

Exploring mental health needs, coping and suitable service modalities for people affected by coronavirus disease 19

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Article info

Received : 15 Aug 2023
Accepted : 11 Nov 2023
Number of tabs : 01
Number of figs : 02
Number of refs : 50

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Summary

There was a general gap on coronavirus disease (COVID) 19 related mental health concerns and coping data from the peak period of pandemic. With the aim of ensuring evidence-informed service delivery, this study explored mental health needs, coping mechanisms and preferred service modalities of the front-line healthcare workers (FLHWs), COVID 19 patients and family members of both patients and FLHWs. Sixty-three participants were included in this cross-sectional study which was conducted at the period from July 2020 to December 2020. The FLHWs and patients were recruited using purposive sampling from a COVID 19 dedicated hospital in Narayanganj while the family members were selected through the contact detailed shared by the FLHWs and the patients. Three mental health professionals conducted the interviews over the phone using a semi-structured qualitative interview guide. The findings of the study were presented in three broad categories, namely a) concerns around psychosocial health and wellbeing, b) coping with COVID 19 and its impacts and c) preferred modalities for psychosocial service delivery. The results showed that, low mood was most common (68.3%) followed by irritability and anger (65.1%) and concerns about the future (61.9%) among the participants. A very high number of participants (74%) reported an increase in religious activity and faith. As strategies to cope with the pandemic crisis, the participants most commonly reported engagement in entertainment (27%), taking care of relationships (21%) and engagement in spirituality (17%). The most preferred modality of service was self-help materials (49%; online videos, booklets, posters/leaflets) followed by webinars (12%) and online counselling (10%). However, to enable evidence informed service delivery during any severe pandemic such as COVID 19, the mental health needs of FLHWS and their family members must be addressed.

Bang J Psychiatry 2023;37(2):38-45

Introduction

The outbreak of the pandemic caused by the coronavirus disease (COVID) 19 disease has sparked an unprecedented crisis with higher prevalence of infection and death rates across the world. In order to keep the death rates at bay and curb further transmission of the disease, governments-imposed lockdowns including closing down educational institutions forcing people to stay at home. These restriction measures put a halt to the normal rhythm of lives irrespective of age, gender, profession and geographical location critically triggering myriad physical and mental health issues. The impact of the disease on mental health has been reported for a wide range of population groups^{1,2} and especially for those who have been affected by the disease^{3,4}.

Data suggested a disproportionate impact of the disease on the health care professionals working at the forefront.⁵⁻⁸ The sudden outbreak of the disease increased the workload and put the frontliners at risk of numerous mental health problems including stress, anxiety and burnout.⁹ Evidence also suggested that they also experienced depression, illness anxiety, posttraumatic stress disorder.¹⁰ Data suggested that medical professionals were at increased risk of mental health problems.^{4,11-3} Front liners working in close contact with COVID-19 patients were found to be 1.4 times more likely to experience fear while depression and anxiety were experienced approximately twice more likely compared to their non-clinical staff.¹¹ The disproportionate burden of the pandemic on frontline health

workers (FLHWs) had been attributed to the prolonged social distancing from family members and colleagues, increased job or occupational stress, limited provision of safety equipment, perceived stigma, isolation or quarantine, perceived lack of organizational support, indifference attitude of colleagues, role conflicts and lack of accurate information.^{8,14} These negative experiences could also take a heavy toll on the mental health of family members of FLHWs and vice versa.

While the investigation of the impacts of the pandemic on mental health was important, exploration of coping strategies adopted by FLHWs and family members was also equally important. Evidence suggested that people resorted to various activities to cope with the crises caused by the pandemic. These included relaxation, positive thinking, seeking social support and having faith and hope.^{15,16} Coping strategies for FLHWs included seeking community and organizational support, help from family and assistance available in the community, securing accommodation and food, regular training on the prevention of infection, ensuring treatment and vaccines.⁸

Engaging in various coping strategies could be helpful in preventing COVID-19 induced mental health repercussions, however, it was also imperative to seek professional support. Evidence suggested that face-to-face psychological support was found to be the preferred option.¹⁷ However, people also acknowledged the benefits of remote care including tele mental health care.^{17,18} Several investigations on mental health impact on FLHWs had been conducted in Bangladesh. A study reported that FLHWs showed higher prevalence of depression, anxiety and stress in Bangladesh¹⁹ where other studies reported emotional suffering, intense physical pressure, disrupted social relationship and inability to discharge familial obligations along with intense depression and anxiety.²⁰⁻² Studies related to coping strategies used by FLHWs reported an increase of religiosity, seeking support from key personnel and resorting to entertainment (e.g., watching TV/YouTube).^{23,24} However, most of the published studies represented findings from the new normal period of the pandemic where people became desensitized and had developed their own set of coping strategies. There was a general gap on COVID 19 related mental health concerns and coping data from the peak period of pandemic, which would be addressed by the present article.

The overarching aim of the present study was to find out mental health needs, coping mechanisms and preferred service modalities of the front-line healthcare workers (FLHWs), COVID 19 patients and family members of both patients and FLHWs. To achieve the objective, an exploration of mental health needs, coping resources and perceptions about suitable modalities of mental health services among the COVID affect individuals were carried out during a peak period of pandemic in Bangladesh.

Materials and methods

This was a cross-sectional study conducted at the period from July 2020 to December 2020. Sixty-three participants from three categories, namely frontline service providers (22), COVID 19 infected participants (25) and family members (16) were selected from a COVID 19 dedicated hospital in Narayanganj, using maximum variation purposive sampling due to the exploratory nature of this study. Telephone interviews were conducted by three trained psychology graduates using a semi-structured questionnaire that included open-ended questions and probes along with Likert-type items to explore the impact, coping and needs. There was a high response rate, with only approximately 10% of the approached individuals declining to take part in this research. The ethical issues were maintained properly in the study. Descriptive analysis of the data was carried out using both qualitative and quantitative approaches. For qualitative data analysis, this study used NVivo (Version 11 pro).

Results

The findings were presented in three broad sections in line with the specific objective of the research, which were a) concerns around psychosocial health and wellbeing, b) coping with COVID 19 and its impacts and c) preferred modalities for psychosocial service delivery. The unprecedented circumstances of COVID 19 infection and the resulting pandemic experience caused concern in almost all psychosocial domains. However, despite reporting a range of disturbances, the average subjective evaluation of the wellbeing of the participants was relatively high at 7.2 on a scale of 0-10 (10 as the highest wellbeing). Their reported concerns were presented in six domains presented in the following. The most commonly reported psychological symptoms associated with COVID 19 included low mood (68.2%), irritability and anger (65.1%), and concern about the future (61.9%) (Table 1).

Fear of infection and death was a common concern (57.1%) connected generally with other symptoms as well. Some of the participants (14%) reported increased interpersonal communication in the family due to the opportunity of being able to stay home during the lockdown, the effect was generally negative for most others. Not being able to reunite with family was a major concern for most of the participants (24%) as they were living away from their families. Decreased communication with friends and family was reported by 14% while 17% reported conflicts and misunderstandings in the relationship. Many participants (35%) reported reduced social cohesion, which they experienced through social discriminations such as deliberate avoidance, negative attitude and increased distance. Lack of socialization (26%), isolation from society and lack of public awareness (10%) were some of the prominent features in social attitudes and behaviors. Concerns about the financial crisis were reported by the majority of the participants (34%). Discontinuation of income and increased expenses were

Table 1: Percentage of psychological and physical symptoms resulting from COVID-19 based on specific population group (n= 63)

Psychological and physical symptoms	FLHW	COVID-19	Family member	Total
	(n = 22) Frequency (%)*	patient (n= 25) Frequency (%)*	(n = 16) Frequency (%)*	(n = 63) Frequency (%)*
Fear of infection and death	17 (70.8)	12 (48)	7 (43.8)	36 (57.1)
Panic	6 (25)	9 (36)	8 (50)	23 (36.5)
Rumination	1 (4.2)	15 (60)	9 (56.3)	25 (39.7)
Concern about future	12 (50)	19 (76)	8 (50)	39 (61.9)
Feeling anxious	10 (41.7)	12 (48)	9 (56.3)	31 (49.2)
Low mood	13 (54.2)	18 (72)	12 (75)	43 (68.3)
Loss of interest	1 (4.2)	9 (36)	7 (43.8)	17 (27.0)
Guilt**	5 (20.8)	-	-	5 (7.9)
Hyper vigilance	5 (20.8)	5 (20)	10 (62.5)	20 (31.7)
Irritability and anger	18 (75)	17 (68)	6 (37.5)	41 (65.1)
Indecisiveness	6 (25)	8 (32)	3 (18.8)	17 (27.0)
Lack of self-confidence	4 (16.7)	5 (20)	3 (18.8)	12 (19.0)
Crying spells	7 (29.2)	11 (44)	7 (43.8)	25 (39.7)
Lack of concentration	5 (20.8)	13 (52)	4 (25)	22 (34.9)
Frustration	9 (37.5)	14 (56)	8 (50)	31 (49.2)
Helplessness	1 (4.2)	11 (44)	5 (31.3)	17 (27.0)
Suicidal thoughts	-	1 (4)	1 (6.3)	2 (3.2)
Lack of self-control	5 (20.8)	6 (24)	3 (18.8)	14 (22.2)
Safety behavior***	1 (4.2)	6 (24)	3 (18.8)	10 (15.9)
Startled reaction	5 (20.8)	-	1 (6.3)	6 (9.5)
Breathlessness and choking	3 (12.5)	10 (40)	1 (6.3)	14 (22.2)
Loss of appetite	8 (33.3)	14 (56)	1 (6.3)	23 (36.5)
General weakness	3 (12.5)	18 (72)	3 (18.8)	24 (38.1)
Headache	8 (33.3)	14 (56)	6 (37.5)	28 (44.4)
Fatigue and tiredness	16 (66.7)	14 (56)	6 (37.5)	36 (57.1)
Disruption in sleep patterns	14 (21.5)	12 (18.5)	3 (4.6)	29 (46.0)

*Number in the parenthesis indicates the percentage of respondents within the group.

**Guilt about infecting family, not being able to save family, not staying with family, etc.

***Safety behavior (excessive washing, checking, etc.).

‘-’, indicates no data available

reported to be the main reason behind such concerns. Although 32% of the participants (mostly the FLHWs) reported an increase in salary, they also expressed anxiety over the possibility of losing their job. Distress associated with increased workload (35%) and a change in the usual environment (40%) associated with wearing personal protective equipment (PPE), lack of safety and lack of support from management were reported by the FLHWs. An increase in problematic behavior in children (37%) was reported by the participants. Closure of academic institutions concerned a large portion (59%) of the participants for themselves or for their family members. Postponement of public examination, a gap in the study and interruption of learning were mostly reported. The FLHWs expressed their worry about stagnation in career advancement due to disconnection in higher education (14%). Concerns around quality of care includes thought of not having enough treatment options (22%) for COVID

19 infected individuals as well as individuals with pre-existing health issues. Reconnecting with religious faith and increasing engagement in rituals were mentioned by 74% of participants. Some of the participants (26%) also reported distress for not being able to visit religious centers (e.g., mosques) or not being able to engage in religious activities due to pandemic restrictions. Coping with COVID-19 and its impacts involved engaging with entertainment (e.g., listening to music, reading books, watching movies and videos, etc.) was the most widely (27%) used coping strategy reported by the participants (Figure 1). Taking care of relationships was another major (21%) coping strategy for them. Spiritual engagement (e.g., daily prayers, faith in the almighty) was also a common (17%) coping strategy, especially among the family members of COVID-19 infected individuals.

Family (40%) was found to be the major coping resource for the infected individuals. Participants from all categories reported

personal efforts (24%) and social support (15%) to be highly effective during this crisis. The participants were found to be slowly accepting the realities of new-normal and a major portion of them (64%) reported adherence to health and safety measures (i.e., using the mask, social distancing, washing hands) as a coping strategy. While reporting about their needs for coping, most of the participants expressed that they needed professional support for ensuring their psychosocial wellbeing (27%), they needed to get back their physical health and safety (21%), as well as job and financial security (20%). When asked from a checklist about the kind of support they need regarding the concerns they raised during the interview, the participants demonstrated a high interest in self-help materials such as videos on mental health (19%), booklet (17%) and posters/leaflets (13%) (Figure 2). They also indicated interest for the more interactive approach of support, including group sessions (13%), webinars (12%) and online counseling (10%).

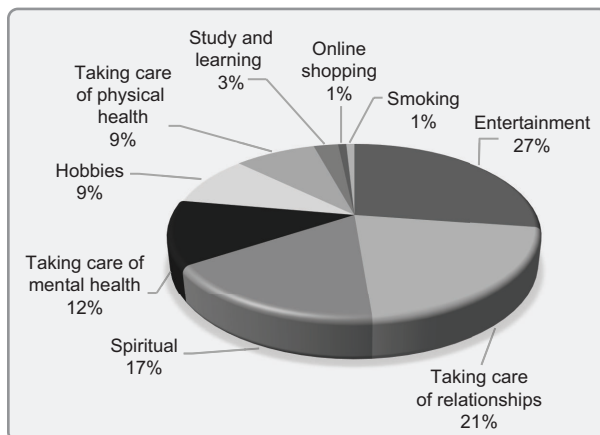


Figure 1: Coping resources and activities of the participants during COVID-19 pandemic (n=63)

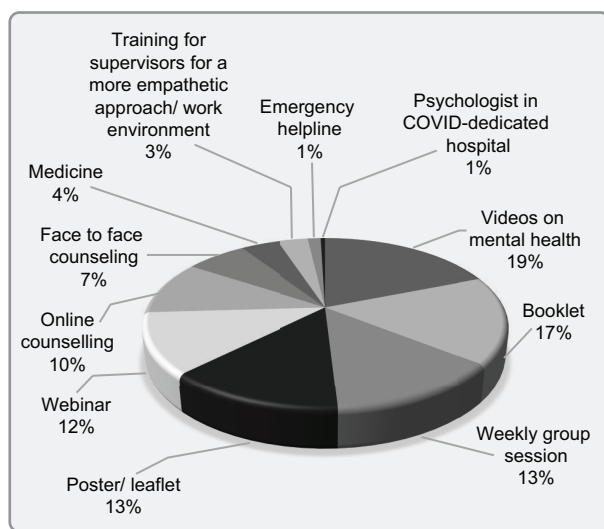


Figure 2: Preferred modalities of psychosocial service during COVID-19 pandemic (n= 63)

Discussion

Amid the limited evidence of mental health needs, coping strategies and suitability of service modalities during the immediate outbreak of the COVID 19 pandemic, the present study aimed to reduce the gap through an exploratory study. Interviews were conducted with a hybrid questionnaire containing both structured and open-ended items. Sixty-three individuals were selected through a purposive sampling of patients, FLHWs and family members of patients and FLHWs. The key findings were presented into three broad categories, namely concerns around psychosocial health and wellbeing, coping with COVID 19 and its impacts and preferred modalities for psychosocial service. The pandemic had triggered a number of concerns revolving around physiological and psychosocial well-being among those infected with the virus. Physiological concerns include disruption in usual sleep patterns, headache, tiredness and weakness. General people infected with the disease reported experiencing headache and sleep difficulties.²⁵ These complaints were also reported by health care personnel being infected while working at the forefront. Evidence suggested that dyspnea, cough, headache, memory loss and brain fog were the noteworthy physiological complaints among health care providers.²⁶ Furthermore, fever, sore throat, diarrhea and nasal obstruction were also evident among health care providers.²⁷ These symptoms were universally experienced by infected people irrespective of profession. The results of the present study suggested a variety of affective complaints such as intense fear of infection and death (70.8%), anger (75%) and low mood (54.2%) similar to findings from other studies.^{25,28-33} The results also reported other psychological symptoms such as those related to panic (breathlessness and choking), anxiety (e.g., hypervigilant, lack of self-control, startled reaction, rumination) and depression (e.g., concern about the future, loss of interest, sense of guilt, lack of confidence, crying spells, frustration, helplessness, suicidal thoughts, loss of appetite, sleep difficulties and fatigue). These symptoms were experienced by FLHWs, patients infected with COVID-19 and family members. However, the severity of the symptoms experienced varied for each group. For example, the fear of infection and death was found to be more pronounced among FLHWs (70.8%) than patients with COVID 19 and family members. Guilt (20%) and irritability and anger (75%) were also found to be higher among FLHWs compared to COVID 19 patients and family members.

The results of the present study also showed that decreased communication with friends and family was reported by 14% while 17% reported conflicts and misunderstanding in interpersonal relationships. The overwhelming impact of the pandemic on relationships was also found to be prominent on reduction of social cohesion (35%). Evidence suggested that the social distancing measures and the security concerns

affected interpersonal relationship with adverse impact on empathy towards people.^{34,35} Concerns about the future were found to be more among the COVID-19 patients (76%). Patients infected with the disease may have perceived it devastating in jeopardizing work, career and education- all important for securing a better future. This could lead to the experience of helplessness as reported by the present results (44%). Compared to the FLHWs and family members, COVID 19 patients reported somewhat more breathlessness and choking, loss of appetite and general weakness. Family members of FLHWs and COVID-19 patients reported a few symptoms in greater degrees such as panic, anxiety, low mood, loss of interest and hyper vigilance. Prolonged stay away from the family, reduced physical contact, concern about infection and death, and uncertainty about future may have collectively increased these symptoms among family members.

The present study suggested that mental health issues from financial security concerns and increased expenses were associated with discontinuation of income (34%). Evidence reported that discontinued income and loss of income source during the pandemic were associated with mental health problems such as anxiety and depression.³⁶ Moreover, the anticipation of impending financial crisis was also identified as a potential risk factor for anxiety and depression.³⁶ Increased financial uncertainty, loss of job or unemployment, income uncertainty, and different degrees of employment led to perceived insecurity (e.g., food and safety), worry, fear and stress.^{37,38} This study also found that 59% of the participants were concerned over the closure of academic institutions. The sudden closure of academic institutions had been reported to instigated adverse mental health symptoms (e.g., distress, anxiety, depression and sleep difficulties) among children and adolescents.³⁹⁻⁴¹ The closure was also found to have disrupted education, increased usage of digital devices and reduced physical activity.^{40,41} The sudden change in behavior and emotion might result in parents and caregivers experience in mental health issues. The pandemic also affected access to care, especially mental health care. The results suggested that 22% of participants reported fewer treatment options during the pandemic. Restricted access to care due to limited movement, disruption in providing care following staff shortage and limited affordability of treatment might have resulted in decreased access to treatment. These physical and psychological complaints arising from these could synergistically compromise overall well-being among infected and non-infected individuals.⁴²

It was imperative that people engaged in various coping strategies during emergencies. These strategies largely depended on the professional orientation, access to coping resources and

awareness about the importance of coping. The results of the current study reported a number of coping strategies that the FLHWs, COVID 19 patients and family members had used to cope with the unparalleled crisis. Overall, a majority of the respondents (27%) reported engaging in entertainment activities (e.g., listening to music, reading books, watching movies and videos, etc.). Evidence suggested that television usage and engaging in various communication technologies had increased during the pandemic.⁴³ Evidence also suggested engaging in recreational activities (e.g., listening to music) had improved people's well-being.⁴⁴ These coping strategies helped people gain improved well-being amid the restricted movement.

The results also suggested that maintaining interpersonal relationships (21%) through regular contact over phone, especially with family members had increased during this period. This had been reflected in the better coping of respondents (see section B of the result section). Literature suggested that family relationships improved due to engagement in appreciation, expression of gratitude and tolerance.⁴⁵ While the pandemic posed numerous challenges within the family while having some members out of physical contact, it had also provided an increase of opportunity to exchange affection and care as many family members were staying together due to pandemic restriction. It was needless to mention that family support and better understanding among family members could reduce the burden of any crisis, as showed by a recent study.⁴⁶

The results showed that respondents also engaged in spiritual activities (17%) as part of their coping strategies during the pandemic. The spiritual activities included offering daily prayers and keeping faith in God. These activities were more pronounced among family members of COVID 19 infected patients. Research showed that faith could transcend the sense of anxiety among people in fear of COVID 19 and bring vibrancy and compassion leading to improved well-being.⁴⁷

A few (9%) reported pursuing hobbies and taking care of physical health. Engaging in physical activities and pursuing hobbies (e.g., gardening and painting) were found to have improved overall well-being.⁴⁴ Engaging in such activities had the potential to take the mind off from the ongoing psychological stress caused by the pandemic. The results of the current study showed that a significant proportion of respondents (12%) engaged in self-care (e.g., spending time with family, engaging in hobbies). Research showed that taking an active role in self-care improved psychological well-being.⁴⁸ Other coping strategies such as engaging in online shopping, smoking, studying and learning were also reported in the present research. This implied that people resorted to a variety of coping strategies ranging from adaptive to maladaptive coping strategies. Future research

should explore why some people resort to adaptive coping while others tend to adopt maladaptive coping during emergencies.

The present research also explored the modalities preferred when it came to seek psychosocial services. The results revealed a variety of preferred modalities such as group session, booklet, watching videos on mental health issues, attending webinar sessions and poster/leaflets. In addition, other means of preference included taking medication, seeking support from emergency helplines, regular training for improving skills or work environment, face-to-face and online counseling. Various videos on mental health issues (e.g., anger and stress management), guiding materials in the form booklet and poster/leaflets could act as self-help resources. People could have access to these materials across any geographical location and cope with mental health issues. Attending webinars discussing mental health issues and ways to cope with those could also act as self-help resources. Webinars provided an opportunity for direct contact with people concerned and asking customized solutions. Online counseling sessions (10%) were reported more than face-to-face counseling sessions (7%). While face-to-face counseling sessions were always preferred, people tended to rely on online sessions to curb the transmission of the infection. Seeking medication (4%) was also reported by respondents. People with pre-existing illnesses requiring regular medical checkups might benefit from online modalities to have opinions on medication. A systematic review suggested that for health care providers and COVID 19 patients, the provision of tele health was found to be more feasible in terms of reducing the risk of COVID 19 transmission and to improve health coverage.⁴⁹ Other studies in Saudi Arabia suggested that most-reported modality of health services was the help-line numbers.⁵⁰ Variation in the preferred modalities might depend on access to the internet and acceptance towards the modalities.

Conclusion

The present study was a collaborative attempt of SAJIDA Foundation and British Asian Trust to explore the mental health needs, coping mechanisms, and preferred service modalities of the FLHWs, COVID 19 infected patients and family members of both of these groups. In this study, low mood was most common followed by irritability and anger. As strategies to cope with the pandemic crisis, the participants most commonly reported engagement in entertainment, taking care of relationships, and engagement in spirituality. The most preferred modality of service was self-help materials, followed by webinars and online counselling. However, to enable evidence-informed service delivery during any severe pandemic, such as COVID 19, the mental health needs of FLHWS and their family members must be addressed and the coping strategies which was followed during COVID-19 warrant more investigation.

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