

ETHICAL AND PUBLIC HEALTH ATTITUDES ON PHYSICAL DISTANCING, SELF-ISOLATION, QUARANTINE, AND LOCKDOWN

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Abstract: Usually, the first responses against new communicable diseases are quarantines and travel bans. As of March, the 16th, 2020 until May, the 14th, 2020 The State of Emergency was declared on all the territory of Romania. People had to comply with “stay-at-home orders” while some regions were under total lockdown. In late April 2020, we created and distributed an online survey, via www.psysafe.org. We addressed ethical issues towards both the individual and populational levels measures designed to prevent and reduce COVID-19, as well as assessed the attitudes towards hypothetical public health sanctions infringed on people who do not follow the regulations. In total, 3.122 respondents took part in the survey. The majority consider that physical distancing, self-isolation, quarantine, and nation/region-wide lockdown imposed to prevent and reduce COVID-19 are both necessary and morally justified. The participants do not agree with a hypothetical sanction of not offering medical treatment but would agree with a hypothetical sanction of having to pay for the medical treatment. In the end, we examined the justice of quarantine and isolation from an ethical point of view.

Keywords: physical distancing, self-isolation, quarantine, lockdown, COVID-19, ethics, public health.

INTRODUCTION

Quarantine alongside other public health measures are effective and valuable means to reduce and control communicable disease outbreaks, but they can also be helpful to reduce the public anxiety. Usually, the first responses against new communicable diseases are quarantines and travel bans. Quarantine has long been adopted as a compulsory measure of separating individuals or group of individuals, livestock, or any other belongings thought to be exposed or contaminated in the course of a contagious disease. By doing so, quarantine produced a false feeling of security and distracted the individuals from observing the necessary precautions. The result was a threat to public health [1]. Moreover, if the disease is highly transmissible, these measures have limited efficiency. If they are imposed in a very severe or hazardous a manner, they can

even become counterproductive [2]. Needless to say, they are perceived as intrusive, suspicious, sometimes distrusted, and can even cause riots. They still raise a wide range of social and ethical issues [3].

As of March, the 16th, 2020 until May, the 14th, 2020 The State of Emergency was declared in Romania [4]. People had to follow “stay-at-home orders”, while some regions were in lockdown. Reasons for leaving home were counted in documents issued by the Ministry of Internal Affairs. Sanctions were imposed. Penal charges were pressed for “Offences against public health”. Mixed teams of Law enforcement and Army workers patrolled the streets, and Gendarmerie teams were camped in proximity of the hospitals. Law enforcement workers guarded people placed in quarantine in specially assigned places. People who entered the borders were placed in quarantine or escorted to their homes for self-isolation.

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To our knowledge, this is the first research in Romania and Central & Eastern Europe to address ethical issues towards the individual and populational levels of measures designed to prevent and reduce COVID-19, and to assess attitudes on hypothetical public health sanctions for people who do not follow the regulations. We ethically examined the justice of the measures.

MATERIAL AND METHODS

Population

We defined the Personnel at High Risk of Contamination (HRP) as adults over 18 years, who work in the medical system, emergency situation department, police and law enforcement, army and national security, and general population (GP) as adults over 18, not part of the HRP. HRP has a potential of human contact or interaction with people infected with SARS-CoV-2 or suffering of COVID-19. Due to their particular relationship with COVID-19 we separated the HRP categories: HRP medical staff (HRP med) and HRP law staff (HRP law). The main difference lies in the actions: HRP med provided care, whereas HRP law ensured that regulations were followed. Each participant gave an informed consent electronically.

Survey

In April 2020, we created and distributed an online survey via www.pspsafe.org, which collected data on demographics, personal status of infection, personal status of public health measures disposed, a close person's status of infection. We assessed the participants' opinion on ethics and public health issues, via a 5-point Likert scale, 1 (strongly disagree); 5 (strongly agree), presented in Annex 1. To simplify we used the term COVID-19 for both the disease and the virus. We conducted a pre-test on the survey to ensure it met aims. Surveys not entirely filled were considered invalid. Data was collected from late-April to the end of May 2020.

The items were classified as follows: a) measures to reduce and prevent COVID-19 designed at individual level: physical distancing (distancing) and self-isolation, b) measures to reduce and prevent COVID-19 designed at populational level: quarantine and nation/region-wide lockdown (lockdown), and c) hypothetical sanctions for people who do not follow the regulations: not being offered medical treatment or having to pay for the medical treatment. We assessed personal attitudes on necessity and moral justice of the above-said measures.

Statistical analysis

Data was statistically analyzed with SPSS 20. The research received the Approval no. 169/24.04.2020 of the Ethics Committee of the Iuliu Hațieganu University of Medicine and Pharmacy Cluj-Napoca, Romania.

RESULTS

Out of 3.150 surveys filled, 28 had missing responses, so they were excluded from the statistical analysis. In the end, we analyzed 3.122 valid surveys. The respondents were 80% female (2,496), mean age 37.69(±13.03) years, and 20% male (623), mean age 39.57(±14.00) years; with 37.1% single (1,154), 51.2% married (1,592), 1.4% widow(er) (45), and 3.8% civil partnership (117). Regarding education, 59.4 % (1,853) of the respondents had a bachelor's degree, 19% (594) had a master's degree, 8.8% (275) had a PhD, 7.9% (246) graduated high school, and 4.9% (154) with no education or other forms of education. GP accounted for 29.2% (913), the rest accounting for HRP, with 68.5% (2,138) HRP med, and 2.3% (71) HRP law.

At the time, 73.6% (2,295) of the respondents declared that they were not or have not been infected with SARS-CoV-2, 1.5% (47) declaring that they were or have been infected, and 24.8% (774) declaring that did not know. On the other hand, 63.6 % (1,987) declared that they did not know a close person to be ill, 24.2% (755) that the person was cured, 9% (280) that the person was still ill, and 3.2% (100) that the person had died, as presented in Table 1.

The percentage of respondents who were or have been placed in self-isolation was 23.8% (744), in quarantine 2.4% (76), admitted to hospital 0.2% (7), with 73.5% (2,295) not placed in quarantine or self-isolation. The results are presented in Table 2.

The attitudes about measures to reduce and prevent COVID-19 designed at individual level and populational level are presented in Figure 1.

The attitudes about hypothetical sanctions for people who do not follow the regulations are presented in Figure 2.

The comparison between GP's and HRP's attitudes about the individual and populational level designed measures, and towards hypothetical sanctions are presented in Tables 3-5.

The opinion about the necessity and moral justification of the measures to reduce and prevent COVID-19 are presented in Tables 6-7, and about the hypothetical sanctions in Table 8.

Table 1. Distribution of close persons infected with COVID-19

Do you know a close person to be ill with COVID-19	GP	HRP med	HRP law	Pearson Chi-Square
No	70.3	60.5	71.8	40.482 p < 0.001
Yes - cured	20.5	26.1	15.5	
Yes - still ill	5.6	10.5	7.0	
Yes - has died	3.6	2.9	5.6	

Table 2. Distribution of individual and populational measures imposed to prevent and reduce COVID-19

Have you been placed in isolation or quarantine	GP	HRP med	HRP law	Pearson Chi-Square
No	70.3	74.5	84.5	15.278 p = 0.018
Yes - isolation	26.6	22.9	15.5	
Yes - quarantine	3.1	2.2	0.0	
Hospitalized	0.0	0.3	0.0	

Table 3. Attitudes about measures to reduce and prevent COVID-19 designed at individual level: comparison between GP and HRP. Results in percentage (%)

	Distancing necessary			Distancing morally justified			Self-isolation necessary			Self-isolation morally justified		
	GP	HRP med	HRP law	GP	HRP med	HRP law	GP	HRP med	HRP law	GP	HRP med	HRP law
Strongly disagree	3.1	1.1	1.4	5.0	2.8	5.6	4.4	2.6	4.3	4.9	4.0	5.7
Disagree	3.6	1.9	2.8	5.7	3.6	7.0	5.9	3.6	5.7	6.0	4.1	8.6
Neither agree, nor disagree	9.5	6.1	18.3	16.1	15.5	22.5	14.8	10.2	10.0	18.3	15.7	18.6
Agree	30.9	26.6	25.4	35.0	32.2	33.8	32.0	31.9	37.1	32.5	32.0	30.0
Strongly agree	52.9	64.3	52.1	38.2	45.9	31.0	42.9	51.7	42.9	38.4	44.1	37.1

To prevent and reduce COVID-19... (%)

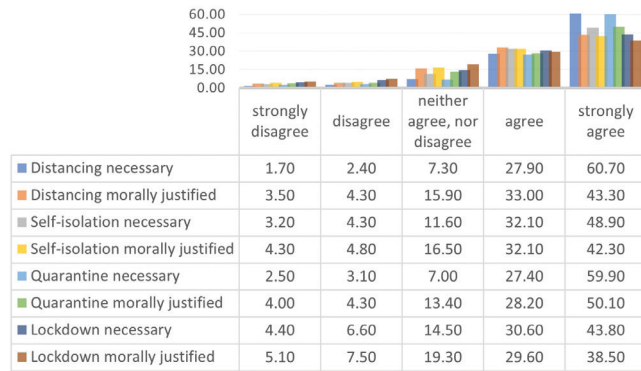


Figure 1. The attitudes about the measures to prevent and reduce COVID-19. Results presented in percentage (%).

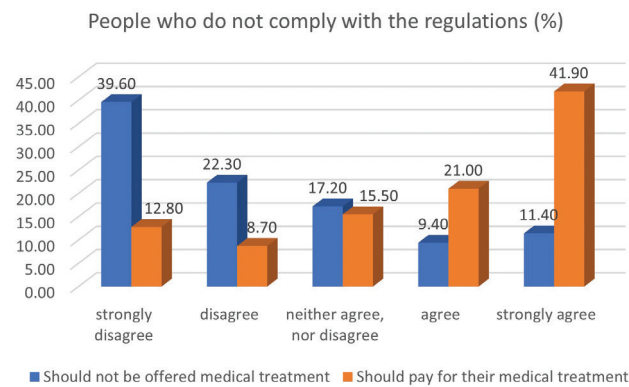


Figure 2. Attitudes towards hypothetical sanctions for people who do not comply with the regulations: not offering or paying for medical treatment. Results presented in percentage (%).

DISCUSSION

Although 73.6% of the respondents declared that they were not infected, there were 1,5% respondents who declared that they were or had been infected with COVID-19. There were 24.2% of respondents who declared that they knew a close person that had been sick and now is well, 9% declared of a close person to be ill, and 3.2% declared that they were aware of a close person who had died of COVID-19. According to the data presented in Table 1, there are statistically significant differences among the three categories, with HRP med largely being aware of a cured, 26.1% of the respondents, or still ill person with COVID-19, 10.5% of the respondents, while the other two categories reported being aware of persons who had died of COVID-19, with 5.6% of the HRP law respondents and 3.6% of the GP respondents. Moreover, when looking at the data presented in Table 2, there are also statistically significant differences among the three categories in terms of individual and populational measures imposed to them, with 26.6% of the GP respondents declaring that they were placed in self-isolation and 3.1% of GP placed in quarantine. These factors are correlated with the public attitudes on quarantine [5].

The results show that most of the participants considered that the individual and the populational

measures imposed in order to prevent and reduce COVID-19 in Romania during the State of Emergency were both necessary and morally justified, as presented in Figure 1. The necessity of physical distancing was strongly agreed by 60.7%, closely followed by the necessity of quarantine, with 59.9% strongly agreeing on this. The necessity of self-isolation and nation/region-wide lockdown came in 3rd and 4th, with 48.9% and 43.8%, respectively, strongly agreeing on these. In France, 38% of GP fully supported the lockdown [6].

However, it appears curious that the rates drop when looking at percentage of subjects who strongly agree with the moral justification of such measures, from 60,7% “physical distancing is necessary”, but only 43,3% strongly agree that is “morally justified”. This is in accordance with the utilitarian maximization, expressed by the principle “to save the most lives”, largely accepted by the public, but it also shows the moral dilemma of every one of us. Public health measures designed to protect are “likely to inflict greater burdens on some than on others”, namely the people living with disabilities, the elderly people and the poor people [7]. We may attribute that the differences in attitudes towards come from the intimate perception that even if these measures are designed to protect as many people as possible, in fact, the deprived people will have to cope with many more difficulties, in order to achieve the same, superordinate goal of saving lives. Nonetheless, if these categories were to be exempted from the very same measures that impose them greater burdens, in order to save them, they would be at the very high risk of contracting the highly transmissible disease and putting their lives at risk. Our results tend to support the argument that “almost everyone recognizes and endorses the overriding importance of saving lives as a public health aim” [7]. Similar findings were reported for a 14 days’ self-isolation: 94% would comply, if lost wages would be sponsored by the state, and less than 57% would comply, if compensation was removed [8].

The results presented in Figure 2 show that the participants do not agree with denial or withdrawal of medical treatment to or from fellow citizens who would not comply with the regulations, with 39.6% strongly disagreeing and 22.3% disagreeing with a hypothetical sanction such as this. However, when looking at the hypothetical situation of charging the person for his/her medical treatment as a mean of sanction, 41.9% strongly agree and 21% agree that these patients should pay for their medical treatment.

When looking at HRP med attitudes towards individual level designed measures, it seems that they

value the most the “necessity” and also consider it “morally justified”, and HRP law tend to have attitudes similar to those of the GP, as presented in Table 3. The same trend is noticed when looking at the populational level designed measures, as presented in Table 4. These attitudes are in accordance with previous results, where respondents showed strong support for quarantine during the outbreak in Wuhan [9]. However, things change when looking at the hypothetical sanctions, with HRP law 50.7% strongly disagreeing with denial of treatment and 43.7% strongly agreeing with charging of treatment, putting this subgroup on the 1st place. HRP med strongly agree in 43.7% with charging for treatment, as presented in Table 5, with statistical significance between the 3 categories, as presented in Tables 6-8. These shows the differences in attitudes among HRP law, HRP med and GP when considering the individual measures (Table 6) and the populational measures (Table 7). A statistically significant difference is noted when addressing the hypothetical sanction of charging for the medical treatment, between the 3 categories, with HRP law accounting for 67.6% agree with the hypothetical sanction. There was no statistically significant difference between the 3 categories when addressing the hypothetical sanction of not offering treatment, as seen in Table 8.

Although it may seem odd that the people whose rights of freedom of movement have been constraint to support in such a high manner the very measures that constrain their rights, we acknowledge that this is a common trait in the first phases of a crisis. Caplan (1960) defines crisis as brief episode of psychological unbalance which occurs when the subject is faced with a problem that cannot be solved or avoided. The main cause of a crisis is an intensely stressful, traumatic, or hazardous event, but two other conditions are also necessary: the individual’s perception of the event as the cause of considerable upset and/or disruption and the individual’s inability to resolve the disruption by previously used coping mechanisms. Both conditions have been fulfilled by the onset of the COVID-19 pandemic. When COVID-19 pandemic stroke, the existence and function of the community were significantly impaired, and even in danger of extinction. The closer the person is to the crisis event, the more intense is the impact, with the immediate concern to protect oneself and those closest to him/her. After the initial impact phase, comes the heroic phase, characterized by cooperative spirit between friends, neighbors, and emergency teams, followed by the honeymoon phase which lasts from 1

Table 4. Attitudes about measures to reduce and prevent COVID-19 designed at populational level: comparison between GP and HRP. Results in percentage (%)

	Quarantine necessary			Quarantine morally justified			Lockdown necessary			Lockdown morally justified		
	GP	HRP med	HRP law	GP	HRP med	HRP law	GP	HRP med	HRP law	GP	HRP med	HRP law
Strongly disagree	4.0	1.8	2.9	4.8	3.8	2.8	6.6	3.4	9.9	7.3	4.1	8.5
Disagree	3.7	2.8	5.7	5.0	3.9	8.5	7.9	6.0	8.5	8.4	7.0	11.3
Neither agree, nor disagree	8.0	6.6	8.6	13.1	13.2	21.1	15.7	14.1	11.3	21.1	18.4	22.5
Agree	28.3	26.9	31.4	28.5	28.2	23.9	30.4	30.6	33.8	27.6	30.5	28.2
Strongly agree	56.0	61.8	51.4	48.6	51.0	43.7	39.4	46.0	36.6	35.6	40.0	29.6

Table 5. Attitudes towards hypothetical sanctions for people who do not comply with the regulations: not offering or paying for medical treatment; comparison between GP and HRP. Results in percentage (%)

People who do not comply...	Should not be offered medical treatment			Should pay for their medical treatment		
	GP	HRP med	HRP law	GP	HRP med	HRP law
Strongly disagree	43.2	37.7	50.7	17.9	10.5	16.9
Disagree	19.5	23.8	13.0	10.1	8.4	1.4
Neither agree, nor disagree	18.0	17.1	13.0	14.6	16.0	14.1
Agree	9.4	9.3	13.0	19.9	21.4	23.9
Strongly agree	9.9	12.1	10.1	37.6	43.7	43.7

Table 6. Distribution of opinion about necessity and moral justification of individual measures to reduce and prevent COVID-19. Results in percentage (%)

<i>Distancing necessary</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
Disagree	16.2	9.1	22.5	40.141	p < 0.001
Agree	83.8	90.9	77.5		
<i>Distancing morally justified</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
Disagree	26.8	21.9	35.2	13.671	p < 0.001
Agree	73.2	78.1	64.8		
<i>Self-isolation necessary</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
Disagree	25.1	16.4	20.0	31.104	p < 0.001
Agree	74.9	83.6	80.0		
<i>Self-isolation morally justified</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
Disagree	29.2	23.9	32.9	11.265	p=0.004
Agree	70.8	76.1	67.1		

Table 7. Distribution of opinion about necessity and moral justification of populational measures to reduce and prevent COVID-19. Results in percentage (%)

<i>Quarantine necessary</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
disagree	15.6	11.3	17.1	12.176	p = 0.002
agree	84.4	88.7	82.9		
<i>Quarantine morally justified</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
disagree	22.9	20.8	32.4	6.461	p = 0.04
agree	77.1	79.2	67.6		
<i>Lockdown necessary</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
disagree	30.2	23.4	29.6	15.675	p < 0.001
agree	69.8	76.6	70.4		
<i>Lockdown morally justified</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
disagree	36.8	29.5	42.3	18.592	p < 0.001
agree	63.2	70.5	57.7		

Table 8. Distribution of opinion about hypothetical sanctions for people who do not comply with the regulations. Results in percentage (%)

<i>Should not be offered medical treatment</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
Disagree	80.7	78.5	76.8	1.986	p = 0.371
Agree	19.3	21.5	23.2		
<i>Should pay for their medical treatment</i>	<i>GP</i>	<i>HRP med</i>	<i>HRP law</i>	<i>Pearson Chi-Square</i>	
Disagree	42.5	34.9	32.4	16.665	p < 0.001
Agree	57.5	65.1	67.6		

week to several months after the disaster occurred. The need to help others is sustained. In time, things tend to wear off in disillusionment, but, in the end, individuals reach the reconstruction phase, when they admit that they must come to grips with their own problems.

On the 26th of February, 2020, the first confirmed case of COVID-19 was reported in Romania. Following a series of measures, the State of Emergency is declared by the President on March 16th, 2020. Looking at the chronology of the events, it appears clear that the Romanian population had experienced the first 3 phases of a crisis. Being in the heroic and honeymoon phase, it appears natural to support the measures. Other possible arguments for the high rates of support would be that these things do not necessarily involve me, for I am not in contact with the people infected with COVID-19 – as seen in Table 1 – the majority where not aware of a person being infected or ill. Also the majority was not subdued to measures of self-isolation or quarantine, as seen in Table 2, which may contribute to the impression that these things do not apply to me. On the other hand, the support for the measures in HRP med category could be attributed to their close contact with the disease, and being more aware of the potential consequences, hence the necessity of the measures.

Although public health discerns between “quarantine” and “isolation”, where the first stands for separating individuals or groups exposed to the infectious disease, and the latter stands for separating individuals known to be infected, in some countries, “quarantine” often comprises both types of measures, but also travel limitations. The U.S. Centre for Diseases Control and Prevention lists Severe acute respiratory syndrome as a Quarantinable Diseases [10].

Public good is known to have interfered with personal rights, when there is a major health crisis. The most stigmatized and discriminated people when isolation was imposed were members of low-income classes, or of an ethnic or marginalized minority group. Large populations are put at risk of stigmatization via the worldwide alarm and panic, biasedly covered by the media [1].

According to Rhodes, the sixteenth duty of medical ethics is medical justice [11]. Public health officials identified the need for physical distancing in order to maximize a public good, that is, “to save the most lives.” Most of the public health measures should be seen as acts of medical justice in response to the threat of a highly transmissible infectious disease. Adopted public health policies should express “avoiding the worst outcome” and “providing public goods” principles. From the

experience of *Jew Ho v. Williamson* - 103 F. 10, 1900 U.S., quarantines cannot be imposed unreasonably, unjust, and oppressive. When authorities decide to limit individual rights and liberties, they must take into account that the people will comply with the measures if their basic needs are granted. Authors list access to medication and healthcare, access to sanitation and access to food as basic needs that must be ensured [2]. The opinion is shared by others in the sense that the measures to control and prevent an infectious disease are justified and “morally mandatory” only when the potential benefits, both at individual and populational levels, are higher than the potential costs. The authors consider that the moral cost of coercion should be taken into account as a potential cost. If the people subjected to quarantine or isolation have a moral duty to comply with the above-mentioned measures, the justification is even stronger. If the personal cost is minimal, authors argue that every individual has a moral obligation to avoid harm to others or to benefit others [12].

The patient as both victim and vector

The constraints of quarantine and isolation, as problems characteristic to infectious conditions, were mainly addressed by public health and were largely left aside in bioethics. Long before modern understanding of the infectious process, public health authorities imposed measures such as isolation and quarantine in an attempt to control the spread of an infectious disease. From this point of view, it appears normal that in early bioethics the patient had the status of a (actual) victim, whereas in public health, the individuals had the status of vectors and potential victims. None the less, when speaking about infectious diseases, the patient is both victim and vector, meaning a person-in-need and a person-as-threat. Furthermore, the “contagious patient is not simply a vector-threat to victim-others”, but also a “victim-other to their vector-threats”. Battin *et al.* [13] challenge our perspective to a more integrated and nuanced one, where the patient is both victim and vector, occupying both of these two morally relevant roles, in the same place and time. In opposition to the “source patient” imagery, the authors argue that this picture can be misleading, even if it is frequently depicted in public health, because we tend to translate this into the moral-theoretical context in order to identify the agents who are responsible for the-given harms. The authors argue that infectious diseases spread through a web of interlocking and interplaying mutual, multiple transmissions, rather than in a chain with a clear starting point. They conclude that with

most communicable diseases, there are no individuals who are to be seen as agents, no individuals who are never patients, no individuals who are only victims, and no individuals who are only vectors. In the end, they mitigate for a “modified and deepened picture of the self who is both victim and vector” which stands for a fuller normative view of the reciprocal obligations that individuals share in the universe of infectious disease.

We acknowledge the limitation of our method of collecting responses, via online, as this had been done in accordance with the State of Emergency and the epidemiological conditions.

In conclusion, the majority of the participants consider that the individual level, such as physical distancing and self-isolation, and the populational level, such as quarantine and nation/region-wide lockdown, designed measures to prevent and reduce COVID-19 are both necessary and morally justified. The participants do not agree with a hypothetical sanction of denial or withdrawal of medical treatment to or from fellow citizens who would not comply with the regulations but would agree with a hypothetical situation of charging the person for his/her medical treatment as a mean of sanction.

Our research supports the idea that, in certain, clear circumstances, public health measures design to control and prevent an infectious disease can be justified and morally mandatory, especially if the people subjected to these measures have a moral duty to comply. We also mitigate for the person as both victim and vector view.

Annex 1

What is your opinion on measures for stopping COVID-19? To prevent and reduce COVID-19... (choose the answer that suits you best for each on 5-point Likert scale 1 – strongly disagree, 2 – disagree, 3 – neither agree, nor disagree, 4 – agree, 5 – strongly agree).

1. Physical distancing is necessary / ... morally justified;
2. Self-isolation is necessary / ... morally justified;
3. Quarantine is necessary / ... morally justified;
4. Nation/region-wide lockdown is necessary / ... morally justified;
5. People who do not comply with the regulations should not be offered medical treatment;
6. People who do not comply with the regulations should pay for their medical treatment.

Conflict of interest

The authors declare that they have no conflict of interest.

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References

1. Tognotti E. Lessons from the history of quarantine, from plague to influenza A. *Emerg Infect Dis.* 2013;19(2):254–259.
2. Parmet WE, Sinha MS. Covid-19 — The Law and Limits of Quarantine. *N Engl J Med* [Internet]. 2020;382(15):e28. Available from: <http://www.nejm.org/doi/10.1056/NEJMp2004211>
3. Cetron M, Landwirth J. Public health and ethical considerations in planning for quarantine. *Yale J Biol Med* [Internet]. 2005;78(5):329–334. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/17132339>
4. President of Romania. Decret semnat de Președintele României, domnul Klaus Iohannis, privind instituirea stării de urgență pe teritoriul României [Internet]. Available from: <https://www.presidency.ro/ro/media/decrete-si-acte-oficiale/decret-semnat-de-presedintele-romaniei-domnul-klaus-iohannis-privind-instituirea-starii-de-urgenta-pe-teritoriul-romaniei> (Romanian).
5. Guillon M, Kergall P. Attitudes and opinions on quarantine and support for a contact-tracing application in France during the COVID-19 outbreak. *Public Health* [Internet]. 2020;188:21–31. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0033350620303954>
6. Peretti-Watel P, Verger P, Launay O. The French general population's attitudes toward lockdown against COVID-19: a fragile consensus. *BMC Public Health.* 2020;20(1):1920.
7. Rhodes R. Justice and Guidance for the COVID-19 Pandemic. *Am J Bioeth.* 2020;20(7):163–136.
8. Bodas M, Peleg K. Self-isolation compliance in the COVID-19 era influenced by compensation: Findings from a recent survey in Israel. *Health Aff.* 2020;39(6):936–941.
9. Song W, Sawafta FJ, Ebrahim BM, Jebri MA. Public Attitude towards Quarantine during the COVID-19 Outbreak. *Epidemiol Infect.* 2020;
10. Centers for Disease Control and Prevention. Legal Authorities for Isolation and Quarantine [Internet]. Available from: www.cdc.gov/quarantine/aboutlawsregulationsquarantineisolation.html
11. Rhodes R. The Professional Responsibilities of Medicine. In: Rhodes R, Frances LP, Silvers A, editors. *The Blackwell Guide to Medical Ethics.* Malden, USA: Blackwell Publishing; 2007. p. 71–87.
12. Giubilini A, Douglas T, Maslen H, Savulescu J. Quarantine, isolation and the duty of easy rescue in public health. *Dev World Bioeth.* 2018;18(2):182–189.
13. Battin MP, Francis LP, Jacobson JA, Smith CB. The Patient as Victim and Vector: The Challenge of Infectious Disease for Bioethics. In: Rhodes R, Frances LP, Silvers A, editors. *The Blackwell Guide to Medical Ethics.* Malden, USA: Blackwell Publishing; 2007: 269–88.