

## Research Article

# Quarantine Perception during Lockdown in View of COVID – 19

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## ABSTRACT

**Background:** Novel Coronavirus disease (COVID-19) originating from China on December 2019 has rapidly crossed borders, infecting people throughout the whole world. This phenomenon has led to a massive public reaction; the media have been reporting continuously across borders to keep all informed about the pandemic situation. A public health measure to prevent the spread of this disease is quarantine. The public has increased level of anxiety and fewer attitudes toward quarantine even though the government is focusing a lot on it. **Aim:** This study attempted to assess the perception of quarantine among the nursing students during the COVID-19 pandemic. **Materials and Methods:** A survey was conducted using a questionnaire to assess the perception of quarantine. A total of 90 samples were selected randomly as first responders to the questionnaire. The questionnaire was distributed with the use of email and WhatsApp. **Results:** The majority of the students strongly agree or somewhat agree for the quarantine practices in four subscale of justification, sanction, burden, and safeguard. About 97% of the samples strongly agree that the public health authority needs to explain the importance of quarantine. **Conclusion:** During this pandemic, most of the educated people and health professionals are aware of this infection, possible preventive measures, the importance of social distancing and government initiatives were taken to limit the spread of infection.

**Keywords:** Quarantine, Perception, COVID-19

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## Introduction

On January 30, 2020, the WHO director-general determined that the outbreak of coronavirus disease (COVID-19) constitutes a Public Health Emergency of International Concern.<sup>[1]</sup> Public health measures to prevent spread of the disease to new areas and to reduce human-to-human transmission of COVID-19 may include quarantine, which involves the restriction of movement, separation from the

rest of the population or healthy persons who may have been exposed to the virus, with the objective of monitoring their symptoms and ensuring early detection of cases. Many countries have the legal authority to impose quarantine. In the absence of a COVID-19 vaccine, we assess the role of non-pharmaceutical interventions aimed at reducing contact and transmission rates of the virus in the population. Measures available to public health authorities to control such pandemics include encouraging citizens to wear masks in public, canceling public events, closing schools, isolating cases, quarantining contacts, monitoring, and enforcing compliance, and screening for illness.<sup>[2]</sup>

To understand the student's reaction to the possible use of widespread quarantine, a study was conducted among nursing students who have had little recent experience with widespread quarantine. The widespread use of quarantine presents a number of planning and implementation challenges. These include where the quarantine period would be spent, how the health status and the compliance of those in quarantine would be monitored, how their basic

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needs would be met, and whether those in quarantine would suffer economic consequences or social discrimination. Historically, case studies have shown that quarantine compliance in major epidemics is lower when the public does not support its use. Explaining the challenges before quarantine to the public may reduce the anxiety of the public and may increase the compliance.<sup>[3]</sup>

Some degree of panic also resides in public due to the unavailability of basic protection measures. As of April 27, 2020, Indian Government has registered a total of 28,380 cases (6362 recovered cases and 886 deaths) due to COVID-19 infection.<sup>[4]</sup> The governments, media, doctors, researchers, celebrities, police, and other stakeholders of the society appealed to the public to avoid public gatherings including sports, religious ceremonies, family functions, meetings, as well as classes in school, to prevent the global spread of coronavirus infection.<sup>[5]</sup> Despite these efforts, many people ignore the importance of social distancing due to attitudinal issues.

Despite the controversial history of quarantine, little information about lay perceptions of and attitudes toward its modern-day use is known. In view of the evidence of potential adverse effects on individual well-being and psychosocial health, and due to the critical necessity of high compliance in the event of a major infectious disease outbreak, it is increasingly important to understand how quarantine is perceived by the general public. Therefore, the objective of the present study was to determine the perception toward the use of quarantine among the nursing students as a means of infectious disease control.

## Methodology

The study was conducted in RVS College of Nursing, Kannampalayam including an equal number of students from second, third, and final years. The questionnaire was administered through e-mails and WhatsApp. A final sample of 90 students was included through random first 30 responders of second, third, and final years. Total of 90 students were included in this study 30 from each year. Data collected from the students were analyzed by descriptive and inferential analysis.

The data collection tool included is demographic data such as gender, area of living, and quarantine status. The perception of quarantine was assessed using the survey instrument which was developed by Toronto Public Health during SARS outbreak. This survey format was modified according to COVID – 19 outbreaks, which has four subscales (Justification, sanction, burden, and safeguard) and a subset of 15 survey items specifically designed to measure public attitudes toward the use of quarantine during infectious disease outbreaks. These items addressed issues ranging from the legality of restrictive measures, the perceived effectiveness of quarantine, and the supports that should be supplied to those affected by quarantine orders.

Respondents were asked to indicate their level of agreement/disagreement with each item; the response format was a 5-point Likert – type design (1 = “Strongly Disagree”; 2 = “Somewhat Disagree”; 3 = “Neutral”; 4 = “Somewhat Agree”; and 5 = “Strongly Agree”).<sup>[6]</sup> The survey response was rated and calculated.

## Results

Table 1 presents a summary of the demographic characteristics of this sample. The majority of the sample were female (68%) and from rural area (58%). Within this sample, 13% of participants were quarantined with someone else in the family.

Table 2 shows that the majority of respondents indicated agreement (either “Strongly Agree” or “Somewhat Agree”) for all the four subscales. Most of the respondents accepted the importance of quarantine in justification. About 95% of the students expressed that by quarantine all will be protected from becoming sick. About 92% of the students felt that quarantine is the good way to stop the spread of the coronavirus outbreak. About 73% of the respondents said that the public health should have the power to order people into quarantine during outbreaks.

In sanction subscale most of the students, 74% expressed that people who break quarantine orders on purpose should face legal penalties such as a fine or jail. Only 22% of the students strongly agree and 19% of them have given neutral response on that the public health should use electronic bracelets and in-home surveillance cameras for people who disobey quarantine orders. Likewise, there was the majority support for the use of various legal sanctions, penalties, and/or coercive measures to maximize compliance with quarantine orders.

About 97% of the students strongly agree that the public health authorities and government officials should endeavor to lessen the burdens endured by those ordered into quarantine. Surprisingly only 47% of the students strongly agree for payment from the government for the missed time at work and 19% of them gave neutral response to this.

**Table 1:** Frequency and percentage distribution of demographic profile

Demographic profile	Frequency	Percentage
Sex		
Male	29	32
Female	61	68
Area of living		
Urban	38	42
Rural	52	58
Quarantine status		
No	77	86
Yes, myself and someone else in my home	12	13
Yes, not myself but someone else in my home	1	1

**Table 2:** Perception of quarantine by nursing students

ITEMS	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
<b>Justification</b>					
Public Health should have the power to order people into quarantine during outbreaks	73	15	12	0	0
Quarantine is a good way to stop the spread of coronavirus outbreak.	92	6	1	0	1
If someone is given a quarantine order by public health, they should follow it no matter what else is going on in their life at work or home	52	27	13	7	1
If I go into quarantine, my family/friends/community will be protected from becoming sick	95	3	2	0	0
<b>Sanctions</b>					
People who break quarantine orders on purpose should face legal penalties such as a fine or jail	74	12	11	3	0
Public health should be able to lock people up if they fail to obey quarantine orders	57	29	10	4	0
Public health should use electronic bracelets and in-home surveillance cameras for people who disobey quarantine	22	50	19	8	1
<b>Burdens</b>					
Public health needs to explain to everyone why they should be allowed to use quarantine	97	3	0	0	0
Government should pay for nurses and counselors to help people who are in quarantine	80	18	1	1	0
Public health should ensure that people have food and shelter while in quarantine	91	8	0	1	0
Government should pay for counselors and support groups so that people coming out of quarantine have someone to talk to about it	51	37	10	2	0
People in quarantine should get money from the government to pay for missed time at work	47	32	19	1	1
<b>Safeguards</b>					
Public health should ensure that there is no discrimination in the use of quarantine	78	16	5	1	0
It is reasonable for some rights to be taken away during coronavirus outbreak	71	21	4	3	1
People who disagree with their quarantine order should be able to request a review to have it ended early	57	28	5	10	0

About 91% of the students felt that the public health should ensure that people have food and shelter while in quarantine. In safeguards 78% of the sample strongly agrees for public health should ensure that there is no discrimination in the use of quarantine. About 71% strongly agrees that it is reasonable for some rights to be taken away during coronavirus outbreak and 57% of the students strongly agree that people who disagree with their quarantine order should be able to request a review to have it ended early and 10% of them disagree for this. Moreover, finally, the vast majority of respondents were in favor of safeguards against unwarranted and/or inappropriate use of quarantine. While these high percentages suggest a certain degree of convergence of opinion, it is important to note that the proportion of respondents indicating “Strongly Agree” versus “Somewhat Agree” varies significantly across the 15 items.

## Discussion

Pandemic diseases can create serious problems for international and local public health authorities and health professionals. They can be highly contagious and can lead to death or serious illness. Such diseases also can have major economic impacts.<sup>[7]</sup> Prior research has shown that

when people are more concerned about a health threat, they are more likely to change their behavior.<sup>[8]</sup> The quarantine of exposed persons (along with the isolation of infected persons) has been described as the most complex, ethically and legally controversial intervention within the jurisdiction of public health by WHO. The majority of respondents strongly support for the use of quarantine in an infectious disease outbreak, for legal penalties against absconders, for social supports for those affected, and for public safeguards against potential inappropriate use.

Epidemics and pandemics are a periodic phenomenon. People in the community may face several challenges during quarantine. The lack of awareness on quarantine leads to an attitude, which affects the preparedness to meet these challenges. Impacts of these pandemics are often intense, which may adversely affect the mental well-being of a given population. The fear and anxiety related to pandemics also influence the behavior of people in the community. Hence, this study attempted to evaluate the perception of quarantine among nursing students.

Multiple studies have found that in the United States, African Americans have different worries about the actions taken by public health authorities to control the spread of an epidemic.<sup>[9]</sup> They might be less willing than others to trust

government authorities and comply with recommendations, because of concern about prior discrimination, experimentation, and inadequate service provision by public health authorities.<sup>[8]</sup> Others have suggested that public cooperation can be increased with major educational efforts to inform people of the seriousness of a disease threat. In addition, public health authorities must provide evidence of managerial competence and preparedness; choose trusted spokes people to articulate the need for compulsory policies; and seek endorsements for these policies from independent professional groups, scientists, and opinion leaders.<sup>[10]</sup> But, a study from Ethiopia reported, poor knowledge and erroneous beliefs of healthcare professionals, during the Ebola virus outbreak in 2015 and it urged for intense training of the healthcare professionals.<sup>[11]</sup> All the participants in the present study were nursing students. The participants had a good level of awareness regarding the mode of spread, symptoms, and yet adequate awareness about the preventive measures. It was possibly due to the government and media emphasizing more on the preventive measures. Educated and especially healthcare people get more sensitized by these information's. Data on public attitudes toward quarantine in the wake of SARS are scarce. Public opinion polls have indicated high levels of acceptance of quarantine among samples of Toronto-area residents (97%) and US citizens (93%).<sup>[8]</sup> Similarly, additional changes like – isolation, social distancing, self-quarantine, restriction of travel and the ever-spreading rumors in social media are also likely to affect mental health adversely.<sup>[12]</sup> In the present study the majority of respondents indicated agreement (either “Strongly Agree” or “Somewhat Agree”) for all the four subscales.

## Conclusion

The present findings indicate strong support from students for the use of quarantine in the context of COVID – 19 outbreaks and for serious sanctions against those who fail to comply.

## References

1. World Health Organization. Considerations for Quarantine of Individuals in the Context of Containment for Coronavirus Disease (COVID-19). Interim Guidance. Geneva: World Health Organization; 2020. Available from: [https://www.who.int/publications/i/item/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-\(covid-19\)](https://www.who.int/publications/i/item/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-(covid-19)). [Last accessed on 2020 Apr 27].
2. World Health Organization. Non-pharmaceutical Public Health Measures for Mitigating the Risk and Impact of Epidemic and Pandemic Influenza. Geneva: World Health Organization; 2019. Available from: [https://www.who.int/influenza/publications/public\\_health\\_measures/publication/en/](https://www.who.int/influenza/publications/public_health_measures/publication/en/). [Last accessed on 2020 Apr 26].
3. John TJ. Final Thoughts on India's 1994 Plague Outbreak. *Lancet* 1995;346:765.
4. MoHFW. Government of India; 2020. Ministry of Health and Family Welfare: Home Page. Available from: <https://www.mohfw.gov.in/index.html>. [Last accessed on 2020 Apr 27].
5. McCloskey B, Zumla A, Ippolito G, Blumberg L, Arbon P, Cicero A, *et al*. Mass gathering events and reducing further global spread of COVID-19: A political and public health dilemma. *Lancet* 2020;395:1096-9.
6. Tracy CS, Rea E, Upshur RE. Public perceptions of quarantine: Community based telephone survey following an infectious disease outbreak. *BMC Public Health* 2009;9:470.
7. Kareshand WB, Cook RA. The human animal link. *Foreign Aff* 2005;84:38-50.
8. Blendon RJ, Benson JM, DesRoches CM, Raleigh E, Taylor-Clark K. The public's response to severe acute respiratory syndrome in Toronto and the United States. *Clin Infect Dis* 2004;38:925-31.
9. Gamble V. Under the shadow of Tuskegee: African Americans and Health Care. *Am J Public Health* 1997;87:1773-8.
10. Clark KT, Blendon RJ, Zaslavsky A, Benson J. Confidence in crisis? Understanding trust in government and public attitudes toward mandatory state health powers. *Biosecur Bioterror* 2005;3:138-47.
11. Abebe TB, Bhagavathula AS, Tefera YG, Ahmad A, Khan MU, Belachew SA, *et al*. Healthcare professionals' awareness, knowledge, attitudes, perceptions and beliefs about Ebola at Gondar university hospital, Northwest Ethiopia: A cross-sectional study. *J Public Health Afr* 2016;7:570.
12. Banerjee D. The COVID-19 outbreak: Crucial role the psychiatrists can play. *Asian J Psychiatry* 2020;2020:102014.