Adapting to COVID-19 in Bangladesh: "*It felt like the sky fell apart and we were in shock*"

Ahmed Jojan Nandonik (ahmedjojan@gmail.com)
SAJIDA Foundation https://orcid.org/0000-0002-9942-6284
Shangjucta Das Pooja
SAJIDA Foundation
Zarina Nahar Kabir
Karolinska Institutet
Shoshannah Williams
SAJIDA Foundation

Research

Keywords: COVID-19, preventative practices, informal care, lockdown, Bangladesh

Posted Date: August 19th, 2021

DOI: https://doi.org/10.21203/rs.3.rs-806117/v1

Abstract

Background

The COVID-19 epidemic has especially impacted the urban population in Bangladesh. Despite the illness impacts not only the patient but also other members in the family, studies on COVID-19 have primarily focused on the patient's perspective. It is important to understand the experience of family members who adopt caregiving roles. This study aimed to explore the challenges, preventative practices, health-seeking behaviour, and navigating the health care system from the perspective of family members of persons who had recovered from COVID-19 during its initial outbreak in Bangladesh.

Methods

Participants of this qualitative study were family members (n = 7) of persons who had recovered from COVID-19 (either suspected or confirmed) and received treatment either at home, in a hospital or isolation centre. Data for the study was collected through in-depth interviews over telephone using a semi-structured interview guide. Thematic analysis was used to analyse the data.

Results

Analysis revealed three key themes: changes in everyday practices and choice of health care, challenges and constraints, and unexpected positive outcomes. All the themes had temporal dimension to them with four distinct phases: early stage of COVID-19, strict lockdown phase, COVID-19 diagnosis and illness period, and post COVID-19 recovery.

Conclusion

The importance of maintaining social contact for psychological wellbeing during critical times was evident in the study. Online communication and social media enabled participants to remain 'socially connected' rather than 'socially distanced', which further supported their mental health during the healing process. Increased attention to hygiene practices both before, during and subsequent to COVID-19 infections within families was reported. The recommendation of physical distancing in case of suspected or confirmed case of COVID-19 was found logistically and socially impractical in a densely populated city.

Background

The rapid spread of the novel human coronavirus COVID-19 (SARS-COV-2) has caused a global public health emergency (WHO, 2020). On 8th March, 2020, Bangladesh declared its first confirmed COVID-19 case, and as of 18th July,2021, the number of deaths has risen to 17894 (Worldometer, 2021a). Bangladesh is a lower-middle income, high density population country, with a population of 164 million (World Bank, 2019). Bangladesh has limited capacity in health infrastructure with the doctor to patient ratio of 6.37 per 10,000 population and, nurse and midwifery personnel to patient ratio of 3.92 nurses per 10,000 population, which

ranks one of the lowest three among all the South Asian countries (World Health Organization, 2019). In addition, the doctor to nurse to technologist ratio is 1:0.4:0.24, whereas WHO sets the standard ratio at 1:3:5, indicating inequitable health workforce distribution (Ahmed et al., 2015).

The government of Bangladesh (GoB) imposed a nationwide lockdown from 26th March, 2020. This was extended 7 times until 30th May, 2020 when restrictions began to be lifted (Khan et al., 2020). During the initial lockdown, all the citizens, except frontline workers (healthcare professionals, police, journalists) were instructed to remain at home with the exception of 'essential activities' (grocery shopping/going to pharmacy and accessing healthcare facilities). In addition, the GoB engaged in public messaging about COVID-19 and preparation of the healthcare system (Mamun, 2020b). A national hotline service staffed by registered doctors was established to answer queries from the general public related to COVID-19. Public awareness campaigns regarding COVID-19 preventative practices were disseminated via television, newspapers, and social media. Testing facilities were expanded from 240 tests per million in April 2020 (Alif, 2020) to an average of 5,137 tests per million in the first week of July of the same year (Shovon, 2020). Till July 2021, Bangladesh had the second lowest number of tests per million in South Asia (Worldometer, 2021b). Initially, the GoB announced that those who were confirmed positive with COVID-19 could receive treatment only in those hospitals dedicated to patients with COVID-19.

Implementing recommendations regarding social distancing, hygiene and quarantine practices is challenging in South Asia due to environmental, behavioural, and economic factors (Kusuma et al., 2021), especially in urban settings. Urban households in Bangladesh are typically multi-generational families sharing limited space. In the context of a pandemic, the congested living situation poses challenges for families in adopting preventative measures such as isolation in case of signs of symptoms. It also increases the risk of secondary transmission within the household (Shah et al., 2020). Whilst some studies have reported a reluctance amongst the general public to engage in preventative practices in Bangladesh at the individual level (Hossain et al., 2021; Ferdous et al., 2020), little is known about the role of families in adopting preventative practices within the context of the COVID-19 pandemic in the country.

In South Asia, family members have a strong sense of familial care and obligation to ensure the wellbeing of all members within the family unit (Hoole, 2002; Ballard, 1982). Family members who become unwell largely rely on informal or family caregivers at home. Whilst the phenomena of familial and informal caregiving is well documented in high-income contexts (Brown & Brown, 2014; Roth et al., 2015), there is limited literature from low and middle-income country contexts, particularly during the COVID-19 pandemic (Mackworth-Young et al., 2020; Jafree et al., 2020). Within the context of Bangladesh, family members typically make health care decisions on behalf of a family member when unwell (Russel, 2004). There is, thus, a need to explore the knowledge, everyday practices, and health-seeking practises of family members who had cared for a person with a suspected or confirmed case of COVID-19 in order to understand their challenges and coping strategies. The aim of this study was to explore the experiences of challenges, preventative practices, health-seeking behaviour, and navigating the health care system from the perspective of family members of persons who had recovered from COVID-19 during its initial outbreak in Bangladesh.

Methods

Participants of this descriptive qualitative study were family members of persons who had recovered from COVID-19 (either suspected or confirmed) and received treatment either at home, in a hospital or isolation centre.

SAJIDA Foundation is a non-profit organisation that engages in a variety of health and development activities. The organisation turned their hospital in Narayanganj (27km from Dhaka) into treatment facilities dedicated to patients of COVID-19 only. In addition, SAJIDA established a telehealth hotline to provide free medical advice to the public. Participants of the current study were purposively selected either from the hotline service callers or those who were admitted to the SAJIDA Narayanganj hospital. Researchers telephoned family members of patients who had recovered from COVID-19 and who utilised either one of the services, and were asked if the person or any other member in their household who is a family member as well could be approached for an interview. Family members experiencing any critical illness and who did not have access to mobile phones were excluded. Ten family members were approached for an interview of whom three declined, resulting in seven study participants. Of the seven participants, five were women and two men. Participants were either a spouse (4), child (2) or a daughter-in-law (1) to the person with suspected and confirmed COVID-19 case.

A semi-structured interview guide was developed and piloted by the research team. Interviews were conducted via telephone to comply with pandemic restrictions and to ensure the safety of participants. Each interview lasted for 40–60 minutes and was audio recorded. Informed consent was obtained and audio-recorded before the commencement of the interview. Participants were informed of the study's objectives, that participation was voluntary and that he/she could refuse to answer any question or could withdraw from the study at any point, even after completion of the interview. Anonymity of the study participants and confidentiality of the data was ensured. Researchers de-identified all the participants by assigning each of them a unique identification number. All the data are stored in a password-protected cloud which can be accessed only by the researchers.

All interviews were transcribed verbatim in Bangla, a couple of which were translated into English, and then thematically analysed (Braun & Clarke, 2012). The co-authors read the transcripts multiple times (all transcripts by AJ and SDP, selected few by ZNK and SW) to identify themes and categories. An initial coding frame was collaboratively developed, and the transcripts coded by all authors. If new codes emerged, the coding frame was then adapted following discussion in the team. Once coding was completed, categories and then broad themes were developed by AJN, SDP and SW, which were consolidated on discussion among all the co-authors. Key quotes presented in the paper were then translated into English and compared back to the Bangla transcripts by AJN, SDP and ZNK. Quotes by specific participants are referred to as "P" and the participant's number.

Results

Analysis revealed three key themes: changes in everyday practices and choice of health care, challenges and constraints, and unexpected positive outcomes. All the themes had a temporal dimension to them, with four distinct phases or key periods emerging throughout the experiences of the family members. The ‘early stage of COVID-19’ is defined in this study as of February - early March 2020, when there was no restriction from the authority regarding public movement. The ‘strict lockdown phase’ lasted from March 26 until the end of May

2020, during which time the GoB imposed a nationwide ‘strict lockdown.’ The ‘COVID-19 diagnosis and illness period’ is defined as the period when one of the family members of the participants started to exhibit symptoms of COVID-19 and lasted till he/she was recovered. The final ‘post COVID-19 recovery’ phase is defined as when the family member with COVID-19 was marked as ‘recovered’ by a physician.

Changes in Everyday Practices and Choice of Health Care

Almost all participants discussed the significant changes in their lifestyle and day to day practices during the COVID-19 period starting from early stage of COVID-19 to post COVID-19 recovery phase.

Early stage of COVID-19

During this period, participants discussed being unsure about the implication of COVID-19 in Bangladesh and there was no restriction in public movement from the authority. Initially, there was little impact of the impending COVID-19 pandemic on the everyday practices of participants due to the role of media in perpetuating the perception that COVID-19 would not ‘come to or spread in’ Bangladesh. Participants eventually became aware of the unfolding situation due to the shift in media coverage including television, newspaper and social media. However, this coverage had a limited impact on everyday practices because participants were unsure about the authenticity of the news, given that the information regarding COVID-19 was new to everyone. Participants discussed misinformation, such as the role of hot climate in ‘killing’ the virus as favouring Bangladesh, which confused people or lulled them into a false sense of security. As P4 highlighted -

… it (virus) won’t survive in temperature in Bangladesh. So, I took it (the situation) very casually.

Concern was raised and participants showed negative emotions once COVID-19 started to spread all over Bangladesh. Some panicked with fear thinking they might not survive if they caught COVID-19. P5 explained recalled -

I had a feeling that COVID was not there, but when it slowly started to affect the whole world…. when it started in Bangladesh, I was convinced that it was really going to be an awful thing.

Most participants reported that the guidance on preventative practices obtained from different sources like TV, print media, social media and internet browsing had been generally helpful, although some stated that it became clearer through the course of the pandemic.

Strict lockdown phase

The Government of Bangladesh imposed a nationwide ‘lockdown' from 26th March, 2020. All the participants reported making changes in their everyday practices in order to adhere to the government-imposed restrictions. Participants reported adapting to the "staying at home" situation and figuring out alternative solutions to address their daily needs. P5 reported -

"We weren't that serious at the beginning of the lockdown. But soon after, when everyone understood how serious it was, everything was shut down. Everyone was obeying the restrictions on movement. Then we got serious about it… let's [participant and her household members] stay at home and let's not go out. “

Activities 'outside' the home were regarded as risky, and participants reported how families did risk calculations regarding which activities were necessary and who would carry it out. The dilemma of whether to stay home or to take some risks by 'going outside' was a topic of much conversation within families. The focus of such conversations was particularly on who would be the person 'going outside'. Typically, a young, healthy male family member took this responsibility. Participants particularly mentioned grocery shopping as a key essential activity. Families also adapted these tasks by either shopping in bulk or online whenever possible. As P2 explained,

"I haven't stepped outside of the house for two months nor the children. Only my husband went out shopping…"

All the participants reported engaging in practices to prevent COVID-19 from entering their homes. However, these varied between participants. P5 explained that initially, the measures seemed “impossible”, but gradually she became used to it. P6 mentioned,

“We (the residents of our building) took a few initiatives for the building, like domestic help and workers from outside …. we stopped their entry to their building. ”

*A*fter coming (from outside), taking a bath and keeping clothes separated, then wash it. Separating and washing grocery items. The items that could not be washed were put out in the sunlight.

P7 noted that some practices, such as wearing a mask constantly, were “annoying”. Wearing masks caused “irritation” in the hot, humid weather and made it challenging to breathe. P7 expressed,

…when I first heard it, I thought, how do you wash your hands for 20 seconds like for so long? It seemed that there was not enough time to wash hands for 20 seconds and to make the solution (disinfectant), spraying every hour at first seemed a little impossible honestly, now everyone is used to it.

"It is a little annoying to wear masks, sometimes it is difficult to breathe, and it is always terrifying. I mean, should I touch it (to adjust) or sanitise my hand first? I'm sweating, sweat is coming into my eyes but still refraining myself from touching the mask."

Other activities that were considered essential included employment (especially frontline workers) as well as attending religious rituals, such as a close relative's funeral, which prompted participants to go out during lockdown.

COVID-19 diagnosis and illness period

This was the period when a member of the household first exhibited symptoms and, during the whole period of illness, that the most abrupt and noticeable changes in everyday practices occurred in households. Participants discussed the concept of isolation, which was described as the family member who was suspected to have contracted COVID-19 staying in a separate room in the household or at the hospital. P1 and P5 talked about arranging a separate room when they realised that one of the members in the household started showing symptoms of COVID-19. Meals and other daily necessary items were placed outside the door. P5 stated,

"…when my husband felt body ache and fever, he immediately said to me that he needed to be isolated in a separate room … I used to leave his meal outside his door, used to wear mask … he said to everyone ‘do not

come near the room, especially father, mother, aunt they should not come.' He added 'only you can come to provide daily meal and other things that I need but do not enter the room. Put things outside. I'll take them myself, no need for you to wait'."

Maintaining social contact with the family member in isolation was considered essential for participants and their families. Participants specified that whilst the family member with COVID-19 (suspected or confirmed) was isolated physically, they still remained socially connected without compromising their safety. Participants talked about adopting different strategies to maintain both the physical and mental wellbeing of the ill member. Online calls were the best solution. P5 used to connect with her husband via online video calls to enable her children to talk with him without putting themselves at a health risk. Also, P1 spoke with passion about this topic:

Yes, it is instructed to keep the distance which I agree with, but every family should chat and spend time with the person, take care of the person, make sure that s/he has taken medicine.

Innovative ways to maintain social contact ensured mental wellbeing of both the person with COVID-19 and his/her family members; these strategies gave them the strength to cope during stressful times.

Participants talked about their preferred place for isolation, that they did not want their patient to get admitted to the hospital rather, they tried to keep the patient isolated at home. They expressed their concern about the unhygienic condition at the public hospitals and also about the inadequacy of the facilities at the hospitals. P7 elaborated -

"We could guess from the very beginning that there were not enough places at hospitals for admission in our country. In our district, there is only one hospital *** medical. I got to know from others that the environment there was not hygienic. We thought this could cause even more spread of the infection, so we preferred treatment at home. After continuing medicine, it seemed that (grandmother) was healing, so we did not think about taking (her) to any hospital."

When in need of a healthcare professional's advice, participants mentioned that they were more comfortable contacting a doctor who is a close relative or a family friend over the phone. Others mentioned calling hotline service to seek professional advice.

Post COVID-19 recovery phase

Even after the family member with COVID-19 was declared as recovered by a physician, most participants mentioned sustained behavioural change in hygiene practices during the post recovery period. Participants believed that practising good hygiene has a long-term impact on health. If people continue to maintain the hygiene practices that are particularly adapted due to the coronavirus outbreak, we can protect ourselves from other viral or bacterial diseases in the future. P1 mentioned,

If these habits are always maintained, then we will not only be protected from COVID-19 but also from viral or bacterial diseases.

P6 expanded -

There has been a change, be it for fear of Corona, the end result has been good. Somethings like cleanliness is being maintained more than before. Earlier, people used to throw garbage anywhere. Now they use specific places, be it a preventive measure or fear of being scolded by someone. Hence, this is a good side in terms of our (residential) building.

Many of the participants agreed that after their loved ones suffered from COVID-19 they were careful of their lifestyle and hygiene practices. P4 said -

"In my opinion, it is better to have those good habits that people have adopted because of COVID-19."

However, P3 stated,

I feel that people have become less conscious (about preventative practices) than before. Like, previously many used to wear masks, but now not many do so. They are going out with masks alright but keeping it in their pockets. We have to make ourselves aware like before, even more. Everyone should follow doctors' instructions. We need to be aware and make others aware.

All the participants agreed that people were not as careful about keeping physical distance and maintaining preventative practices over time. According to P4,

Later on, when the lockdown was relaxed, everyone started going out, everything gradually started getting back to normal. We also became a little careless. We thought we could go out. My husband started going to his office. My parents-in-law were always at home and they did not go out for a single day.

Participants' tendency to go back to the pre-COVID-19 lifestyle indicates that even though people had developed awareness about preventative practices over the period of the pandemic, the sustainability of these practices was not certain.

Challenges and Constraints:

Spread of COVID-19 in Bangladesh exposed participants to social, economic and psychological challenges. Participants indicated that these challenges emerged mostly during the strict lockdown and during the illness phase.

Strict lockdown phase

Families had to face financial difficulties due to restrictions on mobility during the government-imposed lockdown as they were unable to engage in paid employment. Some had to depend on their savings, while some had to take loans to meet the expenses. P1 talked about her parents taking loans and drawing heavily on their savings -

"Gradually, as the days went by, lower-middle-class families like ours were facing a financial crisis. In this way, the lockdown seemed harmful to us."

In addition, the pandemic drove up the prices of essential goods – including food items and hygiene materials, making it difficult for participants to afford these items. P3 highlighted the sudden rise in price -

"… during the time of lockdown, the price of masks rose drastically, and it was tough for a middle-class family to afford. It can be said that it became *'shonar horin'*.

'Shonar horin' literally translated as 'a golden deer' or 'hard to find.' Participants also expressed their boredom and uneasiness of continuously staying at home over a long period of time during the lockdown. P4 spoke of the monotony of staying home all the time -

I felt a little abnormal when everyone was sitting at home as we usually could not stay at home at all. I didn't like it and I wanted to go out for a little.

The financial uncertainty and monotony caused significant pragmatic challenges and mental stress for families.

COVID-19 diagnosis and illness period

P2 shared the immediate reaction of her family when they heard that her husband was COVID positive, stating that it was like "the sky was falling apart" –

At first, when we came to know that he (participant's husband) got affected by coronavirus, I would say that it was like the sky was falling apart and we were in shock. I couldn't believe it and didn't know what to do. My husband started crying, thought that he would not survive. He started calling his relatives in the village and cried.

Maintaining complete physical isolation was challenging, if not impossible, for several families. Due to limited space, they were unable to maintain recommended isolation. P7 discussed that they were not "mentally prepared" to keep distance within the household when the spouse was exhibiting symptoms. P7 explained,

Three of us started to use three different bathrooms. [We] stayed in separate rooms…. [but] we used to eat together, [it] seemed like we weren't always keeping distance.

Most of the participants commented on the challenges of accessing and obtaining a COVID-19 test and the limitations of health care provided in hospitals. Participants were unsure of what to do next due to delay in getting test results for COVID-19. Moreover, standing in long queue was also troublesome. As P5 and P3 shared their experiences:

"He (husband) started staying in a separate room; symptoms were starting to appear one by one. At that time he thought of doing COVID-19 test. It was the time when getting the serial for COVID-19 test was difficult. Two days later, he went to *** hospital and had to stand in queue for a long time. He came back as he couldn't do the test. Later on, he did his test from another hospital on the same day, and one of his friends helped him get the serial for the test." (P5)

"When we did the test for the first time, the report came too late. Honestly, when it comes to our health system, a lot of things are not in place. My grandmother's report came after her death." (P3)

Participants also discussed the challenges of obtaining admission for those suspected to have COVID-19 or tested positive. During early 2020, hospitals in Bangladesh were either 'Covid designated' (receiving patients

who had a confirmed test result) or 'non-Covid' hospitals. 'Non-Covid hospitals' routinely turned away persons exhibiting symptoms of COVID-19 to prevent the spread of the infection at their hospital. P6 faced the challenging situation of 'non-COVID hospitals' refusing admission to her father as he was exhibiting symptoms of COVID-19. On the other hand, 'COVID dedicated' hospitals also denied admission due to the absence of a positive test report. The father's condition had deteriorated significantly by the time he received the test result. P6 stated that -

It took three days for the result to come and by the time his (father) condition gradually deteriorated.

Most participants said that they faced harsh behaviour from their neighbours and the local community when a member of the family had tested positive for COVID-19. Participants spoke of getting eviction notice from the landlord to leave their house. Some felt helpless when their residential building was marked as restricted zone, and no one was allowed to enter or go out. P3 expressed his frustration:

… the society portrayed us as someone contemptible. Everyone had a negative perception about us saying ‘they have corona at home’. We don't have any relatives here in Dhaka. We lived in a rented place, so we did not have anyone who could offer a helping hand. The government imposed lockdown and our house was under lockdown for 24 days, but no one came to enquire about us.

P2 discussed not only facing discriminatory behaviour during the illness period but even after recovery:

"The challenges were mainly social. Our landlord told us to leave and go back to our village. People looked down on us. We faced problems even after our 14-day quarantine period.”

The challenges of stigma, difficulties of physical isolation due to limited space at home, navigation and inefficiency of the health systems faced by the participants was most acute during the illness period of their family member. Financial struggle and monotony during the strict lockdown phase contributed to mental stress of the participants.

Unexpected Positive Outcomes:

Despite the challenges and stressors associated with lockdown and family members being ill, participants talked about some positive outcomes of the pandemic that they didn't expect to encounter. These were experienced during strict lockdown and the illness phase.

Strict lockdown phase:

Participants mentioned finding relief and enjoyment as a result of being able to spend much more quality time with their families. As P1 and P4 stated -

"…I was with my family, felt good (during lockdown) …" (P1)

"…actually, everyone is busy here in Dhaka. Due to this lockdown, family attachment has developed. Amidst everyone's busy times we got to spend time together, this has developed." (P4)

Participants described the pre-COVID-19 period as 'busy time', which didn't give their family the opportunity to spend enough time with each other. Lockdown was an opportunity for families to strengthen their relationship by playing indoor games with family members and spending time with each other.

COVID-19 diagnosis and illness period:

Some participants stated that during the illness period of their family members they received help and mental support from their relatives, colleagues, neighbours and friends, which helped them fight against the dreadful situation. P5 elaborated her experience -

"…when my relatives came to know (about husband being positive for COVID-19) everyone was really supportive. We were blessed by Allah; everyone was continuously taking our updates over phone, including our relatives. No one was negative towards us. Everyone always spoke positively …it was really very important to receive that mental support. They (neighbours and relatives) used to give us whatever we needed."

Others also spoke of realising the importance of support for mental strength which was crucial in a patient's healing process with COVID-19.

Discussion

The study explored the experience of family caregivers to persons who had recovered from COVID-19 and focused on their concerns and challenges regarding preventative practices, the role of information sources, and the experience of navigating the healthcare system. Analyses of the data resulted in three key themes: Changes in everyday practices and health-seeking behaviour, challenges and constraints, and unexpected positive outcomes through the different phases of restrictions during the early phase of the COVID-19 pandemic in Bangladesh.

Participants took time to adjust to the 'new normal'. People faced difficulties both logistically and socially in maintaining social distance in the context of Bangladesh (Shammi et al., 2020). Housing in urban areas is expensive and typically crowded given the countries high population density and rate of urbanisation (UNDP Bangladesh, 2019; World Data Bank, 2018). The social norm of multi-generational living in limited space made it difficult, even impossible, for families to maintain the recommended social distancing and isolation practices when required (Anwar et al. 2020).

The concept of social distance was new to all participants. 'Social distancing', a concept promoted by the World Health Organisation (WHO, 2020), is a misnomer for what is meant to be 'physical distancing'. In fact, results of the current study indicated the importance of maintaining social contact rather than social distancing for the patients' and the family members' mental wellbeing. The mental support communicated through social communications helped in the healing process. Williams et al. (2020) discussed that people in the United Kingdom who maintained social distance and showed adherence to the government's instructions during the pandemic reported concerns about the duration of isolation measures which could lead to psychological suffering. Social support and empathy aids in coping with psychological stress during difficult times as reported in a study by Mak et al. (2009) on survivors of SARS (Severe acute respiratory syndrome). This is reflected in the current study as well where regular interaction between family members and their

relatives via mobile phone or online video chat reduced stress for both the ill persons and the family members caring for them.

The lockdown resulted in many families experiencing job and wage loss which took a significant financial and emotional toll on families. In the United Kingdom, Williams et al. (2020) found that COVID-19 pandemic led to psychological and emotional stress due to loss in income, disruption in daily routines and social interaction. A similar study on older adults in Japan also indicated the mental stress of reducing social life during COVID-19 pandemic among the older population even though they had economic stability in the form of pension (Takashima et al., 2020). Given that Bangladesh is a lower-middle income country, job security, wages and savings are typically low, and social safety nets offered by the government is negligible. Whilst the government and humanitarian organisations as well as the private sector provided food relief during the 'lockdown', the support was focused on the poor who support families with their daily income, e.g. beggars, day-laborers, rickshaw-van pullers, transport workers, restaurant workers, hawkers and tea-stall owners, and those employed in specific prioritised sectors, e.g. export oriented sectors, big industries and the service sectors, small and medium enterprises (Foyez, 2020; Mamun, 2020a). This resulted in very limited assistance to low-income families and middle income families were excluded from such assistance. A study found an additional 36.9 million (22% of the total population) ‘new poor’ during 2020, attributed to the economic impact of lockdowns on lower-middle income families (PPRC & BIGD, 2020). Lack of financial security was a major threat to the participants' subsistence and psychological wellbeing which led them to defy lockdown and find ways to mitigate financial uncertainty.

Participants gradually adapted to the new lifestyle around the pandemic of COVID-19. In order to maintain preventative measures, families adopted alternative ways to meet their daily needs, such as shopping online and even interacting socially online instead of venturing out, thus avoiding exposure. Online shopping for groceries has boomed in the capital city during the period both in terms of demand and supply of services. Social media has become the next best alternative to stay socially connected during the pandemic. Online communication during the restrictions appeared to be the safest and most reliable medium to stay socially connected.

Stigma, discrimination and negative emotions like fear, anxiety and helplessness towards persons suffering from infectious disease during a pandemic have been reported in earlier studies (Choi, 2021; Shultz et al., 2015; Bohle, 2013). The current study participants expressed similar fear of seeing the rising number of deaths during the COVID-19 pandemic. The uncertainty and lack of knowledge about COVID-19 attributed to the fear. Fear and anxiety were particularly pronounced for participants with older persons at home (Takashima et al., 2020). Social anxiety can trigger social stigma leading to discriminatory behaviour towards the ill as was observed when little was known about transmission and treatment of AIDS (Bohle, 2013). Similar discriminatory behaviour towards family members of patients with COVID-19 was observed in the current study who were asked to leave their homes or refused any kind of support.

The government-imposed lockdown and restrictions on mobility, in fact, brought many families closer. The importance of family bonding was particularly felt by spending quality time with each other, which was not possible during the pre-COVID-19 period due to competing obligations, such as long hours at work, much time

wasted in the city traffic, etc. The lockdown created the opportunity for such unexpected positive experiences, as also reported in a study in Pakistan (Jafree et al., 2020).

Participants of the current study reported being more attentive to hygiene practices compared to the pre-COVID-19 period. This was due to continuous media focus on behavioural changes related to COVID-19 and a central topic of discussion among peers. Participants mentioned being more vigilant outdoors than indoors at home regarding washing hands as they see the home as a safe sanctuary. Participants in our study seemed concerned about not bringing coronavirus from outside, hence disinfecting everything brought from outside and treating the virus as 'dirt'. They were not as concerned about the significant threat of contracting COVID-19 inside one's home. Previous studies on the secondary transmission of COVID-19 indicate if a member of the household contracts COVID-19, it could easily spread to other members (Shah et al., 2020) (Nishiura et al., 2020). Moreover, there are reports that surface transmission of COVID-19 is not as significant a threat as it was thought to be (Davey, 2021), which offers greater prospects on the argument of inside and outside COVID-19 contraction narrative. Therefore, it is vital to remind people that even though they are indoors at the workplace or at home hence feeling risk-free, it is still essential to stay vigilant about preventative measures.

Given limited resources, Bangladesh faces great challenges in providing healthcare services to a population of almost 164 million (World Bank, 2019). Hence, inadequacies in health care services during the pandemic were inevitable (Al-Zaman, 2020; Khan et al., 2020). Participants showed lack of trust and reliance in the healthcare system to tackle the spread of COVID-19. Initial lack of efficiency in getting tests done, delay in getting test results (Cousins, 2020) and hospitals turning away patients indicated poor responsiveness of the healthcare system in the country. As a consequence, home-based management of the disease was preferred over seeking treatment at hospitals. Given preference to avail treatment of COVID-19 from the comfort of their home, digitalisation of healthcare service such as provision of efficient hotline service will ensure better access to health care services (Chowdhury et al., 2021). It can also reduce the hassle of navigating hospitals in critical times.

One of the challenges when conducting this study was reaching out to the study participants online. Not everyone was comfortable sharing their experiences over the phone instead of face-to-face meetings. However, researchers ensured that the participants were comfortable enough to engage in an in-depth conversation. The study focused on experiences of only those family members living in the capital city. Inclusion of family members caring for a person with COVID-19 in rural areas would have enriched the study.

Conclusion

Participants adapted health behaviour through improved health and hygiene practices during the pandemic. Reminder about preventative measures through awareness campaign can ensure the sustainability of these improved practices. Importance of maintaining social contact for psychological wellbeing during critical times is evident in the study. Online communication and social media have helped in remaining ‘socially connected’ instead of ‘social distancing’, which helped to muster mental strength significant for the healing process. The recommendation of physical distancing in case of suspected or confirmed case of COVID-19 was found logistically and socially impractical in densely populated communities as in urban Bangladesh.

Declarations

- Ethics approval and consent to participate: Informed consent was obtained from the study participants by informing them of the study objective, the possibility of withdrawing from the study at any point and confidentiality of the data.
- Consent for publication: Yes
- Availability of data and material: The datasets during and/or analysed during the current study available from the corresponding author on reasonable request
- Competing interests: The authors declare that they have no competing interests
- Funding: No external funding was received. The study was supported by SAJIDA Foundation
- Authors' contributions:

All authors (AJN, SDP, ZNK and SW) were involved in conceptualisation of the study, data analysis and manuscript writing. AJN and SDP conducted data collection for the study.

- Acknowledgement: The authors thank all study participants for sharing their valuable experiences.

References

1. Ahmed SM, Alam BB, Anwar I, Begum T, Haque R, Khan JA, Nabanan H, Osman FA. Bangladesh Health System Review. Health Systems in Transition. 2015;5(3):3–47. https://apps.who.int/iris/bitstream/handle/10665/208214/9789290617051_eng.pdf?sequence=1&isAllowed=y.
2. Al-Zaman S. Healthcare crisis in Bangladesh during the COVID-19 pandemic. Am J Trop Med Hyg. 2020;103(4):1357–9. https://doi.org/10.4269/ajtmh.20-0826.
3. Alif A. (2020). *Bangladesh far from reaching mass testing capacity | Dhaka Tribune*. Dhaka Tribune. https://www.dhakatribune.com/health/coronavirus/2020/04/27/bangladesh-s-capacity-is-far-cry-from-mass-testing.
4. Anwar S, Nasrullah M, Hosen MJ. COVID-19 and Bangladesh: Challenges and How to Address Them. Frontiers in Public Health. 2020;8:154. https://doi.org/10.3389/fpubh.2020.00154.
5. Ballard R. (1982). South Asian Families. *In Rapoport, Fogarty and Rapopor*, 18. http://casas.org.uk/papers/pdfpapers/families.pdf.
6. Bohle LF. (2013). Stigmatisation, discrimination and illness. In *Stigmatisation, discrimination and illness* (2013th ed.). Göttingen University Press. https://doi.org/10.17875/gup2013-289.
7. Braun V, Clarke V. (2012). Thematic analysis. APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological. (pp. 57–71). American Psychological Association. https://doi.org/10.1037/13620-004.
8. Brown RM, Brown SL. Informal caregiving: A reappraisal of effects on caregivers. Social Issues Policy Review. 2014;8(1):74–102. https://doi.org/10.1111/sipr.12002.

9. Centers for Disease Control and Prevention. (2021). *Science Brief: SARS-CoV-2 and Surface (Fomite) Transmission for Indoor Community Environments | CDC*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/more/science-and-research/surface-transmission.html.
10. Choi S. "People look at me like I AM the virus": Fear, stigma, and discrimination during the COVID-19 pandemic. Qualitative Social Work. 2021;20(1–2):233–9. https://doi.org/10.1177/1473325020973333.
11. Chowdhury SR, Sunna TC, Ahmed S. Telemedicine is an important aspect of healthcare services amid COVID-19 outbreak: Its barriers in Bangladesh and strategies to overcome. International Journal of Health Planning Management. 2021;36(1):4–12. https://doi.org/10.1002/hpm.3064.
12. Cousins S. (2020). Bangladesh's COVID-19 testing criticised. In *Lancet (London, England)* (Vol. 396, Issue 10251, p. 591). NLM (Medline). https://doi.org/10.1016/S0140-6736(20)31819-5.
13. Davey M. (2021). Clean break: the risk of catching Covid from surfaces overblown, experts say. *The Guardian*. https://www.theguardian.com/australia-news/2021/feb/28/clean-break-the-risk-of-catching-covid-from-surfaces-overblown-experts-say.
14. Ferdous MZ, Islam MS, Sikder MT, Mosaddek ASM, Zegarra-Valdivia JA, Gozal D. Knowledge, attitude, and practice regarding COVID-19 outbreak in Bangladesh: An onlinebased cross-sectional study. PLoS ONE. 2020;15(10 October):1–17. https://doi.org/10.1371/journal.pone.0239254.
15. Foyez A. (2020). Bangladesh PM unveils Tk 72,750cr stimulus packages. *NewAge Bangladesh*. https://www.newagebd.net/article/103845/bangladesh-pm-unveils-tk-72750cr-stimulus-packages.
16. Hoole C. Redeeming the South Asian Family: Mission as extending the household of God. Transformation: An International Journal of Holistic Mission Studies. 2002;19(1):37–41. https://doi.org/10.1177/026537880201900107.
17. Hossain MB, Alam MZ, Islam MS, Sultan S, Faysal MM, Rima S, Hossain MA, Mahmood MM, Kashfi SS, Mamun A, Al, Monia HT, Shoma SS. Population-Level Preparedness About Preventive Practices Against Coronavirus Disease 2019: A Cross-Sectional Study Among Adults in Bangladesh. Frontiers in Public Health. 2021;8:582701. https://doi.org/10.3389/fpubh.2020.582701.
18. Khan MHR, Howlader T, Islam M. (2020). Battling the COVID-19 Pandemic: Is Bangladesh Prepared? *MedRxiv*, 2020.04.29.20084236. https://doi.org/10.1101/2020.04.29.20084236.
19. Kusuma D, Pradeepa R, Khawaja KI, Hasan M, Siddiqui S, Mahmood S, Ali Shah SM, De Silva CK, de Silva L, Gamage M, Loomba M, Rajakaruna VP, Hanif AA, Kamalesh RB, Kumarendran B, Loh M, Misra A, Tassawar A, Tyagi A, … Chambers JC. Low uptake of COVID-19 prevention behaviours and high socioeconomic impact of lockdown measures in South Asia: Evidence from a large-scale multi-country surveillance programme. SSM - Population Health. 2021;13:100751. https://doi.org/10.1016/j.ssmph.2021.100751.
20. Mackworth-Young CCRS, Chingono R, Mavodza C, McHugh G, Tembo M, Dziva Chikwari C, Weiss HHA, Rusakaniko S, Ruzario S, Bernays S, Ferrand RA, Chikwari CD, Weiss HHA, Rusakaniko S, Ruzario S, Bernays S, Ferrand RA. ' Here, we cannot practice what is preached ': early qualitative learning from community perspectives on Zimbabwe's response to COVID-19. Bull World Health Organ. 2020;99(April):1–19. https://doi.org/10.2471/BLT.20.260224.
21. Mak WWS, Law RW, Woo J, Cheung FM, Lee D. Social support and psychological adjustment to SARS: The mediating role of self-care self-efficacy. Psychology Health. 2009;24(2):161–74.

https://doi.org/10.1080/08870440701447649.

22. Mamun S. (2020a). Covid-19 shutdown: Govt mulls food assistance for low income people | Dhaka Tribune. *Dhaka Tribune*, 1. https://www.dhakatribune.com/bangladesh/government-affairs/2020/03/30/low-income-people-to-get-food-support.
23. Mamun S. (2020b). Tackling coronavirus: Government taking preventive measures. *Dhaka Tribune*. https://www.dhakatribune.com/bangladesh/2020/03/10/tackling-coronavirus-government-taking-preventive-measures.
24. Nishiura H, Oshitani H, Kobayashi T, Saito T, Sunagawa T, Matsui T, Wakita T, Suzuki M. (2020). Closed environments facilitate secondary transmission of coronavirus disease 2019 (COVID-19). *MedRxiv*, 2020.02.28.20029272
. https://doi.org/10.1101/2020.02.28.20029272.
25. *Pneumonia of unknown cause*. (2020). World Health Organization (WHO); World Health Organization. http://www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/.
26. PPRC, & BIGD. (2020). *PPRC-BIGD Rapid Response Survey: Livelihoods, Coping and Support During Covid-19 Crisis*. https://bigd.bracu.ac.bd/publications/livelihoods-coping-and-support-during-covid-19-crisis-report/.
27. Rizvi Jafree S, ul Momina A, Naqi SA. Significant other family members and their experiences of COVID-19 in Pakistan: A qualitative study with implications for social policy. Stigma Health. 2020;5(4):380–9. https://doi.org/10.1037/sah0000269.
28. Roth DL, Fredman L, Haley WE. Informal Caregiving and Its Impact on Health: A Reappraisal From Population-Based Studies. Gerontologist. 2015;55(2):309–19. https://doi.org/10.1093/geront/gnu177.
29. Russel S. The economic burden of illness for households in developing countries: A review of studies focusing on malaria, tuberculosis, and human immunodeficiency virus/acquired immunodeficiency syndrome. Am J Trop Med Hyg. 2004;71(2 SUPPL.):147–55. https://doi.org/10.4269/ajtmh.2004.71.147.
30. Shah K, Saxena D, Mavalankar D. Secondary attack rate of COVID-19 in household contacts: a systematic review. QJM: An International Journal of Medicine. 2020;113(12):841–50. https://doi.org/10.1093/qjmed/hcaa232.
31. Shammi M, Bodrud-Doza M, Islam T, A. R. M., & Rahman MM. COVID-19 pandemic, socioeconomic crisis and human stress in resource-limited settings: A case from Bangladesh. Heliyon. 2020;6(5):e04063. https://doi.org/10.1016/j.heliyon.2020.e04063.
32. Shovon FR. (2020). Covid-19 deaths top 2,000: How Bangladesh fares against other countries | Dhaka Tribune. *Dhaka Tribune*. https://www.dhakatribune.com/health/coronavirus/2020/07/05/covid-19-deaths-top-2-000-how-bangladesh-fares-against-other-countries.
33. Shultz JM, Baingana F, Neria Y. (2015). The 2014 Ebola outbreak and mental health: Current status and recommended response. In JAMA - Journal of the American Medical Association (Vol. 313, Issue 6, pp. 567–8). American Medical Association. https://doi.org/10.1001/jama.2014.17934.
34. Takashima R, Onishi R, Saeki K, Hirano M. Perception of COVID-19 Restrictions on Daily Life among Japanese Older Adults: A Qualitative Focus Group Study. Healthcare. 2020;8(4):450. https://doi.org/10.3390/healthcare8040450.

35. UNDP Bangladesh. (2019). *Housing solutions for the urban poor in Bangladesh*. UNDP. https://www.bd.undp.org/content/bangladesh/en/home/presscenter/pressreleases/2019/04/07/housing-solutions-for-the-urban-poor-in-bangladesh.html.
36. WHO. (2020). Responding to community spread of COVID-19. *Interim Guidance 7 March*, *March*, 1–6. https://www.who.int/publications/i/item/responding-to-community-spread-of-covid-19.
37. Williams SN, Armitage CJ, Tampe T, Dienes K. Public perceptions and experiences of social distancing and social isolation during the COVID-19 pandemic: A UK-based focus group study. BMJ Open. 2020;10(7):1–8. https://doi.org/10.1136/bmjopen-2020-039334.
38. World Bank. Population, total - Bangladesh | Data. The World Bank; 2019. https://data.worldbank.org/indicator/SP.POP.TOTL?locations=BD.
39. World Data Bank. Population density (people per sq. km of land area). World Development Indecators; 2018. https://data.worldbank.org/indicator/EN.POP.DNST?locations=BD.
40. World Health Organization. (2019). *WHO Global Health Workforce Statistics Database*. https://www.who.int/data/gho/data/themes/topics/health-workforce.
41. Worldometer. (2021a). *Bangladesh COVID: 1,103,989 Cases and 17,894 Deaths - Worldometer*. https://www.worldometers.info/coronavirus/country/bangladesh/.
42. Worldometer. (2021b). COVID live update: 160,416,106 cases and 3,333,785 deaths from the Coronavirus. In *Worldometer*. https://www.worldometers.info/coronavirus/#countries.