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Original Research Article

A semi qualitative study on the perception of the general public to the presence of the first COVID-19 patient in the locality

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ABSTRACT

Background: Infectious diseases have had a significant role in shaping human history by engraving a subconscious sense of 'fear of infection'. The three sequential stages of the rational response to fear- fear, denial, and frustration, have been reported among quarantined individuals during any outbreak. To our knowledge, this was one of the first studies to assess the impact of the first case of coronavirus disease 2019 (COVID-19) among the neighbouring dwellers.

Methods: A semi-qualitative study using semi-structured in-depth telephonic interviews was conducted after ethical committee approval.

Results: All the participants were aware of the correct attitudes and practices to be followed during the pandemic. Mixed reactions of panic, fear and confusion were observed. Most participants were concerned about elderly at home and financial constraints. Despite most participants having minimal fear of contracting the illness themselves, fear of a family member acquiring the same seemed to be higher.

Conclusions: The study adds to the existing literature that fear and anxiety during a pandemic are mostly due to the uncertainty related to the disease spread and misinformation. There is a need for phased and well informed lockdown implementation and better knowledge propagation among the general public in order to mitigate unwanted fear and panic among the general public.

Keywords: COVID-19, Fear, Stigma, Locality, Semi qualitative Method, Reactions

INTRODUCTION

Infectious diseases have had a significant role in shaping human history by engraving a subconscious sense of 'fear of infection'.[1] In an era of major scientific progress in battling and eliminating certain infections, this fear may seem unwarranted. Yet, 'germ panic' continues to prevail, in contrast to the fear related to more burdensome entities of mortality.[2] Previous outbreaks have led to anger, confusion and other psychological outcomes among the masses and the coronavirus disease 2019 (COVID-19) pandemic is no different.[3] The three sequential stages of the rational response to fear- fear, denial, and frustration, have been reported as predominant among quarantined individuals during any outbreak.[2] When it comes to infectious diseases, the patient is not only a victim, but also a vector.[4] With increase in number of cases, people find it difficult to adapt to these conditions.[5] There is added stigma associated with the disease that adds to the fear and anxiety.[6]

Most studies have focussed on psychological impact of COVID-19 patients. Our study aimed to capture the impact of the first case of COVID-19 among the neighbouring dwellers in a locality.

METHODS

A semi-qualitative study was conducted through telephonic interviews. Ethical approval for this study was received from the institutional review board. Detailed descriptions of the experiences of the inhabitants after coming to know about the first incidence of a patient of COVID-19 in the locality were obtained. Participants were recruited through purposive and snowball sampling. Inclusion criteria was age between 18-60 years, giving consent for the study, staying in and around 1 km from the COVID-19 patient in the locality. Exclusion criteria included those who denied consent. Sample size was determined by data saturation- at the point when no new themes seemed to emerge. Variation in age, educational qualification, proximity from the residence of COVID patient were considered to obtain diversity in their experiences. The study objectives and voluntary nature of the study were explained to the participants. Written informed consent was obtained from participants through an online survey before the telephonic interview. The online survey consisted of 22 questions. The initial questions (n=4) were to understand the demographic profile of the participants. The rest of the questions (n=17) were focussed on participants' knowledge, attitude, and perception about COVID-19. The questionnaire ended with an option for the participant to provide informed consent to be contacted telephonically to divulge further information about their experiences of staying in a locality where an inhabitant had turned out to be COVID positive. Confidentiality was ensured, by using numbers instead of names and removing other identifying information. Semi-structured in-depth telephonic interviews were done at a time convenient for participants between April 9 to 11, 2020.

RESULTS

Sociodemographic data are tabulated (Table 1).

Table 1: Socio-demographic data.

Ident-ification data	Age (yrs)	Sex	Education	Distance from the COVID positive residence (metres)
1	52	Male	Graduate	300
2	54	Female	Graduate	50
3	54	Male	Graduate	500
4	50	Male	Graduate	100
5	26	Female	Graduate	600
6	46	Female	Graduate	600
7	37	Male	Graduate	500

Source of information for all the participants was from a neighbour and the participants came to know about the news on 7th of April 2020.

Table 2: Knowledge about COVID-19

Identification data	Agent causing COVID-19	Main route of spread	Symptoms of COVID-19	Prevention of COVID-19	Effectiveness of washing with soap	Penetration through intact skin	Maximum risk of serious illness
1	SARS-Co V	Droplet	Fever and cough	Social distancing, hygiene	Yes	Maybe	Elderly with comorbidities
2	-	Droplet	Fever and cough	Social distancing, hygiene	Yes	No	Elderly with comorbidities
3	SARS-Co V	Droplet	Fever and cough	Social distancing, hygiene	Yes	No	Elderly with comorbidities
4	SARS-Co V	Droplet	Fever and cough	Social distancing, hygiene	Yes	No	Elderly with comorbidities
5	SARS-Co V	Droplet	Fever and cough	Social distancing, hygiene	Yes	No	Elderly with comorbidities
6	-	Droplet	Fever and cough	Social distancing, hygiene	Yes	No	Elderly with comorbidities
7	-	Droplet	Fever and cough	Social distancing, hygiene	Yes	No	Elderly with comorbidities

Table 3: Attitude and practice during COVID-19 outbreak.

Identification data	Co-operation of public to lockdown	Comparison of Indian health care to world nations	Visiting crowded places without mask	Maintaining social distancing	Following hand hygiene	Avoiding touching unnecessary surfaces	Contact with health care professional or crisis helpline
1	To an extent	Ahead of	No	Yes	Yes	Yes	No
2	To an extent	Equal	No	Yes	Yes	Yes	Not aware of any such services
3	To an extent	Lagging behind	No	Yes	Yes	Yes	No
4	To an extent	Equal to	No	Yes	Yes	No	Yes
5	Complete	Equal to	No	Yes	Yes	Yes	No
6	Complete	Equal to	No	Yes	Yes	Yes	Not aware of any such services
7	To an extent	Lagging behind	No	Yes	Yes	Yes	Yes

Table 4: Reaction to news of COVID-19 patient in locality.

Identification data	Emotional reaction to COVID	Emotional reaction to curfew	Major concerns	Measures that could have been taken to prevent such worries	Behavioural changes/ precautions after this incident	Feeling towards the patient
1	Panic, what if the virus can spread through air?	Unsure of reason for sudden blockage, confused to see roads blocked and announcement by police	Elderly at home, work issues, duration of lockdown	Following all rules as advised	Increased handwashing Definite mask if going out Better immunity providing food cooked	Angry Was done on purpose to spread the infection among Hindus
2	Scared, who else is positive in the locality?	Difficulty as essentials cannot be obtained directly now	nil	Proper screening of others in locality so that we can be aware of positive cases	Completely stopped going out unless necessary	Pity Unaware of the seriousness probably
3	Scared, what will be the consequences?	Consequences about duration of lockdown extended to 7 more days than other places	Salary crunch	Authentic news on mode of spread Practical household day to day issues to be addressed by media- paper, milk, buying grocery, etc Reduced contradicting news on tv	Walking dog reduced, close areas only, washing of dog's feet after entering more hand washing Maid stopped Completely stopped going out unless necessary	Pity

Continued.

Identification data	Emotional reaction to COVID	Emotional reaction to curfew	Major concerns	Measures that could have been taken to prevent such worries	Behavioural changes/ precautions after this incident	Feeling towards the patient
4	Chilling that COVID has reached so close by	House at the end of street, still receiving essentials every day, so manageable	Business stoppage, Elderly family members, asthmatic child	Follow everything as advised Rapid testing of all during or before lockdown	Clothes change often Wash more often Turmeric and salt gargle Regular pranayama Compulsory hot water for all	Pity Pray for his betterment
5	Fear of other modes of spread	Afraid to see sudden blockage of nearby roads	College extension	Prior appropriate warning	Completely stopped going out unless necessary	Angry Did it on purpose
6	Scared	Worried as to how we will procure food stuff	Extent of lockdown	Prior preparation about how to go about	Completely stopped going out unless necessary	Pity
7	Confusion	Worried how long this will last	Salary crunch, elderly family members	Information about spread of virus	Hand washing Wearing mask for nearby shop also	Pity

Table 5: Further reaction to news of COVID-19 patient in locality.

Identification data	Fear of contracting illness	Chances of family contracting illness	Reaction of family if you were covid+	Your reaction to a positive family member	Participation in lockdown	How long this will last
1	Less	Elderly mother, fear increases on talking on phone with others	Worried, make sure isolated	Get best care for them	Doing what is told as best as possible	No idea
2	Less	Less	Feel bad, make sure isolation is done	Take it strongly, best care	Doing what is told as best as possible	End of May
3	Doubt due to probable air spread	Less than 1% chance, all steps taken	Admitted immediately, proper isolation	Feel horrible, all worried	Doing what is told as best as possible	June Till numbers fall
4	I am the only person stepping out, worry that I may get infected	Need more caution, daughter and mother	Will manage well	I will not be able to tolerate; anxiety varies with who is affected	Doing what is told as best as possible	September
5	Minimal	minimal	Worried	Worried, make sure proper care	Doing what is told as best as pos[illegible]	June
6	Minimal	minimal	Worried	Worried, make sure proper care	Doing what i[illegible] as best as possible	[illegible]
7	Minimal	minimal	Not be able to tolerate	Worried, make sure proper care	Doing what is told as best as possible	June

Continued.

From Table 2 it is evident that all the participants had adequate knowledge about COVID-19 in terms of route of spread, symptoms and severity of infection.

All the participants were aware of the correct attitudes and practices of the general public to be followed during the pandemic including hand hygiene, use of face masks, social distancing and adhering to the government lockdown rules (Table 3).

Table 4 enumerates the participants' reactions to the news of COVID-19 patient for the very first time in that locality.

Mixed reactions of panic, fear and confusion were obtained. Most participants were concerned about children and elderly at home, financial constraints due to the blockage of the locality from adjoining areas, everyday hassles that they were about to experience, etc. Significant additional precautions were taken by most participants after this incident including stopping household maids, stricter social distancing practices, changes in routine including stoppage of walking their dogs, not going out completely, etc.

Table 5 enumerates other changes in their thinking including doubts about mode of spread of infection and its severity. Despite most participants having minimal fear of contracting the illness themselves, fear of a family member acquiring the same seemed to be significantly higher on hearing the news.

DISCUSSION

The interview was conducted during the immediate aftermath of the nationwide lockdown in March 2020. To our knowledge, this is the earliest study to be carried out using a semi qualitative methodology. Also, the setting of the study is unique in the fact that all the participants were already known to each other. One of the authors belonged to this particular community and so one could expect that the experiences narrated by the participants would be upfront and not guarded as usually expected. Also, the timing of the study was unique in the fact that this was the first instance of outbreak in that community at that point in time and so the added restrictions that were imposed at that time came as an added shock to the participants. The instrument used was multidimensional. It had components testing knowledge, attitude and practices of the participants as a tool for validation, to find out if they were well informed about the disease. A semi structured questionnaire was used to have direction in the interview and as it was a cross sectional interview, using telephone, scales were not utilized due to paucity of time.

As shown in Table 1, the sociodemographic characteristics of the sample was representative. All the participants were cooperative and were belonging to various communities and religions. The interview was conducted in their vernacular language, making it comfortable for the participants. From the initial part of the questionnaire (Table 2, 3) it is evident that the participants were well informed about all the aspects of COVID-19.

Similarly, (Table 4) varied responses to the news were obtained. The added local curfew was considered a hinderance by the participants due to issues in acquiring daily necessities and the suddenness of the announcement added to the same. The common major concern remained about the concern for elderly parents at home, showing that they were well informed about the lethality of the disease in the elderly.[2] Another side to this was the salary crunch which also worried them. The fact that worried the participants regarding future course of action was the lack of testing neighbours in the locality despite a week of diagnosis and isolation of the patient. This added to doubts about the mode of spread of the illness apart from the droplet route being told about, adding to unnecessary worries.[7]

It was good to notice that after the incident, there was an added seriousness in the way social distancing and hygiene instructions were carried out by all the participants and their family members.[3] This should ideally be the norm otherwise also and should continue despite the reduction in fear of the disease in coming times also. Although most of the participants' attitude towards the patient was that of pity, a couple of them felt angry towards the patient, blaming him for spreading the disease in the community on purpose. Stigma against minority continues to prevail in these trying times also.[4]

Despite the news, most participants were not much worried about themselves, although worry for a family member contracting the illness prevailed, especially elderly. All the participants gave their 100% in taking all precautions during the lockdown, hoping for the pandemic to end around end of 2020.

Limitations of the study includes a small sample size and online mode of data collection. More information on other aspects of the impact of virus could have been collected.

CONCLUSION

The study adds to the existing literature that fear and anxiety during a pandemic are mostly due to the uncertainty related to the disease spread and misinformation. There is a need for phased and well informed lockdown implementation and better knowledge propagation among the general public in order to mitigate unwanted fear and panic among the general public.

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REFERENCES

1. Morens DM, Folkers GK, Fauci AS. Emerging infections: a perpetual challenge. Lancet Infect Dis. 2008;8:710-9.
2. Pappas G, Kiriaze IJ, Giannakis P, Falagas ME. Psychosocial consequences of infectious diseases. Clin Microbiol Infect. 2009;15:743-7.
3. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet. 2021;395:912-20.
4. Smith CB, Battin MP, Jacobson JA, Francis LP, Botkin JR, Asplund EP, et al. Are there characteristics of infectious diseases that raise special ethical issues? Dev World Bioeth. 2004;4:1-16.
5. Taylor S. The Psychology of Pandemics: Preparing for the Next Global Outbreak of Infectious Disease. Cambridge Scholars Publishing. 2019;179.
6. Dubey S, Biswas P, Ghosh R, Chatterjee S, Dubey MJ, Chatterjee S, et al. Psychosocial impact of COVID-19. Diabetes Metab Syndr. 2020;14:779-88.
7. Sahoo SS, Sahu DP, Kankaria A. Mis-infodemic: The Achilles' heel in combating the COVID-19 pandemic in an Indian perspective. Monaldi Arch Chest Dis. 2020;90.

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