present research is important because it examines the attitudes of the Social Workers members of the Greek Association of Social Workers (SKLE) towards compulsory vaccination for Covid-19. This survey also focuses on the respondents' knowledge and the sources from which they receive information about Covid-19, their views on compulsory vaccination and the vaccination of health professionals, and the views that encourage or discourage them to support vaccination against the virus.

### 2. Method

For this study, a quantitative survey was chosen using online questionnaires sent to the Social Workers of Greece with the support and assistance of the Association of Social Workers of Greece. 771 Social Workers members of the Association of Social Workers of Greece (ASGLE) who are professionally active in Greece participated in the study. The majority of the participants are women, who hold a basic degree. The participation of individuals in the survey was voluntary but necessary for the study. The questionnaires were anonymous and did not contain any personal data of the individuals which could have in any way revealed their identity. The study was approved by the Research Ethics Committee.

#### 2.1 Instruments

An online self-completion questionnaire was used as the data collection method. To achieve the objectives of the study, the questionnaire has five sections, which include: the demographic characteristics of the Social Workers, questions about their work status, questions about coronavirus, and their attitudes towards vaccination for Covid-19. Closed questions have been included in the questionnaire, with only one open question. A cover letter was sent along with the questionnaire, informing the Social Workers about the survey, while encouraging them to participate in it.

The first section contains 7 closed-ended questions, analysing gender, age, marital status, number of children, place of residence and number of family members. The second section contains 7 closed-ended questions concerning their employment status. The third section contains questions on coronavirus including whether they have been ill, vaccinated or lost a loved one. The fourth section refers to the opinions of social workers regarding the adequacy of the participants' knowledge regarding Covid-19, their sources of information about the virus, opinions about the vaccination of health

professionals, opinions about the measures imposed by the state and questions about the compulsory nature of vaccination. Through these questions, it could also be deducted whether health professionals consider the vaccine to be safe, whether they would take repeat doses, whether they themselves recommend vaccination to their surroundings and their views on the mandatory safety measures.

## 2.2 Statistical analysis

For the statistical analysis of the data the statistical processing program SPSS v. 27.0. was used. The mean and standard deviation (SD) were used to describe the quantitative variables, after appropriate testing of the normality of the distribution through the Kolmogorov-Smirnov statistical test. The absolute (N) and relative frequency (%) were used to describe the qualitative variables. The intermediate value and interquartile range (25th - 75th quartile) were used to describe the quantitative variables that were not found to follow the normal distribution. To compare the distribution of quantitative variables between two categories, the independent sample t-test was used to compare the distribution of quantitative variables between two categories, while for the comparison of more than two categories, the One-way Analysis of Variance (ANOVA) was used. Pearson's correlation coefficient (r) was used to test the relationship between two quantitative variables. Correlation is considered low when the correlation coefficient (r) ranges from 0.1 to 0.3, moderate when the correlation coefficient ranges from 0.31 to 0.5 and high when the coefficient is - 34 - greater than 0.5. Linear regression analysis with a stepwise inclusion-subtraction procedure (stepwise method) was used to find independent factors associated with the different scales from which dependency coefficients ( $\beta$ ) with their respective 95% confidence interval and p-value were obtained. All the tests performed were two-sided and statistical significance was set at the level of  $\alpha = 0.05.$ 

# 3. Results

The majority of participants were women (87.9%), aged on average 38 years. The majority of them were single (39.5%), 37.4% were married and almost half of them (51.1%) had no children. Regarding their place of residence, more than a quarter reside in a small town (29.2%), while a large proportion reside in the capital (28.3%). Regarding their family structure, more than half of the participants reside in families with 1 to 3 members, while a big percentage reside with people belonging to vulnerable groups (16.9%). 88% of the participants were employed and only about 10% were unemployed at the time of the survey. More than half of the participants work in the public sector (57.8%). Most of the employed participants worked on a fixed-term contract, which suggests vulnerability regarding their job security, while only 16% had a permanent employment position in the public sector. A significant percentage of the participants work in the Municipal and Regional Social Welfare Sector (20.2%) and the Health and Mental Health Sector (20.5%).

although diverse, seems to be disabled people and chronic sufferers (16.3%) while patients, recipients of health services and abused persons are approximately 12.1% of the beneficiaries.

Most participants did not belong to a vulnerable group (90.5%), while 52.4% of them had been sick with coronavirus and did not need to be hospitalized. About 88% of the participants belonging to the non-vulnerable group did not lose a loved one to the coronavirus, while the percentage of the non-vulnerable that stated that they that they had not been sick with coronavirus was also large (46.6%). On the other hand, around 70% of the participants who belonged to the vulnerable group were sick but did not need to be hospitalized.

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Yes	69	8.9	8.9	8.9
	No	698	90.1	90.5	99.5
	No answer	4	.5	.5	100.0
	Total	771	99.5	100.0	
	Missing	4	5		
Total		775	100.0		

**Table 1:** Do you belong to a vulnerable group that, according to the scientific data, is among the groups at high risk of serious illness from Covid-19?

Most respondents said they had been vaccinated (85.2%). Only 1% decided not to answer the question, indicating their open attitude to the survey. 50% of vaccinated respondents agreed that it was a way to protect their health. When asked if their decision was influenced by the fact that vaccination was mandatory and they would be suspended from work if remained unvaccinated, the responses given were mixed. 32% responded that they strongly disagreed with the statement while 22.7% responded that they strongly agreed.

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Strongly agree	203	26.2	32.0	32
	Disagree	77	9.9	12.1	44
	Neither agree or disagree	95	12.3	15.0	59
	Agree	116	15.0	18.3	77
	Strongly agree	144	18.6	22.7	100
	Total	635	81.9	100.0	
	Missing	140	18.1		
Total		775	100.0		

**Table 2:** Your decision was influenced by the fact that the vaccination was compulsory and you got vaccinated because you did not want to be suspended from work

In terms of individuals or circumstances contributing to the vaccination of the participants, it was clear that the personal physician helped or contributed to their decision to vaccinate. However, the main source of influence appeared to be but the people close to them and not the personal physician. Over 50% of participants were

vaccinated to protect their nearest and dearest. Regarding the influence of their work environment, responses were almost the same (45.3%). Restrictions on travel and social activities seem to have affected some more than others. In the question on conspiracy theories, the majority agreed that they were nonsense, while only a small percentage partially or fully disagreed. Regarding vaccination, more than half of the participants tended to be in favor of vaccination, considering it an important means of protecting health, although they did not know whether their health would be at risk in the short or long term with this decision.

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Strongly agree	30	3.9	4.7	4.7
	Disagree	59	7.6	9.3	14.1
	Neither agree or disagree	199	25.7	31.5	45.6
	Agree	178	23.0	28.2	73.7
	Strongly agree	166	21.4	26.3	100
	Total	632	81.5	100.0	
	Missing	143	18.5		
Total		775	100.0		

**Table 3:** The beliefs were against any form of "compulsory" as they felt their rights were being violated

Those who decided not to get vaccinated answered similar questions by using the same method on a scale from Strongly Disagree to Strongly Agree. Most people did not get vaccinated as their beliefs were against any form of "compulsory" as they felt their rights were being violated. 72.3% of the unvaccinated strongly agreed with this statement.

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Strongly agree	7	.9	7.4	7.4
	Disagree	8	1.0	8.5	16.0
	Neither agree or disagree	11	1.4	11.7	27.7
	Agree	68	8.8	72.3	100.0
	Total	94	12.1	100.0	
	Missing	681	87.9		
Total		775	100.0		

Table 4: My beliefs are against any form of "compulsion" as I feel my right violated

The experts do not seem to have influenced their opinion, as they are neither trusted nor ignored. This is also true for most family doctors, in contrast to the State, in which most people do not have much confidence. This is why the attitude of most participants against compulsory vaccination (38.6%) was a result of their disagreement with the measures implemented to deal with the pandemic. To that end, 46.1% of the above participants felt that vaccination and confinement measures were disproportional to the coronavirus threat which was not as great as the state presented it to be. What is perhaps surprising is that although most of them (61.4%) were not against vaccination, they still believed

that their choice of not getting vaccinated would not endanger the lives of others whether in their immediate environment or in general.

In addition, a significant percentage (46.1%) of the unvaccinated participants felt that vaccines were a source of financial gain for some and that they served their interests, and they did not want to contribute to that. They also assumed that vaccination and incarceration measures were part of a wider project to restrict individual rights. Finally, 74.4 % of the unvaccinated participants seemed to fear the long-term health consequences, as vaccines are new and there is no scientific data on future consequences.

	vaccines are new and we have no specific data on the future consequences						
		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>		
Valid	Strongly agree	3	.4	3.3	3.3		
	Disagree	1	.1	1.1	4.4		
	Neither agree or disagree	1	.1	1.1	5.6		
	Agree	18	2.3	20.0	25.6		
	Strongly agree	67	8.6	74.4	100		
	Total	90	11.6	100.0			
	Missing	685	88.4				
Total		775	100.0				

**Table 5:** I do not know the long-term consequences for my health, as the

One third of the participants responded that they neither agree nor disagree with the statement that Social Workers should set a "good example" and comply with the decisions of the State, while a fairly large percentage leaned towards disagreement. The same degree of neutrality (30.6%) was shown to the statement that they ought to trust science, except that in this question a large percentage leaned towards disagreement. What most people seemed to agree on was a) that vaccination and compliance with Public Health protection measures, in general, was an act of social solidarity and social responsibility because it protects vulnerable groups and b) that the idea that Social Workers in the Health and Closed Institutional Care sector should get vaccinated to protect the lives of people at risk was correct. There is also much agreement on the statement that vaccination has created a new kind of social stigma, especially for the 'unvaccinated'.

In addition, more than 30% strongly agreed that social workers should maintain a neutral stance on ideologically charged issues, such as the compulsory vaccination for protection against Covid-19, in the context of defending social cohesion and not in the context of preventing polarization and social division. What most disagreed with was the suggestion that in war, as in the pandemic "war", there will be casualties and those who are vulnerable will die whether they are vaccinated or not. If that is the case, the participants argued that there is no reason to restrict freedoms and limit individual rights. It is also worth mentioning that most of those who said that the coronavirus is not as dangerous as it has been portrayed work in the health and mental health sector.

The last question of the questionnaire asked participants to rate the extent to which specific "sources" of information contributed to the formation of their personal attitude towards vaccination, but also to the response to the pandemic in general. Their answers

showed that the most influential factors in their decisions were their personal family doctor, the NHS, the Ministry of Health, the study of articles in scientific journals, and discussions with experts and close family members. The position of the Association of Social Workers of Greece also did not seem to have influenced their opinion much, while only 20% were moderately influenced.

#### 4. Limitations of the research

The limitations of this study concern the use of self-completion instruments, the sample size of the respondents and the ambiguity on the validity of the respondents' answers. Participation in the survey was only possible for members of the Association of Social Workers of Greece who have access to electronic equipment and the internet to complete the questionnaire. This may have limited the participation of people who do not have an Internet connection or the necessary equipment, older people or people who are not familiar with the use of technology. Also, the survey was exclusively for professionally active social workers who are members of the Association of Social Workers of Greece, therefore excluding social workers who are not members of the association. Conducting a similar survey in the future, targeting the general population as well as other professions, would be of great interest and would broaden the scope of the issue under investigation even further. The data collection of the present survey was also a limitation as it was carried out in the period after the decline in the incidence of cases in Greece during the summer.

#### 5. Conclusion

Although Covid -19 and vaccination against it is a hot topic in our society, few surveys have been conducted on people's views on vaccination, especially in Greece. According to international literature and surveys conducted in early 2020, a few months after the emergence of the virus adults' views on vaccination showed unexpected results (Miller et al., 2020). Understanding the reasons for the hesitancy to use Covid-19 vaccine is essential to ensure maximum uptake required for herd immunity (Lundberg et al., 2021). A synchronous online survey conducted from May 29 to June 20, 2020, among a national sample of U.S. adults aged 18 years and older assessed the cognitive, cognitive-motor, and normative beliefs associated with not intending to get the Covid-19 vaccine. Of the 1219 respondents, 17.7% said they would not get vaccinated and 24.2% were uncertain (Allen et al., 2021). A similar survey of 223 French adults showed a positive relationship between fear of Covid-19 and individuals' intention to vaccinate. However, when this fear was associated with high levels of existential anxiety through conspiracy beliefs, the intention to get vaccinated decreased. It is therefore evident that "conspiracy" theories about the action and content of the vaccines bring greater fear and hesitation to the general population because although anti-vaccine narratives have little persuasiveness, a large proportion of the population will be quickly exposed to them (Gagneux-Brunon et al., 2020). Assuming that all individuals are equally likely to adopt anti-vaccine views after exposure, those who are most exposed to these views are more likely to adopt them (Scrima et al., 2022). Misinformation is usually adapted to fit different narratives and spreads rapidly through social networks (Larhlid et al., 2022), while false beliefs, once adopted, are rarely corrected.

In the midst of the Covid-19 crisis, pandemic deniers and people who oppose vaccine use are already an essential aspect of the pandemic evolution (Prieto & González, 2021). Therefore, due to all the uncertainty surrounding coronavirus and vaccination, it was considered important to conduct this research, specifically in the Social Work Branch, which falls within the health sector. The results showed that most Social Workers have been vaccinated and only a small percentage have not. The main reason which motivated them to get vaccinated was to protect the health of themselves and their fellow human beings, while the main reason for not getting vaccinated was the fear of the longterm consequences of a new vaccine and the conspiracy theories developed. The Social Workers' broader views on the compulsory nature of the vaccine and more generally on the ethics and decisions of the State were mixed. Some agreed with the State's measures while some were more in favor of the code of ethics and the principles of Social Work. It should perhaps not be considered a coincidence that those who were vaccinated had previously been ill without requiring hospitalization. The same applies to a large extent to those who live with people belonging to vulnerable groups. It is also worth noting that those on work suspension have not been vaccinated, perhaps because they are not working and therefore do not put the health of others at risk or are not required to be vaccinated. In addition, those who work with disabled people, chronic sufferers and the elderly are found to have lower rates of non-vaccination. The sources of information for most appeared to be scientific journals, personal doctors and health ministry announcements, while less attention was given to sources such as television, radio or church as they were considered by them to be less reliable. However, reluctant vaccination against coronavirus 2019 (Covid-19) in health workers contributes to personal risk and the risk of patients contracting Covid-19 (White, et al., 2021). The reasons behind the hesitation are not clear and also there were no clear answers concerning the question of how to improve vaccination rates. However, the participants appear to be positively influenced by colleagues who believe in Covid-19 vaccination, thus developing improved communication between departments and health worker roles may improve vaccination rates (Toth-Manikowski et al., 2021).

#### 6. Discussion

According to the survey, most Social Workers chose to get vaccinated to protect their health and the health of those around them, while only 22.7% responded with absolute certainty that they were vaccinated because they did not want to get suspended from work or suffer other consequences. In general, those who work with disabled people, chronic sufferers and the elderly or had previously contracted the disease without needing hospitalization are found to have lower rates of non-vaccination. The majority of the participants who chose to get vaccinated tended to be pro-vaccine without always knowing the short- or long-term risks of vaccines and they were also the participants who agreed with the measures and the mandate regarding the vaccination. These participants were strongly in favor of the compulsory nature of the vaccines and they supported the constraints mandate by the government. However, despite possible fears of the long-term consequences of the new vaccine and the conspiracy theories surrounding the pandemic and the vaccines, some of the participants chose to get vaccinated because they lived with people belonging to vulnerable groups. On the other hand, the main reasons for not getting vaccinated was the fear of the long-term consequences of a new vaccine, its mandatory nature and the conspiracy theories developed. Although the narratives of the conspiracy theories have little persuasiveness, a large proportion of the population will be quickly exposed to them e.g. through social media, and those who are most exposed to false beliefs are more likely to adopt them (Scrima et al., 2022) and once adopted they are rarely corrected. Regarding the opinions of the participant Social Workers on the compulsory nature of vaccination in health care facilities and closed institutional care systems, they seem to be mixed. Over 30% of the participants seem to strongly agree with the compulsory nature of the vaccine, while a 28% lean towards agreement. Only a small percentage believes that compulsory vaccination should not exist.

The results of the present study indicated that the unvaccinated professionally active Social Workers did not encounter particular difficulties at work or their personal lives, because many felt that vaccination and confinement measures were disproportional to the threat of the coronavirus, which to their mind was not as great as it was presented. Also, some of the unvaccinated Social Workers were on work suspension and perhaps because they were not working, they deduced that they did not put the health of others at risk or were not required to be vaccinated. Although Social Workers in the health sector exposed to Covid-19 were at a high risk of contracting the disease and were also responsible for the collective, the lives of their beneficiaries and the people they came in contact with outside work, those who were strongly against any form of mandates and compulsion as they feel that their rights are being violated did not vaccinate at all. Meanwhile, the fear of the pandemic which should have had a positive relationship with the individuals' intention to vaccinate was replaced by the anxiety created by the conspiracy beliefs and the fear of the long-term health consequences of the new vaccines with not enough scientific data on future consequences, leading to a decreased intention to get vaccinated. To that end, their belief, stemming from the conspiracy theories, that the coronavirus threat is not as serious as communicated by the officials compared to the serious consequences of the vaccines and people carrying the virus do not endanger the lives of others gave them a good reason to not get vaccinated (Fountoulakis, 2020, Peinado & Anderson, 2020, Alnazly et al., 2021). It is important to note that both before and after the approval of the first vaccines, the attitude towards vaccination was more positive for the participants who considered all vaccines safe.

The opponents of the compulsory nature of vaccination also justified their choice on the grounds of the code of ethics, the principles of Social Work and the individuals' own intention to vaccinate, as their belief was that the health threat of the coronavirus was not as great as presented to the public. Thus, they did not support the idea of the protective nature of the vaccines as, to their mind, public health was not at such high risk as presented. Some participants with doubts about the vaccines eventually went ahead with the vaccination not so much because of the influence from their personal physician but mainly because they were convinced by the people around them, namely family, friends or trusted colleagues. The most influential factors in their decision were discussions with experts and close family members, people from vulnerable groups in their immediate environment, their personal family doctor, the NHS, the Ministry of Health and the study of articles in scientific journals. The position of the Association of Social Workers of Greece did not seem to have influenced their opinion much. Even though the sources of information for most participants were mainly scientific journals, personal doctors and health ministry announcements and not the mass media or church, those who feared the consequences of the vaccines still did not decide to get vaccinated as they dismissed the seriousness of the situation, they reacted to the compulsory mandates as being a violation to their individual rights and freedom of choice and they were suspended from work thus avoiding public contact and collective actions. It can be deducted that the participants who were vaccinated because they did not want to get suspended from work or suffer other consequences and the participants who were against the compulsory nature of the vaccination did not motivate their beneficiaries towards getting vaccinated, while the pro-vaccine participants did the opposite. It is worth noting that although the large majority (61.4%) were not against vaccination, a large percentage leaned towards disagreement to the statement that they "ought to trust science" and they believed that their choice of not getting vaccinated would not endanger the lives of others whether in their immediate environment or in general. On the contrary, there is much agreement on the statement that vaccination has created a new kind of social stigma, especially for the 'unvaccinated', which apart from the Covid-19 health risk environment itself constitutes an additional reason for the Social Workers in the health sector to be at high risk of developing adverse mental health outcomes and requiring psychological support or interventions (Lai et al., 2020; Triantafyllidou, 2020).

#### Conflict of interest statement

The authors declare no conflicts of interest.

#### About the author

Dr. Georgia Konstantopoulou is a Clinical Psychologist, Laboratory Teaching Staff, University of Patras, Department of Educational Sciences & Social Work.

#### References

- Alcoforado, F. (2020). The World after coronavirus. academia.edu (accessed on, 10 March 2020)
- Allen, J. D., Feng, W., Corlin, L., Porteny, T., Acevedo, A., Schildkraut, D., King, E., Ladin, K., Fu, Q., & Stopka, T. J. (2021). Why are some people reluctant to be vaccinated for COVID-19? A cross-sectional survey among U.S. Adults in May-June 2020. *Preventive Medicine Reports*, 24. <u>https://doi.org/10.1016/j.pmedr.2021.101494</u>
- Alnazly, E., Khraisat, O. M., Al-Bashaireh, A. M., & Bryant, C. L. (2021). Anxiety, depression, stress, fear and social support during COVID-19 pandemic among Jordanian healthcare workers. *PLOS ONE*, 16(3), e0247679. https://doi.org/10.1371/journal.pone.0247679
- Bell, S., Clarke, R. M., Ismail, S. A., Ojo-Aromokudu, O., Naqvi, H., Coghill, Y., Donovan, H., Letley, L., Paterson, P., & Mounier-Jack, S. (2022). COVID-19 vaccination beliefs, attitudes, and behaviours among health and social care workers in the UK: a mixed-methods study. *PLOS ONE*, 17(1), e0260949. https://doi.org/10.1371/journal.pone.0260949
- Bowen, R. A. R. (2020). Ethical and organizational considerations for mandatory COVID-19 vaccination of health care workers: a clinical laboratorian's perspective. *Clinica Chimica Acta*, 510(510), 421-422. <u>https://doi.org/10.1016/j.cca.2020.08.003</u>
- Brinkerhoff, D. W. and Bossert, T. J. (2014). Health Governance: Principal-Agent Linkages and Health System Strengthening. *Health Policy and Planning*, 29, 685-693. <u>http://dx.doi.org/10.1093/heapol/czs132</u>
- Butter, S., McGlinchey, E., Berry, E., & Armour, C. (2021). Psychological, social, and situational factors associated with COVID-19 vaccination intentions: a study of UK key workers and non-key workers. *British Journal of Health Psychology*. <u>https://doi.org/10.1111/bjhp.12530</u>
- CDC. COVID Data Tracker. Centers for Disease Control and Prevention. (accessed on, 28 March 2020). <u>https://covid.cdc.gov/covid-data-tracker/#vaccinations</u>.
- <u>ertnews.gr</u>. Two years of coronavirus in Greece: the course, the lockdowns, the measures and the hope". <u>https://www.ertnews.gr/eidiseis/mono-sto-ertgr/dyo-chroniakoronoios-stin-ellada-i-poreia-ta-lockdowns-ta-metra-kai-i-elpida/</u> (accessed on, 26 February, 2020)
- Cudjoe, E., & Abdullah, A. (2020). Drawing on kinship care support for older people during a pandemic (COVID-19): Practice considerations for social workers in Ghana. *Journal of Gerontological Social Work*, 63(4), 254-256.
- Fountoulakis, K. N., Apostolidou, M. K., Atsiova, M. B., Filippidou, A. K., Florou, A. K.,
  Gousiou, D. S., Katsara, A. R., Mantzari, S. N., Padouva-Markoulaki, M.,
  Papatriantafyllou, E. I., Sakharidi, P. I., Tonia, A. I., Tsagalidou, E. G., Zymara, V.
  P., Prezerakos, P. E., Koupidis, S. A., Fountoulakis, N. K., & Chrousos, G. P. (2021).
  Self-reported changes in anxiety, depression and suicidality during the COVID-19

lockdown in Greece. *Journal of Affective Disorders*, 279, 624-629. https://doi.org/10.1016/j.jad.2020.10.061

- Gagneux-Brunon, A., Detoc, M., Bruel, S., Tardy, B., Rozaire, O., Frappe, P., & Botelho-Nevers, E. (2020). Intention to get vaccinations against COVID-19 in French healthcare workers during the first pandemic wave: a cross-sectional survey. *Journal of Hospital Infection*. <u>https://doi.org/10.1016/j.jhin.2020.11.020</u>
- Giubilini, A. (2020). Vaccination Ethics. *British Medical Bulletin*, 137(1). <u>https://doi.org/10.1093/bmb/ldaa036</u>
- Gur-Arie, R., Jamrozik, E., & Kingori, P. (2021). No Jab, No Job? Ethical Issues in Mandatory COVID-19 Vaccination of Healthcare Personnel. BMJ Global Health, 6(2), e004877. <u>https://doi.org/10.1136/bmjgh-2020-004877</u>
- Health.gov.au. (2022). (accessed on 25 February, 2020) <u>https://www.health.gov.au/sites/default/files/documents/2021/03/covid-19-</u> <u>vaccination-astrazeneca-covid-19-information-on-covid-19-astrazeneca-</u> <u>vaccine\_4.docx</u>
- Heyerdahl, L. W., Dielen, S., Nguyen, T., Riet, C. V., Kattumana, T., Simas, C., Vandaele, N., Vandamme, A.-M., Vandermeulen, C., Giles-Vernick, T., Larson, H., Grietens, K. P., & Gryseels, C. (2022). 'Doubt at the core: unspoken vaccine hesitancy among healthcare workers'. *The Lancet Regional Health -* Europe, 12. https://doi.org/10.1016/j.lanepe.2021.100289
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors Associated with Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. *JAMA Network Open*, 3(3), e203976-e203976. <u>https://doi.org/10.1001/jamanetworkopen.2020.3976</u>
- Larhlid, M., Manar, N., Laraqui, S., Laraqui, O., Deschamps, F., & El Houssine Laraqui Hossini, C. (2022). Acceptability of anti-covid -19 vaccination by health care workers (HCWs). Safety and Health at Work, 13, S176. <u>https://doi.org/10.1016/j.shaw.2021.12.1302</u>
- Lataifeh, L., Al-Ani, A., Lataifeh, I., Ammar, K., AlOmary, A., Al-hammouri, F., & Al-Hussaini, M. (2022). Knowledge, Attitudes, and Practices of Healthcare Workers in Jordan towards the COVID-19 Vaccination. *Vaccines*, 10(2), 263. <u>https://doi.org/10.3390/vaccines10020263</u>
- Lundberg, L., Bygdell, M., Stukat von Feilitzen, G., Woxenius, S., Ohlsson, C., Kindblom, J. M., & Leach, S. (2021). Recent MMR vaccination in health care workers and Covid-19: A test negative case-control study. *Vaccine*, 39(32), 4414-4418. <u>https://doi.org/10.1016/j.vaccine.2021.06.045</u>
- Luo, C., Yang, Y., Liu, Y., Zheng, D., Shao, L., Jin, J., & He, Q. (2021). Intention to COVID-19 vaccination and associated factors among health care workers: a systematic review and meta-analysis of cross-sectional studies. *American Journal of Infection Control.* <u>https://doi.org/10.1016/j.ajic.2021.06.020</u>

- Manolescu, L. S. C., Zaharia, C. N., Dumitrescu, A. I., Prasacu, I., Radu, M. C., Boeru, A. C., Boidache, L., Nita, I., Necsulescu, A., & Chivu, R. D. (2021). Early COVID-19 Vaccination of Romanian Medical and Social Personnel. *Vaccines*, 9(10), 1127. https://doi.org/10.3390/vaccines9101127
- Miller, V., Fields, N., Kusmaul, N., Anderson, K., & Maxwell, C. (2020). Nursing Home Social Workers Perceptions of Preparedness and Coping for COVID-19. *Innovation in Aging*, 4 (Supplement\_1), 953-953. <u>https://doi.org/10.1093/geroni/igaa057.3487</u>
- Moris, D., & Schizas, D. (2020). Lockdown During COVID-19: The Greek Success. *In Vivo*, 34(3 suppl), 1695-1699. <u>https://doi.org/10.21873/invivo.11963</u>
- Musselwhite, C., Avineri, E. and Susilo, Y. (2020). Editorial JTH 16-The Coronavirus Disease COVID-19 and Implications for Transport and Health. *Journal of Transport* & Health, 16, Article ID: 100853. <u>https://doi.org/10.1016/j.jth.2020.100853</u>
- Narayan, P., TS, S. K., BV, M. M., Ghorai, P. A., Devi, E. R., & Shetty, P. (2021). Uptake And Impact of Vaccination Against COVID-19 among Healthcare Workers-Evidence from a Multicentre Study. *American Journal of Infection Control*. <u>https://doi.org/10.1016/j.ajic.2021.10.036</u>
- Papini, F., Mazzilli, S., Paganini, D., Rago, L., Arzilli, G., Pan, A., Goglio, A., Tuvo, B., Privitera, G., & Casini, B. (2022). Healthcare Workers Attitudes, Practices and Sources of Information for COVID-19 Vaccination: an Italian National Survey. International Journal of Environmental Research and Public Health, 19(2), 733. <u>https://doi.org/10.3390/ijerph19020733</u>
- Parker, M., Bedford, H., Ussher, M., & Stead, M. (2021). Should covid vaccination be mandatory for health and care staff? *BMJ*, n1903. <u>https://doi.org/10.1136/bmj.n1903</u>
- Peinado, M., & Anderson, K. N. (2020). Reducing social worker burnout during COVID-19. International Social Work, 002087282096219. https://doi.org/10.1177/0020872820962196
- Prieto Curiel, R., & González Ramírez, H. (2021). Vaccination strategies against COVID-19 and the diffusion of anti-vaccination views. *Scientific Reports*, 11(1). <u>https://doi.org/10.1038/s41598-021-85555-1</u>
- Queen, D., & Harding, K. (2020). Societal pandemic burnout: a COVID legacy. *International Wound Journal*, *17*(4), 873-874. <u>https://doi.org/10.1111/iwj.13441</u>
- Rahman, M. A., Hoque, N., Alif, S. M., Salehin, M., Islam, S. M. S., Banik, B., Sharif, A., Nazim, N. B., Sultana, F., & Cross, W. (2020). Factors associated with psychological distress, fear and coping strategies during the COVID-19 pandemic in Australia. *Globalization and Health*, 16(1). <u>https://doi.org/10.1186/s12992-020-00624-w</u>
- Rimmer, A. (2021). Covid vaccination to be mandatory for NHS staff in England from spring 2022. *BMJ*, 375, n2733. <u>https://doi.org/10.1136/bmj.n2733</u>
- Rodger, D., & Blackshaw, B. P. (2022). COVID-19 Vaccination Should not be Mandatory for Health and Social Care Workers. *The New Bioethics*, 28(1), 1-13. <u>https://doi.org/10.1080/20502877.2022.2025651</u>

- Sadie Bell, et al. (2022). COVID-19 vaccination beliefs, attitudes, and behaviours among health and social care workers in the UK: a mixed-methods study. *PLoS One*. 2022; 17(1): e0260949. doi: 10.1371/journal.pone.0260949. doi: 10.1371/journal.pone.0260949
- Savic, L. C., Savic, S., & Pearse, R. M. (2022). Mandatory vaccination of National Health Service staff against COVID-19: more harm than good? *British Journal of Anaesthesia*. <u>https://doi.org/10.1016/j.bja.2022.01.030</u>
- Schrading, W. A., Trent, S. A., Paxton, J. H., Rodriguez, R. M., Swanson, M. B., Mohr, N. M., Talan, D. A., Bahamon, M., Carlson, J. N., Chisolm-Straker, M., Driver, B., Faine, B., Galbraith, J., Giordano, P. A., Haran, J. P., Higgins, A., Hinson, J., House, S., Idris, A. H., & Kean, E. (2021). Vaccination rates and acceptance of SARS-CoV-2 vaccination among U.S. emergency department health care personnel. *Academic Emergency Medicine*, 28(4), 455-458. <u>https://doi.org/10.1111/acem.14236</u>
- Scrima, F., Miceli, S., Caci, B., & Cardaci, M. (2022). The relationship between fear of COVID-19 and intention to get vaccinated: the serial mediation roles of existential anxiety and conspiracy beliefs. *Personality and Individual Differences*, 184, 111188. <u>https://doi.org/10.1016/j.paid.2021.111188</u>
- Toth-Manikowski, S. M., Swirsky, E. S., Gandhi, R., & Piscitello, G. (2021). COVID-19 vaccination hesitancy among health care workers, communication, and policymaking. *American Journal of Infection Control*, 50(1). <u>https://doi.org/10.1016/j.ajic.2021.10.004</u>
- Triantafyllidou, M. (2020). The COVID-19 pandemic and its impact on mental health. *Rostrum of Asclepius*, *19*(4), 274-294. <u>https://doi.org/10.5281/zenodo.4061809</u>
- Waters, A. (2022). Covid-19: Reassess effects of compulsory vaccination on staffing, urge unions. *BMJ*, o139. <u>https://doi.org/10.1136/bmj.o139</u>
- White, C. J., Samady, H., & Moliterno, D. J. (2021). The Case for Mandatory COVID-19 Vaccination of Health Care Workers. *JACC: Cardiovascular Interventions*, 14(17), 1961-1962. <u>https://doi.org/10.1016/j.jcin.2021.07.055</u>
- Zakar, R., Momina, A. ul, Shahzad, S., Hayee, M., Shahzad, R., & Zakar, M. Z. (2022). COVID-19 Vaccination Hesitancy or Acceptance and Its Associated Factors: Findings from Post-Vaccination Cross-Sectional Survey from Punjab Pakistan. International Journal of Environmental Research and Public Health, 19(3), 1305. <u>https://doi.org/10.3390/ijerph19031305</u>

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Social Sciences Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a <u>Creative Commons Attribution 4.0 International License (CC BY 4.0)</u>