Coronavirus Related Fears among Residents of Karachi, Pakistan

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Abstract

Objective
The emerging epidemic coronavirus (COVID-19) crisis rattled nearly every sphere of life across all over the globe, aim of the study was to explore fears produced due to the swift spread of the deadly virus among residents of Karachi city, Pakistan.

Method
A 10–item Coronavirus Fear Questionnaire (CVFQ) with good reliability (α=.75, p<.01) purposely constructed based on informal interviews from the general population and administered on (N=264) participants invited via an online Google based survey.

Results
Outcomes showed the prevalence of fears related to the infection to oneself (76.5%), family (84.5%), contagious transmissions (62.9%), death of loved ones (72.3%), financial constraints (80.7%), increase in prices (85.2%), disease rumors (80.7%), restriction of mobility (71.2%), and social rejections (61.7%).

Conclusion
It was concluded that residents of Karachi possess different fears related to COVID-19, which warrants appropriate psycho-social attention.

Keywords
Coronavirus, Questionnaire, Reliability, Fears, Karachi, Pakistan

Introduction

Coronavirus (COVID-19) is the third viral catastrophe after SARS-CoV[1] and MERS 2012 [2], which erupted in late 2019 in which an increasing number of individuals complained about pneumonia-like symptoms. The origin of the virus was mysterious and assumed to emerge from the seafood market located in Wuhan, China[3] spreading from Wuhan to other cities in China, Asia, engulfing the entire world.[4]

In Pakistan, the first case of coronavirus was reported on February, 2020 with 1,856 cases and 25 deaths till March, 2020[5] which increased up to 37218 cases, 10,155 recoveries with 803 Deaths till May, 2020[6]. To curb the spread of the virus, the Government of Pakistan announced public health safety measures which include travel restrictions, social distancing, quarantine policies and closure of educational organizations.[7]

Pakistan is the fifth densely populated region with poor economic conditions[8], Lower and Middle-Income Countries (LMICs) juggle with lack of workforce distribution in health areas, poor infrastructure, and lower mental health awareness[9]; lack of adequate supplies of beds, ventilators, oxygen cylinders, personal protective equipment and hand sanitizers.[10] In such a scenario, covid-19 posed a serious threat in Pakistan as it is already battling with numerous transmittable and non-transmittable infectious diseases. [11]

In LMICs there is a narrow understanding of covid-19 related perceptions.[12] Likewise, in Pakistan, political and religious groups pose resistance against governmental orders.[13] In Pakistan, the tradition of a joint family system is prevalent, people live in closed spaces hence, quarantine measures and social distancing challenged the physical as well as psychological health of individuals.[8]

Covid-19 not only threatened the physical health of individuals but also adversely affect the mental, social and psychological well-being of people.[14] Nearly half of the participants showed medium to high levels of psychological effects following an early outbreak of COVID-19.[15] Studies carried out considering population from high and LMICs revealed that covid-19 related fears are closely linked with psychological disorders.[16,17,18]

In case of epidemic outbreaks, and during epidemic conditions, uncertainty produces fears and anxieties among healthy people.[19] Lack of management of negative emotions aroused due to pandemic outbreaks creates prolonged psychological disorders,[20,21] which possibly linger even after crises subsides. It is believed that unconventional and novel dangers induce greater levels of anxiety as compared to familiar ones.[22,23] Worldwide epidemic prevalence of COVID-19 warrants clinical attention towards the mental health of individuals.[24]

However, the majority of psychological research related to covid-19 contributed by China, the United States and European regions.[25] Developing countries possess an augmented level of

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fear about epidemic than epidemic itself [26,27,28] creates pressing need to carry out covid-19 related investigations in LMICs to effectively comprehend situation.[25] It is necessary to cater to the psychological issues of individuals to effectively manage and control any pandemic situations.[29,30,31] Therefore, it is crucial to explore the psychological effects of covid-19 among the Pakistani population for detection and psychological intervention.

The purpose of the study was to explore the prevalence of general fears related to covid-19 among residents of Karachi, Pakistan.

- Ø To investigate covid-19 related infection fears among residents of Karachi city.
- Ø To investigate Covid-19 related fears about financial and social issues among residents of Karachi city.

Materials and Method

The study was carried out during the initial covid-19 outbreak and strict lockdown periods in Karachi city (March/ April 2020). Due to social distancing policies, all respondents were approached online via different social networking sites (Facebook, WhatsApp, Instagram, LinkedIn).

It was an exploratory study for which CVFQ was purposively designed in successive stages. Individuals (n=30) with an age ranged from 19 to 40 years selected for an informal interview. open-ended questions such as What are the main reasons for corona related anxiety/fear among the public? What are the thoughts and emotions come to your mind when someone speaks to you about the coronavirus? were asked from key informants via online interviews (Zoom, Microsoft Teams, WhatsApp calls) to explore common reasons for fears related to the COVID-19.

The verbatim was qualitatively analyzed for key ideas and themes. Fifteen items were written based on two conceptual categories: fear of viral infection; personal and social insecurities. Dichotomous categories (yes/no) were decided to score responses. To ascertain content validation, fifteen items were given to two subject experts for the determination of face validity, specificity, and content adequacy. Items were modified according to expert suggestions. Twelve items were deleted due to a lack of clarity.

Pilot Study was done on a sample of (n=20) individuals with a requested to identify clarity and aptness for further refinements. Two items were discarded due to ambiguity. The final pool of 10-item-CVFQ was finally administered for determination of internal consistency on a sample of 264 (111 male & 153 female) individuals, age ranged from 19-47 years recruited over one month (March to April 2020). All individuals were Karachi residents and currently present in the city during the lockdown period. The ethical criteria of research were carefully considered. All respondents have fully described the purpose, right to refuse participation or leave in the middle of the study. They were also ensured about confidentiality that data will only be used for research publications without identification of personal information and only consented participants were included in the study. Statistical Package for Social Sciences (SPSS) version 22 used for data analysis.

Results

Demographic Profile (represented in Table 1) shows that out of 264 Participants, 153 (58%) females and 111(58%) males. The age of 88 individuals were ranged from 19-25 years (33.3%); 92 individuals aged between 26-32 years (34.8%); 44 participants aged between 33-39 years (16.7%), 24 respondents age ranged from 40-46 years (9.1%) and 16 participants age ranged from 47 and above (6%). 81 individuals completed the bachelor's degree (30.6%), 119 participants attained maters (45.1%), 64 respondents attained a doctoral degree (24.2%).

163 participants were single/ never married (61.7%), 93 were married (35.2%) and 8 respondents were divorced/ separated (3%).

Responses of participants for CVFQ (Table 3) shows 202 participants reported fear of covid-19 infection (76.5%), 223(84.5%) showed fear of infection to family members, 166 (63%)showed fears that infection is inescapable, 191(72.3%)showed fear of death, 199(75.4%) feared about the delay of vaccine, 225(85.2%)feared about increases in prices,

Table 1: Shows the frequency and percentage counts of individuals who participated in the study (N=264).

Demographics		Frequency	Percentage (%)
Gender	Male	111	42
	Female	153	58
Age	19-25 years	88	33.3
	26-32 years	92	34.8
	33-39 years	44	16.7
	40-46 years	24	9.1
	47 years	16	6.0
Education	Bachelors	81	30.6
	Masters	119	45.1
	Doctorate and above	64	24.2
Marital Status			
	Single/ never married	163	61.7
	Married	93	35.2
	Separated/ Divorced	8	3.0

Table 2: Internal consistency for 10-items Coronavirus Fear Questionnaire (CVFQ) (N=264)

Do you feel anxiety /worry about?	*r- values*
Infection from COVID-19?	.406
Children/ elderly parents/ grandparents will be infected from COVID-19?	.500
Infection of COVID-19 is inescapable?	.388
Death of loved ones (family, friends, relatives) due to COVID-19?	.373
The vaccine will take a longer time to control COVID-19?	.359
Increase in prices (food/grocery/sanitizes/ soaps) due to COVID-19?	.356
Financial problems (unemployment/job loss /business loss) due to COVID-19?	.394
Rumors spread in media (news channels, internet, social networking sites)?	.360
Limitation of activities (travelling, social gatherings) due to COVID-19?	.349
Social rejections by other people due to COVID-19 contamination?	.456
Overall CVFQ	.750

CVFQ=Coronavirus Fear Questionnaire, *p<.01

Internal consistency of CVFQ in Table 2 shows that the values for the 10-item questionnaire lie in acceptable range of (α=.35-.5, p<.01). Good indices of overall reliability for CVFQ was found (α=.75, p<.01).

Table 3: Shows the percentage and frequency counts (f) for responses of participants on CVFQ (N=264)

Do you feel anxiety /worry about?	No f (%)	Yes f (%)
Infection from COVID-19?	62(23.5)	202(76.5)
Children/ elderly parents/ grandparents will be infected from COVID-19?	41(15.5)	223(84.5)
Infection of COVID-19 is inescapable?	98(37.1)	166(62.9)
Death of loved ones (family, friends, relatives) due to COVID-19?	73(27.7)	191(72.3)
The vaccine will take a longer time to control COVID-19?	65(24.6)	199(75.4)
Increase in prices (food/grocery/sanitizes/ soaps) due to COVID-19?	39(14.8)	225(85.2)
Financial problems (unemployment/job loss /business loss) due to COVID-19?	51(19.3)	213(80.7)
Rumors spread in media (news channels, internet, social networking sites)?	51(19.3)	213(80.7)
Limitation of activities (travelling, social gatherings) due to COVID-19?	76(28.8)	188(71.2)
Social rejections by other people due to COVID-19 contamination?	101(38.3)	163(61.7)

213(80.7%) showed fears about financial problems and rumors spread by media, 188(71.2%) showed fears about limitation of activities and 163(61.7%) respondents showed fears about social rejections. Results imply that most participants reported covid-19 related fears.

Discussion

The purpose of the study was to explore the prevalence of general fears related to covid-19 among residents of Karachi, Pakistan. It investigates different fears related to covid-19 (infection fears, fears about financial and social issues) among Karachi residents. For this purpose, a short survey questionnaire (10-item, CVAQ-10 item) was designed which demonstrated acceptable reliability coefficients.[32] The outcomes of the study showed an overall greater prevalence of Covid-19 related fears among residents of Karachi city. Results are congruent with earlier investigations which revealed a larger proportion of residents in different regions of the world (USA, China) reported covid-19 related anxieties.[33,34]

Findings of the present study showed that the majority of Karachi residents disclosed covid-19 related infection fears such as fears about the infection to oneself (76.5%), family (84.5%), contagious transmissions (62.9%) and death of loved

ones (72.3%). Present findings are in agreement with an earlier study which showed (94%) Karachi residents reported fear about the health of family members due to covid-19.[35] In the USA, more than half of the population showed anxiety related to covid-19 transmissions[36] and in China, 30% population declared fear of death of one's self due to covid-19 infections.[37] Greater prevalence of fears possibly denotes fact that epidemic conditions accelerate uncertainties and fears about being infected and transmission of disease to others and death likely to impact negatively on psychological states [38] and increase fears related to spreading of infection in family members.[39]

Covid-19 related fears about financial and social issues among residents of Karachi city showed people endorsed presence of fears about the hike in prices (85.2%), financial constraints (80.7%) rumor spread (80.7%), restriction of mobility (71.2%), and social rejections (61.7%). Greater fears related to financial matters during a pandemic is possibly due to changes in work patterns and social distancing which creates a sense of isolation and helplessness, people feel sense of insecurities because of the decline in economic conditions.[40] Also, closures of business following epidemic outbreaks create job losses and financial issues likely to diminish the psychological conditions of people.[41] Research showed that the spread of false covid-19 related information via media creates higher levels of fear (84%) among Karachi residents.[35] This was also indicated by the study which showed that lack of knowledge and false news related to creates fear and anxiety among the Chinese population.[42,43] A possible reason for higher Covid-19 fears related to disease rumors (80.7%) includes erroneous information and rumors about the disease which creates misunderstandings and increased fears among the public.[44]

Higher levels of Covid-19 related fears about the restriction of mobility (71.2%), and social rejections (61.7%) affirmed by earlier studies which showed during pandemics, stringent quarantine and other health safety measures cause discrimination, societal rejections financial hardships and stigmatization.[45,46]

Possible explanations denote the notion that during epidemics, the inability to participate in daily routine activities creates distress[47] and social rejections followed by epidemic outbreaks create fears among individuals.[48,49]

Conclusion

The present study showed an alarming prevalence of COVID-19 related fears among residents of Karachi, Pakistan. The generalization of present outcomes should be made with cautions because of the small sample size and limited focus on participants from Karachi city. It is recommended to carry out future investigations considering the population of different cities of Pakistan. Also, the study could be replicated to investigate covid-19 related fears among the population diagnosed with psychological and physical/ chronic diseases.

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