

**"UNVEILING THE PSYCHOLOGICAL BURDEN ON PHYSICIANS IN BANGLADESH  
AMIDST THE COVID-19 OUTBREAK"****\*Dr. Farhana Ahmed, MD (Ukraine), MPH (NIPSOM, BSMMU)**

Upazila Health and Family Planning Officer, Shibpur Upazila Health Complex, Shibpur, Narsingdi.

**\*Corresponding Author: Dr. Farhana Ahmed, MD (Ukraine), MPH (NIPSOM, BSMMU)**

Upazila Health and Family Planning Officer, Shibpur Upazila Health Complex, Shibpur, Narsingdi.

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**ABSTRACT**

The COVID-19 pandemic has placed a substantial psychological burden on healthcare professionals globally, including physicians. This paper focuses on understanding the psychological burden experienced by physicians in Bangladesh during the COVID-19 outbreak. The study utilizes a cross-sectional design and involves data collection from four hospitals in Bangladesh. A structured questionnaire is used to collect information on socio-demographic factors, determinants of mental stresses, factors reducing mental stresses, and coping strategies employed by physicians. The findings reveal those physicians in Bangladesh face numerous stressors, including high workloads, limited resources, fear of contracting the virus and witnessing patient suffering and mortality. These stressors lead to various psychological impacts, such as anxiety, burnout, and sleep disorders. The study also highlights the demographic characteristics of physicians, with a majority being young and female. It underscores the importance of considering cultural and religious factors in addressing their mental well-being. The findings provide insights into the challenges faced by physicians in Bangladesh and emphasize the need for targeted interventions and support systems to alleviate their psychological burden. The study acknowledges certain limitations, such as selection bias and potential recall bias. Nonetheless, it contributes to the understanding of the psychological well-being of physicians in Bangladesh and provides a basis for further research and interventions to support their mental health during and beyond the pandemic.

**KEYWORDS:** Psychological burden, Physicians, Bangladesh, COVID-19 outbreak.**INTRODUCTION**

The COVID-19 pandemic has placed an unprecedented burden on healthcare systems worldwide, challenging the physical, emotional, and psychological well-being of healthcare professionals.<sup>[1,2,3]</sup> Among these professionals, physicians have been at the forefront, facing the direct consequences of the pandemic while striving to provide quality care to patients.<sup>[4]</sup> The situation is no different in Bangladesh, where healthcare resources have been strained, and physicians have been grappling with the overwhelming challenges posed by the pandemic.<sup>[5]</sup> This paper aims to shed light on the psychological burden experienced by physicians in Bangladesh amidst the COVID-19 outbreak. The COVID-19 pandemic has significantly impacted the mental health of healthcare professionals globally. Physicians, in particular, are exposed to numerous stressors, including high patient volumes, limited resources, long working hours, fear of contracting the virus, uncertainty, and witnessing patient suffering and mortality.<sup>[4,6]</sup> These stressors can lead to a range of psychological issues, such as anxiety, depression, burnout, post-traumatic stress disorder (PTSD), and compassion fatigue.<sup>[2,3]</sup> The psychological well-being of physicians is crucial not only for their own

health but also for maintaining a resilient and effective healthcare system.<sup>[6]</sup> Bangladesh's healthcare system has faced immense pressure due to the COVID-19 outbreak. The country has experienced a surge in COVID-19 cases, stretching healthcare resources to their limits.<sup>[5]</sup> The shortage of personal protective equipment (PPE), medical supplies, and hospital beds has placed a significant strain on healthcare professionals, including physicians.<sup>[4]</sup> Additionally, the scarcity of critical care facilities, inadequate training, and limited access to mental health support further exacerbate the challenges faced by physicians in Bangladesh.<sup>[5,6]</sup> To understand the psychological burden on physicians in Bangladesh, exploring the existing literature and studies conducted in similar contexts is essential. A study which has been conducted during the early phase of the pandemic in Bangladesh highlighted the high levels of anxiety, fear, and stress experienced by healthcare professionals. The study emphasized the need for comprehensive psychological support and interventions to address the mental health challenges faced by healthcare workers, including physicians.<sup>[7]</sup> Furthermore, a systematic review has examined the psychological impact of the COVID-19 pandemic on healthcare professionals in low-resource

settings. The review revealed that healthcare professionals in these settings faced increased psychological distress, burnout, and stigma, with limited access to mental health support. The findings of this review provide valuable insights into the potential psychological burden on physicians in Bangladesh, given the similarities in resource constraints and healthcare system challenges.<sup>[8]</sup> In response to the psychological burden faced by physicians, various interventions and support systems have been proposed and implemented globally. These include psychological counseling, peer support programs, mindfulness-based interventions, and organizational measures to reduce workload and improve working conditions. However, the effectiveness and feasibility of these interventions in the context of Bangladesh need to be explored further. This paper aims to contribute to understanding the psychological burden on physicians in Bangladesh amidst the COVID-19 outbreak. By reviewing existing literature, analyzing the unique challenges faced by physicians, and considering potential interventions, this study aims to provide insights into the psychological well-being of physicians and the importance of addressing their mental health needs during and beyond the pandemic.

#### MATERIALS AND METHODS

The present study utilized a cross-sectional design to investigate the psychological burden on physicians in Bangladesh amidst the COVID-19 outbreak. The study was conducted in four hospitals: Kurmitola General Hospital, Mugdha Medical College & Hospital, AMZ Hospital, and United Hospital Limited, during the period from January to December 2020. The research process involved several stages, including a comprehensive literature review, protocol presentation, and obtaining ethical approval from the Institutional Review Board (IRB) of the National Institute of Social and Preventive Medicine (NIPSOM). A structured questionnaire was developed, which underwent a pre-testing phase to ensure its validity and clarity before initiating data collection. Data collection was carried out through telephone interviews, utilizing the developed questionnaire. Convenient sampling was employed to enroll a sample size of 207 eligible physicians who met the inclusion criteria. The questionnaire encompassed various aspects, including collecting socio-demographic information, exploring determinants of mental stresses experienced by physicians, and identifying factors that aided in reducing mental stresses. Subsequently, data management and analysis were conducted using IBM SPSS version 26. Descriptive and inferential statistical techniques were employed to analyze the collected data, allowing for a comprehensive understanding of the psychological burden experienced by physicians. To effectively present the findings, graphical representations such as bar diagrams, pie charts, and histograms were utilized, offering a visually intuitive means of conveying the statistical information. Throughout the study, ethical implications were given significant consideration. Ethical approval was obtained from the IRB, ensuring

that the study adhered to ethical guidelines and principles. Informed consent was obtained from all participants, emphasizing their voluntary participation and ensuring their rights and privacy were protected. Strict measures were implemented to maintain the confidentiality and anonymity of the collected data, fostering a secure and trustworthy research environment. Despite the rigorous methodology employed, the study had certain limitations. The use of convenient sampling introduced the potential for selection bias, as the participants were not randomly selected. Moreover, there may have been a recall bias since data collection occurred six months after the acute phase of the COVID-19 crisis. Additionally, conducting the study during a highly challenging and stressful period in the healthcare system presented difficulties in data collection over the phone. It should also be acknowledged that the study's findings may be limited in their generalizability, as they were derived from a specific set of hospitals, potentially not fully representing the entire country's scenario.

#### RESULTS

In this study majority (60.4%) of the participants were aged between 25 and 35 years, indicating a relatively young physician population. Only 1% of the respondents fell into the age group of 56 to 65 years. In terms of gender distribution, 54.10% were female, while 45.90% were male. Religious affiliation showed that the majority (84.50%) identified as followers of Islam, followed by 11.50% Hindu, 2% Buddhist, and 2% Christian. Regarding educational background and marital status, among the 207 respondents, 62.30% had completed their graduate degrees, while 37.70% had pursued post-graduation in their respective fields. In terms of marital status, 87% of the respondents were married, 12.1% were unmarried, and 1% were divorced. Family structure and size varied among the respondents. About 50.7% belonged to nuclear families, while 49.3% belonged to joint families. Family sizes ranged, with 23.70% having four family members, 1.4% having twelve family members, 1.4% having ten family members, and only 0.5% having eleven family members. In terms of geographic distribution, the highest percentage of respondents (28%) were from the Dhaka division, followed by 13% from Khulna, 11.60% from Mymensingh, Rajshahi, and Chittagong divisions (each), and 6.80% from the Sylhet division. Regarding accommodation, 35.3% of respondents lived in their own apartments, while another 35.3% lived in rental apartments. A small proportion (5.8%) lived in shared apartments. Occupationally, the majority of respondents (74.40%) worked in COVID-19-dedicated government hospitals, while only 2.40% were in COVID-19-dedicated private laboratories. Their professional roles varied, with 57.50% being medical officers, 9.70% pathologists, 8.20% registrars, 7.70% consultants, 4.30% assistant professors, and only 2.40% associate professors. In terms of departments, 45.40% of respondents worked in the indoor department, and a small proportion (0.50%) worked in telemedicine. Other departments included

emergency (14.00%), laboratory (12.10%), ICU (10.10%), triage (7.70%), and isolation units (5.80%). When it came to income and expenses, 26.1% of the respondents had a monthly family income of more than 2.4 lakhs BDT, while 5% had a monthly income ranging from forty to sixty thousand BDT. In terms of expenses, 36.7% had monthly family expenses exceeding 1.5 lakhs BDT, while only 6.3% spent less than fifty thousand BDT. The respondents reported various stressors and impacts on their mental well-being during the COVID-19 outbreak. Among the respondents, 22.60% stated they had no personal life due to home isolation, 21.60% had no family life, 16.50% were COVID-19 positive, 12.30% had no socialization, 9.80% felt imprisoned at home, 6.30% had excessive work at home, and 6.00% had small babies, making it challenging to maintain isolation. The impact of social distancing and the fear of infecting family members was significant. All respondents (100%) were affected by social distancing, 97.6% experienced interruptions in their regular personal and working lives, and 96.1% felt that social distancing measures were harmful to their family members. Social media misinformation affected 97.6% of respondents, and 24.2% expressed a desire to resign from their jobs. A substantial proportion of respondents (37.0%) reported working with the fear of contracting COVID-19. The continuous wearing of personal protective equipment (PPE) posed problems for 32.40% of respondents, and 17.50% struggled to adapt to the new working style. Additionally, 9.30% expressed dissatisfaction with working as part of a COVID-19 team, and 3.80% experienced disturbances in their work due to continuous roster duty. Adherence to preventive measures and avoidance of public gatherings were observed. 81.60% of respondents avoided public gatherings, and contact with colleagues was fairly often avoided by 42.5%, while 7.2% always avoided contact. The mental stress caused by social distancing was experienced by 35.30% of respondents, while only 3.90% never felt such distress. The fear of becoming infected by COVID-19 was reported by 96.60% of respondents, while 80.70% suffered from mental stress due to the fear of death. Anxiety affected 57.50% of respondents, and 36.70% often experienced mental stress due to the lack of treatment, delayed treatment, or inadequate ICU support for patients. However, 12.60% of respondents did not feel such stress, as they believed the treatment provided was appropriate. Other psychological impacts included 36.2% of respondents always avoiding going home to prevent potential transmission, 46.4% fairly often being affected by social media posts, and 92.8% never fearing losing their job. Sleeping disorders were reported by 73.40% of respondents, with disturbances and panic during sleep reported by 70.50% and 61.40% of respondents, respectively. Mood swings were experienced by 37.2% of respondents, while 21.7% never had mood swings. Regarding burnout, 75.8% of respondents experiencing burnout felt difficulties in deciding priorities and finding alternatives. Additionally, 47.3% believed that people experiencing burnout require

assistance in rethinking their career paths. In conclusion, the study highlights the significant psychological burden faced by physicians in Bangladesh during the COVID-19 outbreak. Various stressors have impacted their personal, professional, and family lives.

## DISCUSSION

The findings of this study provide valuable insights into the demographic characteristics and psychological impacts experienced by physicians in Bangladesh during the COVID-19 outbreak.<sup>[9]</sup> The majority of participants were young physicians, with 60.4% falling within the age range of 25 to 35 years. This finding suggests that the healthcare workforce combating the pandemic consists of a relatively young population, which may have implications for the long-term planning and sustainability of the healthcare system.<sup>[10]</sup> In terms of gender distribution, a slight majority of female participants (54.10%) indicated that women are actively involved in the healthcare response to the pandemic.<sup>[11]</sup> This finding aligns with the increasing representation of women in the medical profession globally. Furthermore, the respondents' religious affiliation reflected the religious composition of Bangladesh, with the majority identifying as followers of Islam (84.50%), followed by Hindu, Buddhist, and Christian populations.<sup>[12]</sup> This religious diversity among physicians highlights the importance of considering cultural and religious factors in addressing their mental well-being and coping strategies during the crisis. Regarding educational background, a significant proportion of respondents had completed their graduate degrees (62.30%), demonstrating a high level of educational attainment among the physician population.<sup>[13]</sup> This finding indicates that the physicians involved in the study have received extensive training and education, which may influence their perception and management of the pandemic. Additionally, the majority of respondents were married (87%), suggesting that they may have additional responsibilities and concerns related to their families' well-being and safety during the outbreak.<sup>[14]</sup> The study also revealed variations in family structure and size among the respondents. Approximately half of the respondents belonged to nuclear families (50.7%), while the other half belonged to joint families (49.3%).<sup>[15]</sup> These findings highlight the importance of considering the social support and dynamics within different family structures when designing interventions to address the mental well-being of physicians. Furthermore, the range of family sizes reported indicates that the impact of the pandemic extends beyond the individual physician and may involve multiple family members.<sup>[16]</sup> Geographically, the highest percentage of respondents were from the Dhaka division (28%), which is the capital city of Bangladesh. This finding is expected given the concentration of healthcare facilities and resources in urban areas. However, it is worth noting that respondents from other divisions, such as Khulna, Mymensingh, Rajshahi, Chittagong, and Sylhet, also participated in the study, providing a more representative view of the

physician population across different regions of the country.<sup>[17]</sup> In terms of occupational distribution, a significant proportion of respondents worked in COVID-19-dedicated government hospitals (74.40%), indicating the central role of public healthcare facilities in responding to the pandemic.<sup>[18]</sup> However, the low representation of respondents working in COVID-19-dedicated private laboratories (2.40%) suggests a potential gap in private sector engagement and highlights the need for collaborative efforts between public and private healthcare providers during public health emergencies.<sup>[19]</sup> The study also shed light on the professional roles and departments in which physicians were engaged. Medical officers comprised the largest group (57.50%), followed by pathologists, registrars, consultants, and academic positions.<sup>[20]</sup> The dominance of medical officers reflects the frontline nature of their work and the heavy reliance on these healthcare professionals in managing the crisis. The distribution across departments indicates the involvement of physicians in various areas of care, including indoor departments, emergency, laboratory, ICU, triage, and isolation units.<sup>[21]</sup> This broad involvement underscores the multidimensional and multifaceted challenges faced by physicians during the pandemic. The study findings also highlight the significant psychological impacts experienced by physicians during the COVID-19 outbreak. Various stressors were reported, including the lack of personal and family life due to home isolation, fear of contracting COVID-19, disruptions in regular personal and working lives, and the impact of social distancing measures. These findings are consistent with previous research emphasizing the negative effects of social distancing measures on mental well-being and the psychological toll of the pandemic on healthcare professionals.<sup>[22]</sup> Furthermore, the study identified specific challenges faced by physicians in their professional roles. Fear of contracting COVID-19, difficulties in adapting to new working styles, and dissatisfaction with working as part of a COVID-19 team were reported by a significant proportion of respondents.<sup>[23]</sup> These challenges reflect the physical and emotional burden faced by physicians on the frontline and underscore the need for adequate protective measures, training, and support systems to address their concerns. The high prevalence of sleeping disorders, disturbances during sleep, and mood swings among respondents highlight the psychological toll of the pandemic on their well-being. These findings indicate the need for interventions targeting sleep disturbances and emotional regulation to promote the mental well-being of physicians.<sup>[24]</sup> The study also revealed a considerable level of burnout among respondents, with difficulties in deciding priorities and finding alternatives reported by those experiencing burnout.<sup>[25]</sup> These findings underscore the urgent need for interventions to address burnout and support physicians in managing their workload and maintaining work-life balance. Moreover, the belief among respondents that people experiencing burnout require assistance in rethinking their career paths

emphasizes the importance of career support and guidance in mitigating the long-term impact of the pandemic on physicians' professional trajectories.<sup>[26]</sup>

It is important to acknowledge that this study provides a snapshot of the psychological impacts experienced by physicians in Bangladesh during the COVID-19 outbreak and may not capture the full range of experiences and challenges faced by all healthcare professionals. However, the findings contribute to the growing body of literature on the psychological well-being of healthcare workers during public health crises, emphasizing the need for comprehensive support systems, including mental health services, information dissemination, and targeted interventions addressing specific stressors and challenges faced by physicians.<sup>[27]</sup>

## CONCLUSION

This study provides valuable insights into the demographic characteristics and psychological impacts experienced by physicians in Bangladesh during the COVID-19 outbreak. It reveals a young and actively engaged healthcare workforce, with an increasing representation of women. The study emphasizes the importance of considering cultural and religious factors in addressing physicians' mental well-being. Additionally, it highlights physicians' high educational attainment, family responsibilities, and the challenges faced in different professional roles. The study underscores the need for interventions targeting sleep disturbances, mood swings, burnout, and the importance of comprehensive support systems. Although the study offers a snapshot of experiences, it contributes to the literature on healthcare workers' well-being during public health crises. Addressing physicians' mental well-being through targeted interventions can enhance their resilience and effectiveness in responding to the ongoing crisis.

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