IMPACT ON MENTAL HEALTH AND PERCEPTIONS OF PSYCHOLOGICAL CARE AMONG MEDICAL AND NURSING STAFF

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Abstract

Background: Healthcare professionals frequently face high levels of occupational stress, which can negatively impact their mental well-being. Despite growing recognition of the importance of mental health support for medical and nursing staff, access to psychological care services remains limited. This study aims to evaluate the mental health status of healthcare workers, identify the factors associated with psychological distress, and assess perceptions regarding the availability and effectiveness of psychological care.

Methods: This study was conducted among 500 healthcare professionals, including doctors and nurses, using an anonymous, self-administered questionnaire. The survey assessed depression, anxiety, insomnia, and psychological distress using the Patient Health Questionnaire-9 (PHQ-9), Generalized Anxiety Disorder Scale-7 (GAD-7), Insomnia Severity Index (ISI), and Impact of Event Scale-Revised (IES-R). The study also examined workplace stressors, utilization of mental health services, and perceived health status. Statistical analyses, including cluster analysis and structural equation modeling, were performed to determine relationships between psychological distress, workplace stressors, and access to mental health resources.

Results: A significant proportion of participants reported experiencing mental health disturbances, with 22.3% showing moderate to severe depression, 24.6% experiencing moderate to severe anxiety, and 21.1% suffering from moderate to severe insomnia. Furthermore, 19.8% exhibited severe psychological distress. Despite these findings, only 12.7% of participants had accessed counselling or psychotherapy, while 52.5% had not sought any mental health support. Engagement with psychological resources, such as printed materials and online mental health platforms, was more common among individuals with mild to moderate distress. Structural equation modelling confirmed that higher exposure to occupational stressors was associated with poorer mental health outcomes and lower self-perceived health status.

Conclusion: The study highlights significant mental health challenges among healthcare professionals, with a substantial portion experiencing psychological distress but lacking adequate support. The findings emphasize the need for expanded access to psychological care, including structured interventions such as therapist-led counseling, peer support networks, and media-based educational resources. Strengthening mental health services for medical and nursing staff is essential to improving their well-being and ensuring the sustainability of healthcare systems in high-stress environments. Future research should explore longitudinal trends and intervention strategies to address these pressing mental health concerns.

Keywords: Healthcare professionals, occupational stress, mental health, psychological distress, support services.

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Introduction

Healthcare professionals frequently encounter challenging and high-pressure situations, exposing them to considerable psychological strain (Chong et al., 2004; Wu et al., 2009). During public health crises, the emotional well-being of medical and nursing staff can be significantly impacted, leading to heightened stress, anxiety, and long-term psychological consequences (WHO, 2020).

Previous research has demonstrated that in response to severe infectious disease outbreaks, healthcare workers experience an initial surge in fear and anxiety, which may subside over time. However, prolonged exposure to stressful conditions can result in persistent psychological distress, including depression, trauma-related symptoms, and physical manifestations of stress (Chong et al., 2004; Wu et al., 2009). Factors contributing to this mental strain include working in high-risk environments, direct exposure to patients with severe illnesses, and extended periods of isolation (Wu et al., 2009; Maunder et al., 2003).

Historical evidence suggests that the psychological impact on healthcare workers extends beyond the immediate crisis, often leading to long-term consequences if appropriate support is not provided (Maunder et al., 2006). Implementing timely and structured interventions is crucial to safeguarding their mental health. Various strategies have been employed to alleviate stress among healthcare personnel, such as increasing workforce support, ensuring access to protective equipment, enforcing strict infection control protocols, and providing structured training and guidance. Previous responses to public health threats indicate that such measures play a critical role in mitigating psychological distress (Khalid et al., 2016).

Additionally, mental health professionals often play a key role by offering psychological support, counseling services, and self-help resources aimed at reducing the emotional burden on healthcare workers (Kang et al., 2020). Public awareness campaigns through media platforms also contribute to disseminating coping strategies and mental health resources. However, the implementation of evidence-based psychological interventions is essential to ensure the effectiveness of mental health support systems (Aarons et al., 2012). Given the importance of addressing mental well-being in healthcare professionals, further exploration is needed to assess the effectiveness of current psychological interventions, evaluate their accessibility, and determine the specific mental health needs of medical and nursing staff.

Methods

This study involved the participation of doctors and nurses working in healthcare settings. The data collection period spanned one week, during which healthcare professionals were invited to take part in an online survey. The data were gathered using an anonymous, self-administered questionnaire distributed via an online platform. Participants provided informed consent electronically before proceeding with the survey. The consent page required respondents to select either "yes" or "no" to indicate their willingness to participate. Only those who consented were directed to the questionnaire, and they had the option to withdraw at any time.

The survey consisted of six sections: demographic information, mental health assessment, exposure to occupational stressors, utilization of psychological support services, psychological care needs, and self-perceived health status compared to the period before experiencing work-related stress.

1. Demographic Information

Collected demographic variables included profession (doctor or nurse), gender (male or female), age, marital status (single, married, or divorced), education level (undergraduate or lower, postgraduate or higher), professional rank (entry-level, intermediate, or senior), and work department (categorized based on exposure to high-stress environments such as emergency care, intensive care units, or isolation wards).

2. Mental Health Assessment

Mental health status was assessed using four standardized scales

- Patient Health Questionnaire (PHQ-9): A self-report tool for assessing depression severity, with scores categorized as minimal/no

depression (0–4), mild depression (5–9), moderate depression (10–14), or severe depression (15–21) (Kocalevent et al., 2013).

- Generalized Anxiety Disorder Scale (GAD-7): A self-rated measure evaluating anxiety severity, with scores classified as minimal/no anxiety (0–4), mild anxiety (5–9), moderate anxiety (10–14), or severe anxiety (15–21) (Löwe et al., 2008).

- Insomnia Severity Index (ISI): A validated tool for assessing sleep disturbances, categorized as normal (0–7), subthreshold insomnia (8–14), moderate insomnia (15–21), or severe insomnia (22–28) (Morin et al., 2011).

- Impact of Event Scale-Revised (IES-R): A measure assessing distress in response to significant stressful events, classified as subclinical distress (0–8), mild distress (9–25), moderate distress (26–43), or severe distress (44–88) (Daniel & Weiss, 2007).

3. Exposure to Occupational Stressors

To assess workplace stressors, participants were asked whether they had personally encountered high-risk situations, such as direct patient care in high-stress environments, exposure to critical incidents, or working in departments with a high patient load. Additionally, they were asked about the presence of workplace-related stressors within their household or social circle.

4. Utilization of Psychological Support Services

To evaluate access to mental health resources, participants were asked whether they had utilized any of the following support services:

- Psychological materials (e.g., brochures, educational leaflets, or books provided by mental health professionals).

- Psychological resources disseminated through media (e.g., expert-recommended strategies for stress management shared via television, online platforms, or news articles).

- Professional counselling or psychotherapy, either in individual or group settings.

5. Psychological Care Needs

Participants were surveyed regarding their preferences for mental health support in the future. They were asked about the type of psychological content they found most valuable (e.g., general psychological knowledge, techniques for self-management, methods for supporting others, or guidance on seeking professional help). Additionally, they were asked to specify preferred formats for psychological support (e.g., printed materials, media-based resources, group therapy, or individual counselling). Lastly, they were asked to indicate their preferred sources of support, including mental health professionals, family members, friends, or colleagues.

6. Self-Perceived Health Status

Participants were asked to compare their current health status to their condition before facing occupational stress. Response options included: improved, unchanged, worsened, or significantly worsened.

Statistical Analysis

Data analysis was conducted using IBM SPSS Statistics (Version 23.0) and Mplus (Version 7.4). Descriptive statistics were used to summarize demographic information and psychological service utilization. Categorical data were presented as frequencies and percentages.

Cluster analysis using the k-means clustering method was applied to categorize participants based on PHQ-9, GAD-7, ISI, and IES-R scores (Ball, 1967). Using the Ward method and Euclidean square root distance, participants were grouped into four clusters. Differences between these groups in terms of exposure to workplace stressors and access to mental health services were analyzed using the chi-square test.

A structural equation model (SEM) was developed using Mplus to examine relationships among exposure to occupational stressors, access to psychological support, mental health status (PHQ-9, GAD-7, ISI, and IES-R scores), and self-perceived health. The model was evaluated using standard fit indices, including root mean square error of approximation (RMSEA < 0.08) and comparative fit index (CFI) and Tucker-Lewis index (TLI) values > 0.90, which indicate an acceptable model fit (Hu & Bentler, 1998). Confidence intervals for effect estimates were determined using Monte Carlo resampling with 1,000 iterations (Bauer et al., 2006). Statistical significance was set at $p < 0.05$.

Results

A total of 500 healthcare professionals participated in this study. Table 1 presents their demographic details, including gender, age, marital status, education level, technical title, and work department classification. The majority of participants were female (68.4%), with 31.6% being male. The most common age group was 30-39 years (45.2%), followed by those aged 40-49 years (28.7%). Regarding marital status, 63.1% were married, while 28.9% were unmarried and 8.0% were divorced.

Most participants had an undergraduate degree or lower (57.4%), while 42.6% held a postgraduate qualification. The distribution of technical titles revealed that 36.8% held primary-level positions, 41.2% were in intermediate positions, and 22.0% had senior titles. Participants were classified based on their workplace exposure risk, with 54.3% working in high-exposure departments and 45.7% in non-high-exposure departments (Table 1).

Table 2 presents the mental health assessments of participants based on PHQ-9 (depression), GAD-7 (anxiety), ISI (insomnia), and IES-R (psychological distress). The findings show that 22.3% of participants had moderate to severe depression, 24.6% had moderate to severe anxiety, and 21.1% suffered from moderate to severe insomnia. Additionally, 19.8% of participants reported experiencing severe psychological distress. the mental healthcare services accessed by participants. Among them, 31.4% had received psychological materials, 28.9% had accessed online psychological resources, and only 12.7%

Table 1. Demographic Characteristics of Participants.

Characteristic	Percentage (%)
Gender	
Male	31.6
Female	68.4
Age (years)	
<30	21.4
30-39	45.2
40-49	28.7
≥50	4.7
Marital Status	
Unmarried	28.9
Married	63.1
Divorced	8.0
Education Level	
Undergraduate or lower	57.4
Postgraduate or higher	42.6
Technical Title	
Primary	36.8
Intermediate	41.2
Senior	22.0
Department Type	
High-Exposure	54.3
Non-High-Exposure	45.7

Table 2. Mental Health Assessment of Participants.

Scale	Category	Percentage (%)
PHQ-9 (Depression)	Minimal/None (0–4)	39.2
	Mild (5–9)	38.5
	Moderate (10–14)	14.2
	Severe (15–21)	8.1
GAD-7 (Anxiety)	Minimal/None (0–4)	38.0
	Mild (5–9)	37.4
	Moderate (10–14)	15.2
	Severe (15–21)	9.4
ISI (Insomnia)	Normal (0–7)	42.9
	Subthreshold (8–14)	35.8
	Moderate (15–21)	14.6
	Severe (22–28)	6.5
IES-R (Distress)	Subclinical (0–8)	40.7
	Mild (9–25)	39.3
	Moderate (26–43)	12.2
	Severe (44–88)	7.6

had participated in individual or group therapy. More than half (52.5%) of the participants had not accessed any psychological support. When asked about future psychological care needs, 41.7% of participants expressed interest in learning ways to alleviate their own psychological reactions, while 33.6% wanted guidance on helping others. Only 22.8% preferred individual therapy. Approximately 27.3% reported their health status as worse or much worse, while 52.1% felt no significant change. The structural equation modeling (SEM) analysis confirmed a significant relationship between psychological distress and exposure risk, as well as an indirect association with self-perceived health. The model fit indices were within acceptable ranges (RMSEA = 0.064, CFI = 0.91, TLI = 0.92). These results indicate that participants with greater exposure risk had worse mental health outcomes and poorer self-perceived health.

Discussion

This study represents an important investigation into the mental health status of medical and nursing staff and their perceptions of psychological care services in high-stress healthcare environments. Healthcare professionals frequently work under intense pressure, exposing them to significant psychological strain (Chong et al., 2004; Wu et al., 2009). When faced with prolonged workplace stressors, the nature of mental health challenges can evolve over time (Shioyama et al., 2000). To comprehensively assess this issue, we employed multiple validated scales to evaluate levels of depression, anxiety, insomnia, and distress among medical personnel.

Our findings reveal considerable gaps in the availability and accessibility of mental healthcare services for healthcare professionals. While some individuals had access to psychological support in the form of printed educational materials and online resources, more personalized interventions, such as counselling and psychotherapy, were significantly underutilized. Despite their limited accessibility, less personalized support mechanisms still contributed positively to mitigating mental distress. Previous studies have highlighted that exposure to stressful healthcare environments—whether due to direct patient care, workplace incidents, or the burden of critical decision-making—can result in lasting psychological effects (Wu et al., 2009). In particular, individuals with close social ties to colleagues experiencing distress may be at increased risk of developing secondary psychological trauma.

Our study revealed that mild to moderate mental health disturbances constituted the largest proportion of cases. Individuals in these categories may be more proactive in seeking coping strategies and adapting to workplace challenges, which has been shown to provide long-term psychological resilience (Maunder et al., 2006). Furthermore, our results indicate that individuals experiencing subthreshold or mild psychological distress were more likely to express an interest in helping others manage stress, highlighting the importance of peer support in healthcare settings. Physiologically, positive coping mechanisms have been associated with improved immune function and overall well-being in high-demand environments (Sakami et al., 2004). However, excessive exposure to workplace stress without adequate intervention may have negative consequences, as acute psychological distress has been linked to activation of the sympathetic-adrenal-medullary system and the hypothalamic-pituitary-adrenal axis, leading to both physical and mental health deterioration (Turner et al., 2020). These findings underscore the need for continuous mental healthcare services, even for individuals experiencing mild psychological distress, to prevent escalation into more severe conditions.

A particularly concerning finding was the presence of severe psychological distress among a subset of medical personnel who had not accessed mental health services. Compared to those with lower distress levels, this group had lower engagement with printed psychological materials and digital mental health resources, yet demonstrated a greater preference for one-on-one counselling services. While it is possible that engagement with educational and media-based interventions provided protective benefits to other participants, our cross-sectional design limits our ability to establish causation. Nonetheless, our results emphasize the importance of implementing comprehensive prevention and monitoring strategies, particularly given the expressed demand for psychological support services among mildly and moderately affected healthcare professionals.

Research has consistently demonstrated that mental health consequences following major occupational stressors often surpass physical health impacts, with long-lasting effects on affected individuals (Allsopp et al., 2019). However, mental health services typically receive far fewer resources than physical health services, despite their crucial role in workforce well-being. The Lancet Global Mental Health Commission has suggested that innovative approaches—such as the use of digital technology and non-specialist providers—could expand mental healthcare accessibility (Patel et al., 2018). Our findings align with this model, as psychological support disseminated through printed and digital media demonstrated potential in reducing stress levels among healthcare workers. However, therapist-led interventions remain essential, particularly in cases of severe psychological distress. Prior research indicates that structured psychological interventions for medical staff can reduce burnout, enhance professional fulfillment, and produce long-term benefits (West et al., 2014).

Previous studies have highlighted that the psychological impact of workplace stress varies by occupation and department (Hawryluck et al., 2004; Wu et al., 2009). Healthcare workers with specialized knowledge in occupational hazards may derive some degree of reassurance from their understanding of exposure risks (Chowell et al., 2015). For instance, medical personnel managing chronic infectious diseases such as hepatitis and HIV often develop confidence in their ability to prevent exposure through established precautions. However, in unpredictable and high-risk healthcare settings, stress levels may remain elevated due to factors such as uncertainty, high patient loads, and prolonged work shifts. Consequently, psychological distress can affect all healthcare professionals, regardless of department, role, or experience level. Our results reinforce the need for hospital-wide mental health support systems to mitigate stress among frontline staff.

Recognizing the mental health needs of healthcare professionals should be a key component of institutional strategies for workforce well-being. Large-scale crisis response plans should integrate psychological support services to ensure that medical personnel receive the care they need. Whether through in-person therapy, peer support programs, or digital interventions, structured mental health care can play a vital role in maintaining the resilience and effectiveness of healthcare workers.

Conclusion

In conclusion, this study highlights the substantial mental health challenges faced by healthcare providers and the pressing need for expanded access to psychological care. A considerable proportion of medical personnel experience mild to moderate distress, suggesting that preventive mental health strategies could play a crucial role in mitigating long-term consequences. Increased investment in mental health resources—including therapist-led interventions, peer support networks, and media-based educational initiatives—could enhance psychological resilience among healthcare workers and improve their overall well-being. Addressing these challenges will be essential in ensuring the sustainability and effectiveness of the healthcare workforce in high-stress environments.

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