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Impact of the COVID-19 pandemic on mental health and well-being of communities: an exploratory qualitative study protocol

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ABSTRACT

Introduction The COVID-19 pandemic has certainly resulted in an increased level of anxiety and fear in communities in terms of disease management and infection spread. Due to fear and social stigma linked with COVID-19, many individuals in the community hide their disease and do not access healthcare facilities in a timely manner. In addition, with the widespread use of social media, rumours, myths and inaccurate information about the virus are spreading rapidly, leading to intensified irritability, fearfulness, insomnia, oppositional behaviours and somatic complaints. Considering the relevance of all these factors, we aim to explore the perceptions and attitudes of community members towards COVID-19 and its impact on their daily lives and mental well-being.

Methods and analysis This formative research will employ an exploratory qualitative research design using semistructured interviews and a purposive sampling approach. The data collection methods for this formative research will include indepth interviews with community members. The study will be conducted in the Karimabad Federal B Area and in the Garden (East and West) community settings in Karachi, Pakistan. The community members of these areas have been selected purposively for the interview. Study data will be analysed thematically using NVivo V.12 Plus software.

Ethics and dissemination Ethical approval for this study has been obtained from the Aga Khan University Ethical Review Committee (2020-4825-10599). The results of the study will be disseminated to the scientific community and to the research subjects participating in the study. The findings will help us explore the perceptions and attitudes of different community members towards the COVID-19 pandemic and its impact on their daily lives and mental well-being.

Strengths and limitations of this study

► The mental health impact of the COVID-19 pandemic is likely to last much longer than the physical health impact, and this study is positioned well to explore the perceptions and attitudes of community members towards the pandemic and its impact on their daily lives and mental well-being.
► This study will guide the development of context-specific innovative mental health programmes to support communities in the future.
► One limitation is that to minimise the risk of infection all study respondents will be interviewed online over Zoom and hence the authors will not have the opportunity to build rapport with the respondents or obtain non-verbal cues during interviews.

BACKGROUND

The COVID-19 pandemic has affected almost 180 countries since it was first detected in Wuhan, China in December 2019.[1 2] The COVID-19 outbreak has been declared a public health emergency of international concern by the WHO.[3] The WHO estimates the global mortality to be about 3.4%[4]; however, death rates vary between countries and across age groups.[5] In Pakistan, a total of 10 880 cases and 228 deaths due to COVID-19 infection have been reported to date.[6]

The worldwide COVID-19 pandemic has not only incurred massive challenges to the global supply chains and healthcare systems but also has a detrimental effect on the overall health of individuals.[7] The pandemic has led to lockdowns and has created destructive impact on the societies at large. Most company employees, including daily wage workers, have been prohibited from going to their workplaces or have been asked to work from home, which has caused job-related insecurities and financial crises in the communities.[8] Educational institutions and training centres have also been closed, which resulted in children losing their routine of going to schools, studying and socialising with their peers. Delay in examinations is likewise a huge stressor for students.[8] Alongside this, parents have been struggling with creating a structured milieu for their children.[9] COVID-19 has hindered the normal

routine life of every individual, be it children, teenagers, adults or the elderly. The crisis is engendering burden throughout populations and communities, particularly in developing countries such as Pakistan which face major challenges due to fragile healthcare systems and poor economic structures.[10]

The COVID-19 pandemic has certainly resulted in an increased level of anxiety and fear in communities in terms of disease management and infection spread.[8] Further, the highly contagious nature of COVID-19 has also escalated confusion, fear and panic among community residents. Moreover, social distancing is often an unpleasant experience for community members and for patients as it adds to mental suffering, particularly in the local setting where get-togethers with friends and families are a major source of entertainment.[9] Recent studies also showed that individuals who are following social distancing rules experience loneliness, causing a substantial level of distress in the form of anxiety, stress, anger, misperception and post-traumatic stress symptoms.[8 11] Separation from family members, loss of autonomy, insecurity over disease status, inadequate supplies, inadequate information, financial loss, frustration, stigma and boredom are all major stressors that can create drastic impact on an individual's life.[11] Due to fear and social stigma linked with COVID-19, many individuals in the community hide their disease and do not access healthcare facilities in a timely manner.[12] With the widespread use of social media,[13] rumours, myths and inaccurate information about COVID-19 are also spreading rapidly, not only among adults but are also carried on to children, leading to intensified irritability, fearfulness, insomnia, oppositional behaviours and somatic complaints.[9] The psychological symptoms associated with COVID-19 at the community level are also manifested as anxiety-driven panic buying, resulting in exhaustion of resources from the market.[14] Some level of panic also dwells in the community due to the unavailability of essential protective equipment, particularly masks and sanitisers.[15] Similarly, mental health issues, including depression, anxiety, panic attacks, psychotic symptoms and even suicide, were reported during the early severe acute respiratory syndrome outbreak.[16 17] COVID-19 is likely posing a similar risk throughout the world.[12]

The fear of transmitting the disease or a family member falling ill is a probable mental function of human nature, but at some point the psychological fear of the disease generates more anxiety than the disease itself. Therefore, mental health problems are likely to increase among community residents during an epidemic situation. Considering the relevance of all these factors, we aim to explore the perceptions and attitudes towards COVID-19 among community residents and the impact of these perceptions and attitude on their daily lives and mental well-being.

METHODS AND ANALYSIS
Study design
This study will employ an exploratory qualitative research design using semistructured interviews and a purposive sampling approach. The data collection methods for this formative research will include indepth interviews (IDIs) with community members. The IDIs aim to explore perceptions of community members towards COVID-19 and its impact on their mental well-being.

Study setting and study participants
The study will be conducted in two communities in Karachi City: Karimabad Federal B Area Block 3 Gulberg Town, and Garden East and Garden West. Karimabad is a neighbourhood in the Karachi Central District of Karachi, Pakistan, situated in the south of Gulberg Town bordering Liaquatabad, Gharibabad and Federal B Area. The population of this neighbourhood is predominantly Ismailis. People living here belong mostly to the middle class to the lower middle class. It is also known for its wholesale market of sports goods and stationery. Garden is an upmarket neighbourhood in the Karachi South District of Karachi, Pakistan, subdivided into two neighbourhoods: Garden East and Garden West. It is the residential area around the Karachi Zoological Gardens; hence, it is popularly known as the 'Garden' area. The population of Garden used to be primarily Ismailis and Goan Catholics but has seen an increasing number of Memons, Pashtuns and Baloch. These areas have been selected purposively because the few members of these communities are already known to one of the coinvestigators. The coinvestigator will serve as a gatekeeper for providing entrance to the community for the purpose of this study. Adult community members of different ages and both genders will be interviewed from both sites, as mentioned in table 1. Interview participants will be selected following the eligibility criteria.

IDIs with community members
We will conduct IDIs with community members to explore the perceptions and attitudes of community members towards COVID-19 and its effects on their daily lives and mental well-being. IDI participants will be identified via

Table 1	Study participants for indepth interviews	
Indepth interview participants	**Sample range**
Young adults (18–35 years)	6–8 (4 male and 4 female)
Middle-aged adults (36–55 years)	6–8 (4 male and 4 female)
Older adults (>55 years)	6–8 (4 male and 4 female)

the community WhatsApp group, and will be invited for an interview via a WhatsApp message or email. Consent will be taken over email or WhatsApp before the interview begins, where they will agree that the interview can be audio-recorded and that written notes can be taken. The interviews will be conducted either in Urdu or in English language, and each interview will last around 40–50 min. Study participants will be assured that their information will remain confidential and that no identifying features will be mentioned on the transcript. The major themes will include a general discussion about participants' knowledge and perceptions about the COVID-19 pandemic, perceptions on safety measures, and perceived challenges in the current situation and its impact on their mental well-being. We anticipate that 24–30 interviews will be conducted, but we will cease interviews once data saturation has been achieved. Data saturation is the point when no new themes emerge from the additional interviews. Data collection will occur concurrently with data analysis to determine data saturation point. The audio recordings will be transcribed by a transcriptionist within 24 hours of the interviews.

An interview guide for IDIs is shown in online supplemental annex 1.

Eligibility criteria
The following are the criteria for inclusion and exclusion of study participants:

Inclusion criteria
▶ Residents of Garden (East and West) and Karimabad Federal B Area of Karachi who have not contracted the disease.

Exclusion criteria
▶ Those who refuse to participate in the study.
▶ Those who have experienced COVID-19 and are undergoing treatment.
▶ Those who are suspected for COVID-19 and have been isolated/quarantined.
▶ Family members of COVID-19-positive cases.

Data collection procedure
A semistructured interview guide has been developed for community members. The initial questions on the guide will help to explore participants' perceptions and attitudes towards COVID-19. Additional questions on the guide will assess the impact of these perceptions and attitude on the daily lives and mental health and well-being of community residents. All semistructured interviews will be conducted online via Zoom or WhatsApp. Interviews will be scheduled at the participant's convenient day and time. Interviews are anticipated to begin on 1 December 2020.

Patient and public involvement
No patients were involved.

Data analysis
We will transcribe and translate collected data into English language by listening to the audio recordings in order to conduct a thematic analysis. NVivo V.12 Plus software will be used to import, organise and explore data for analysis. Two independent researchers will read the transcripts at various times to develop familiarity and clarification with the data. We will employ an iterative process which will help us to label data and generate new categories to identify emergent themes. The recorded text will be divided into shortened units and labelled as a 'code' without losing the main essence of the research study. Subsequently, codes will be analysed and merged into comparable categories. Lastly, the same categories will be grouped into subthemes and final themes. To ensure inter-rater reliability, two independent investigators will perform the coding, category creation and thematic analyses. Discrepancies between the two investigators will be resolved through consensus meetings to reduce researcher bias.

Ethics and dissemination
Study participants will be asked to provide informed, written consent prior to participation in the study. The informed consent form can be submitted by the participant via WhatsApp or email. Participants who are unable to write their names will be asked to provide a thumbprint to symbolise their consent to participate. Ethical approval for this study has been obtained from the Aga Khan University Ethical Review Committee (2020-4825-10599). The study results will be disseminated to the scientific community and to the research subjects participating in the study. The findings will help us explore the perceptions and attitudes of different community members towards the COVID-19 pandemic and its impact on their daily lives and mental well-being.

DISCUSSION
The findings of this study will help us to explore the perceptions and attitudes towards the COVID-19 pandemic and its impact on the daily lives and mental well-being of individuals in the community. Besides, an indepth understanding of the needs of the community will be identified, which will help us develop context-specific innovative mental health programmes to support communities in the future. The study will provide insights into how communities are managing their lives under such a difficult situation.

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Annex-1
In-Depth Interview Guide for interviewing community members

Basic Information

S.no	Participant Code (Confidential)	Age	Sex	Occupation	Educational level	Locality/site

General Perceptions and attitudes towards COVID-19

1. How do you feel about your knowledge level regarding COVID-19 pandemic?
2. How did you learn about the coronavirus outbreak?
3. What is the reliable source of information about COVID-19?

    Probes: social media, television, newspapers/magazines, websites, friends/family, health

    care professionals
4. What were your initial reactions towards COVID-19, when you first heard about it?
    a. Probes: curse from God etc.
5. What are your thoughts and feelings about COVID-19 cases?

Perceptions on safety measures for preventing COVID-19

1. What safety measures have you taken for yourself and for your family safety in COVID-19?

    Probes: hand washing, sanitizer, social distancing, covering your cough, avoiding touching
    your eyes, nose, and mouth with unwashed hands, wearing a face mask, avoiding close
    contact with someone who is sick

Supplemental material

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2. Do you think novel coronavirus will inflict serious damage in your community, if adequate safety measures are not taken?

3. Do you think you can protect yourself against the novel coronavirus?

Perception about fears, anxiety stress and coping about COVID-19

1. How you perceive life during the COVID- pandemic?
   a. Probes: affected daily routine

2. What are your fears and anxieties related to COVID-19?

3. What are the mental health consequences of the COVID-19 lockdown and social isolation you and your family?

4. How the current pandemic has caused stress in life's of people and it has also dramatically affected you and your family? (financial glitches, disputes, jobs)

5. How COVID-19 has influenced your temperament, feelings and emotions?

6. What is the effect of repeated media consumption about COVID-19 in traditional and social media on mental health?

7. How do you cope with anxiety and fear related to COVID-19 pandemic?

8. Do you feel the need of having mental health programs or other measures to overcome anxiety, fear and stress in this pandemic situation?

9. Do you have any suggestions on how government could provide support services for coping with stress related to this crisis situations? (Coping strategies)

10. Currently, what sort of help or support is accessible to you and your family to cope with the pandemic situation?

11. What are the best methods for promoting successful adherence to behavioural advice about COVID-19 while enabling mental wellbeing and minimizing distress?

Future Preparedness

1. In your opinion, what are the needs for future preparedness for any outbreak that prepare community (trainings, awareness, equipment, protective gears)