Original Article

Prevalence of Generalized Anxiety Disorder among Medical Support Staff during COVID-19 Pandemic

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Abstract

Introduction: The pandemic COVID-19 not only caused grievous public health problems but also caused enormous psychological distress, especially among the medical support staff. These mental health issues leading to Generalized Anxiety Disorder (GAD). Ther is a lack of substantial data on psychological effects due to COVID pandemic on Bangladeshi medical health workers. This study aims to provide prevalence of GAD on Bangladeshi health workers

Objective: The study aimed to investigate the prevalence of generalized anxiety disorder among medical support staff (Doctors & Health Care Workers) in some hospitals during the COVID-19 pandemic swept over Bangladesh recruited from Dhaka division. Face-to-face interviews were conducted to obtain Socio-demographic data using a semi structured to learn status of the COVID-19 pandemic in those hospitals and anxiety symptoms among those Docs/HCWS.

Result: In this study of total 289 study populations majority (65.7%) were male and (34.3%) were female. With a mean age of 31.09±8.91 years. Majority of them (64.4%) used to work indoor, while 11.1% worked outdoors, 8.0% in emergency department and 16.6% in critical care unit (OT, ICU and HDU). Out of all those Docs/HCWS 51.2% use to be in direct contact with COVID-19 suspected patients feverish or infected, 48.8% did not. More than half of those Docs/HCWS participated less self-protection against COVID-19 of the (55.4%) Docs/HCWS had a little trust in infection control measures practised by the health care authority and just over half (52.2%) were worried on being infected with COVID-19. Among them, 73.4% lived with their family.

Nearly 2/3rd of the participants or persons they were living with (64.7%), didn't get infected by COVID-19. Among those who looked for COVID-19-related information, 59.6% spent at least 30 minutes daily. The majority of the respondents (58.0%) had minimal anxiety and others had variable levels of generalized anxiety disorder.

Conclusion: Measures should be taken to overcome the obstacles to improve the betterment of the working status and service.

Keywords: COVID-19, Anxiety, Healthcare, Mental health, Support staff, Pandemic

Introduction:

The COVID-19 pandemic placed an unprecedented burden on the healthcare system along with it's medical support staff (Doctor's, Nurse, Lab expert, ICU worker etc.) are facing increased demands for patient care, infection control, and emotional support. Stress and anxiety associated illness among these Health Care Workers facing such challenges can have impaired mental health that can lead to conditions like generalized anxiety disorder (GAD). GAD is a common mental disorder characterized by persistent worries about everyday events if deems excessive.[1] While previous studies have examined the prevalence of GAD among healthcare professionals. However, data on the prevalence of GAD during COVID-19 pandemic lacks, particularly in Bangladesh, Asia and Africa.

Purpose of this study was to evaluate the prevalence of GAD among COVID medical support workers during the COVID-19 pandemic to identify the potential risk factors of those coping strategies.

The COVID-19 pandemic has imposed a lot of stress and anxiety induced psychological disorder particularly in our country among the HCWs. HCWs who played an inevitable role in offering health care emergencies and routine service delivery in such high infectious environment (COVID-19). During that on-going pandemic the HCWs had to deploy a high level of intellect. Generalized anxiety sickness (GAD) is a common mental health problem that impacts humans of all ages and backgrounds. It is characterized by continual and excessive worry about a huge variety of normal occasions and sports.[2]

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Shedding light on mental health impact of the pandemic on healthcare professionals, our research can inform interventions and programs aimed at supporting their well-being.

The incidence of GAD in various stages of COVID-19 pandemic is very essential to evaluate as very few data are found on this issue from Bangladesh. Understanding the significance of GAD amongst clinical guide staff can assist healthcare businesses enhance effective interventions to aid their intellectual fitness and well-being. This study may even contribute to the existing literature on mental health issues amongst healthcare employees during pandemics, which is crucial to develop evidence-based solutions to cope with the intellectual fitness effect of any upcoming pandemics.[3]

Methodology:

This was a cross-sectional study. The study period is estimated to be 6 months from July to December, 2020. The study was conducted at Dhaka Medical College and Hospital (DMCH), Kurmitola General Hospital (KGH), Government Hospital of Kuwait Bangladesh Friendship, and Mugda Medical College and Hospital in Dhaka and Tungipara UHC from Tungipara, Gopalganj.

The study population was purposively selected from the selected area. Total 289 medical support workers (cleaner, security guard, aya, wards boy, etc.) who worked for at least one month in a dedicated department of covid and have not been diagnosed with generalized anxiety disorder were enrolled. The data were collected by face-to-face interview with the respondents during their work at their place of work without interrupting their regular work and with the permission of the authority. Data were recorded in a semi-structured questionnaire. The Generalized Anxiety Disorder-7 was the main data collection tool. Data were checked for consistency, relevance, and quality control and compiled, coded, cleaned, classified, and edited according to objectives and variables through the Statistical Package for Social Sciences (SPSS version 22).

Missing data were checked by frequency runs. Data were analysed using IBM "Statistical Package for the Social Sciences" software (version 22), Microsoft Word, and Microsoft Excel for Windows for data management and analysis. Generalized anxiety disorder was analysed using descriptive statistics and expressed in both numbers and percentages. The prevalence of GAD was measured according to the degree of severity in both numbers and percentages. The analysed data were presented in frequency distribution through suitable tables and graphs. Minimal probable analysis was performed according to the objectives as needed.

Ethical Implication:

- A written consent form in Bengali was used to obtain the respondents' consent, and translated from the original text prepared in English.
- At the beginning of the interview, respondents were informed about all the specific aims of the study, as well as its purpose.
- Respondents were also assured that their data would remain confidential.
- Finally, the risks and benefits of the study were elaborated.
- They were informed that they had the full right to participate in the study and to refuse at any time.
- No treatments or interventions were performed in this study.
- A copy of the written informed consent was provided to all respondents.
- Data were collected only from respondents who volunteered as participants.
- This study was performed in accordance with the guidelines set out in the Protocol of the Declaration of Helsinki.

Results:

Table-I

Socio-demographic characteristics of the respondents (N = 289)

Socio-demographic Characteristics	Frequency (f)	Percentage (%)
Sex		
Female	99	34.3
Male	190	65.7
Age group (in years)		
18 to 25	83	28.7
26 to 35	135	46.7
36 to 45	49	17.0
46 and above	22	7.6
Marital status		
Single	77	26.6
Married	204	70.6
Widowed or divorced	8	2.8
Educational status		
Primary	35	12.1
Junior school	73	25.3
S.S.C.	77	26.6
H.S.C.	76	26.3
Graduation or above	28	9.7

Socio-demographic characteristics of all 289 respondents, reveals male predominance (65.7%) vs. (34.3%) female. The age of the respondents ranged between 18 to 63 years with a mean age 31.09±8.91 years, though majority (46.7%) belonged to 26 to 35 years age group. While majority of the respondents (70.6%) were married, 77 were single (26.6%) and only 8 (2.8%) were widowed &/or divorced, none of those HCWS were illiterate, 12% had primary & 25% Junior School, 52.9% had SSC and HSC and only 9.7% completed graduation or post-graduation.

Table-II

Work-related characteristics of the respondents (N = 289)

Work-related characteristics	Frequency (f)	Percentage (%)
Respondents' profession		
Cleaner	90	31.1
Cook	9	3.1
Security guard	45	15.6
Aya	49	17.0
Ward boy	71	24.6
Others	25	8.7
Current work station		
Indoor	186	64.4
Outdoor	32	11.1
O.T./ICU/HDU	48	16.6
Emergency	23	8.0
Direct contact with feverish or infected patients		
Yes	148	51.2
No	141	48.8

Table II shows, the work-related characteristics of the respondents. 31.1% were cleaner, 24.6% were ward boys, and 15.6% were security guards. 17.0% were aya and the rest of them were cook and others. The majority of them (64.4%) worked indoors. 11.1% worked outdoors, 8.0% worked in emergency and 16.6% of them worked (OT, ICU, HDU). Out of 289 respondents, 51.2% of them required direct contact with feverish or infected patients and 48.8% of them didn't.

Table-III

Social characteristics of the respondents (N = 289)

Social characteristics of the respondents	Frequency (f)	Percentage (%)
Living situation of the respondents in the past 2 weeks		
Family	212	73.4
Friends	14	4.8
Colleague	63	21.8
A person her/himself or persons living with her/him got infected		
No	187	64.7
Yes	102	35.3
Psychological support from social media or news received by respondents		
Not helpful	169	58.5
Helpful	120	41.5

Table III shows, the social characteristics of the respondents. Among them, 73.4% lived with their family. The rest of them resided with their colleagues (21.8%) and friends (4.8%). Nearly two third of the participants or persons they were living with (64.7%), didn't get infected by COVID-19. Just over one-third (35.3%) of medical support staff or persons they were living with got infected. The majority of them (58.5%) found psychological support from social media or news, not helpful at all. Only 41.5% found them helpful. Respondents' average time spent on acquiring information on COVID-19 daily was 21.6 minutes though the majority of them (52.9%) didn't spend any time at all. Among those who looked for COVID-19-related information, 59.6% spent at least 30 minutes daily.

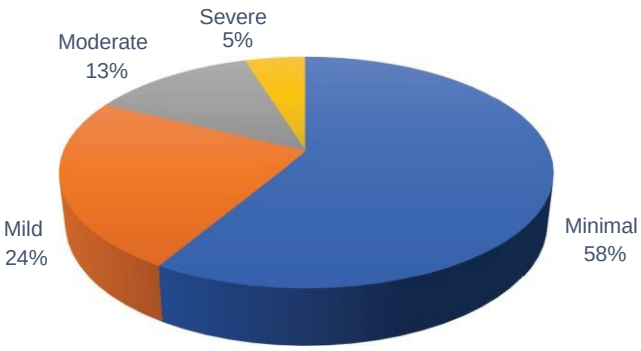

Figure 1: *Distribution of magnitude of generalized anxiety disorder among respondents (N = 289)*

Figure 1 shows the majority of the respondents (58.0%) had minimal anxiety. 24.0% of the medical support staff had mild anxiety, 13.0% had moderate anxiety and only 5.0% had severe anxiety.

Discussion:

This cross-sectional study was conducted during the COVID pandemic in Bangladesh. It was found that all the 289 medical support staff who participated voluntarily in the research were suffering from some sort of generalized anxiety disorder. Psychological interventions in the face of such epidemics are part of the health care system in public health emergencies.[4] We are educated from previous epidemics that recognition and support of the mental health issues of the health care support staff bring out good performance to control and contain the epidemic.[5] We are social by nature and isolation brings down our mental status especially when in medical emergency.[6] In a genuine sense, mental go-betweens are among the foremost basic components driving inveterate infection or declining it.[7] Partitions from family and low-income family units cause different mental well-being issues for tainted people and their family individuals.[8] From a mental viewpoint, COVID-19, as a major scourge, includes the event of mental clutters that are predominant to the patient's capacity to handle.

One of the most common outcomes about of COVID-19 is the mental brokenness of individuals who fear disease or have tainted relatives. Mental brokenness probably happens when an outside life emergency surpasses the individual's passionate reaction and adapting capacity driving to mental disappointment or lopsidedness. Owing to the deadly results of the COVID-19, lives are undermined, and there are more than 20.000 passings on 26 Walk 2020, so it is considered a worldwide well-being crisis.[9]

Governments ought to carefully consider the lessons learned from the episode of COVID-19. There ought to be tall straightforwardness of data to avoid the discharge of rumours, early travel limitations, early isolate methods, and extravagant stores on antibodies and treatment improvement. Governments and open specialists within the tainted nations have executed different control methodologies for the scourge. So also, they would be required at the show and in the close future to actualize mental intercessions for the recouped patients and those individuals who were on the cutting edge, particularly the healthcare workers.[10] Deficiently coordination among therapeutic and mental divisions that display mental mediation administrations speaks to a critical challenge. This needs for participation squanders mental well-being assets and delays the conclusion and follow-up administrations. Other than that, the deficiency of proficient therapists and experienced analysts decreases the adequacy of the mediation. Owing to the strict directions and disease evasion rules, cutting-edge healthcare laborers alone are the central staff who give mental intercession to patients in healing centers. All focus specified is considered fundamental challenges that ruin analysts and therapists in their interest of moving forward regarding mental well-being in tainted people and their families.[11] This study measured the prevalence of generalized anxiety disorder among medical support staff during the COVID-19 pandemic. In this study, it is found that 42.1% of medical support staff are suffering from various degrees of generalized anxiety disorder (GAD 7 ≥ 5) which was consistent with the study in Ethiopia[12] but inconsistent with studies in China[13] and Turkey.[14] The people who work in medicine are helping others while also being at risk of getting sick themselves. Medical staff helped fight COVID-19, even if they didn't have much training. Moreover, when the hospital was suddenly assigned to treat COVID-19 patients, they didn't have enough resources to create separate rooms for isolation. Eventually, the situation got better, but there still wasn't enough staff and resources to properly handle everything. The people who work in healthcare need to wear special clothes that cover their whole body. They have to wear this for 8 to 12 hours and it includes things like a face mask, gloves, hat, shoe covers, and special glasses. They wear these clothes when they work in units where sick people are kept away from others. To stay safe when taking off their protective gear, workers can't eat, drink or use the restroom while they work. A lot of them don't have enough water because they sweat too much, and some get bladder infections and a red, bumpy skin reaction. People who work in places where sick people are kept apart from others should always stay in touch with those who might be sick or infected. In these busy situations, people who help with medical care can feel really tired in their minds and bodies. That's why they may have trouble sleeping because they feel very stressed. People who were very anxious during the COVID-19 pandemic worried about getting sick with the virus. They didn't find much help from social media or the news, but they felt less uncertain about how to control the disease as time went on. People who trust that safety measures at work will protect them are less

worried about the pandemic, according to my research. Medical support staff's worries can make them anxious and affect their ability to sleep well.[15] During and after a disease spread, approximately one out of every six healthcare workers experienced serious stress symptoms.[16] Research has proven that getting ready for a disaster is really crucial. It helps a lot to have well-defined plans, rules, actions, and some practice runs, as these things can greatly affect a person's mental state. When people know what's going on, knowing how the medical staff is getting ready and what their jobs are can help to concentrate on important things and not feel nervous. The crisis caused confusion and changes in how things were done. This caused a lot of people to feel stressed, worried, and sad.[17]

Conclusion

This study was carried out to assess the prevalence of generalized anxiety disorder among medical support staff during covid-19 pandemic at different healthcare facilities in the Dhaka division. All the medical support staff responding to the spread of COVID-19 reported minimal to severe symptoms of generalized anxiety disorder.

Limitations of the Study:

The research was achieved in a limited variety of hospitals; therefore, the effects may not observe in all hospitals. The statistics accumulated become self-stated, which can cause a recall bias. Additionally, individuals with a record of mental disorder have been not excluded, which may bring about a relapse or growth in symptom severity at some stage in the COVID-19 period.

Recommendations:

The findings can help provide specific interventions for generalized anxiety disorder for medical support staff, especially for those who have different social and work-related risk factors.

1. Hospital administration should provide sufficient mental health education and training among medical staff.
2. To understand the problems found among the medical support staff in limited resource facilities, teleconsultation should be incorporated.
3. More studies among large-scale Bangladeshi medical support staff are warranted to confirm the finding of this study.

References:

1. Grey I, Arora T, Sanah A. Generalized Anxiety Mediates the Relationship Between Loneliness and Sleep Quality Amongst Young Adults During the COVID-19 Pandemic. Psychological Reports. 2022 Mar 26:00332941221079723.
2. Skalski SB, Konaszewski K, Büssing A, Surzykiewicz J. Resilience and mental well-being during the COVID-19 pandemic: serial mediation by persistent thinking and anxiety about coronavirus. Frontiers in Psychiatry. 2022 Jan 27;12:2603.
3. Adibi A, Golitaleb M, Farrahi-Ashtiani I, Pirani D, Yousefi K, Jamshidbeigi Y, Sahebi A. The prevalence of generalized anxiety disorder among health care workers during the COVID-19 pandemic: a systematic review and meta-analysis. Frontiers in psychiatry. 2021 May 31;12:658846.
4. Khalaf MA. Psychological consequences of COVID-19 and challenges for post-traumatic interventions. Journal of Psychology Research. 2020 Jan;10(1):24-9.
5. Xiang YT, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, Ng CH. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. The Lancet psychiatry. 2020 Mar 1;7(3):228-9.
6. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, Rubin GJ. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. The lancet. 2020 Mar 14;395(10227): 912-20.
7. Deter HC. Psychosocial interventions for patients with chronic disease. BioPsychoSocial Medicine. 2012 Dec;6:1-5.
8. Kun P, Han S, Chen X, Yao L. Prevalence and risk factors for posttraumatic stress disorder: a cross-sectional study among survivors of the Wenchuan 2008 earthquake in China. Depression and Anxiety. 2009 Dec;26(12):1134-40.
9. Yang Y, Li W, Zhang Q, Zhang L, Cheung T, Xiang YT. Mental health services for older adults in China during the COVID-19 outbreak. The Lancet Psychiatry. 2020 Apr 1;7(4):e19.
10. Sohrabi C, Alsafi Z, O'neill N, Khan M, Kerwan A, Al-Jabir A, Iosifidis C, Agha R. World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). International journal of surgery. 2020 Apr 1;76:71-6.

11. Duan L, Zhu G. Psychological interventions for people affected by the COVID-19 epidemic. The Lancet psychiatry. 2020 Apr 1;7(4):300-2.

12. Necho M, Birkie M, Gelaye H, Beyene A, Belete A, Tsehay M. Depression, anxiety symptoms, Insomnia, and coping during the COVID-19 pandemic period among individuals living with disabilities in Ethiopia, 2020. PloS one. 2020 Dec 30;15(12):e0244530.

13. Huang Y, Wang Y, Zeng L, Yang J, Song X, Rao W, Li H, Ning Y, He H, Li T, Wu K. Prevalence and correlation of anxiety, insomnia and somatic symptoms in a Chinese population during the COVID-19 epidemic. Frontiers in psychiatry. 2020 Aug 28;11:568329.

14. Şahin MK, Aker S, Şahin G, Karabekiroğlu A. Prevalence of depression, anxiety, distress and insomnia and related factors in healthcare workers during COVID-19 pandemic in Turkey. Journal of community health. 2020 Dec;45:1168-77.

15. Styra R, Hawryluck L, Robinson S, Kasapinovic S, Fones C, Gold WL. Impact on health care workers employed in high-risk areas during the Toronto SARS outbreak. Journal of psychosomatic research. 2008 Feb 1;64(2):177-83.

16. Lu YC, Shu BC, Chang YY. The mental health of hospital workers dealing with severe acute respiratory syndrome. Psychotherapy and Psychosomatics. 2006;75(6):370-5.

17. Wong EL, Wong SY, Lee N, Cheung A, Griffiths S. Healthcare workers' duty concerns of working in the isolation ward during the novel H1N1 pandemic. Journal of clinical nursing. 2012 May;21(9-10): 1466-75.