

# Mental Health Disorders Among Allied Health Professionals: A Cross-Sectional Survey of Prevalence and Types

*Original Article*

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## Abstract

**Background:** Allied health professionals are exposed to high levels of stress and demands, which predispose them to mental health disorders. Understanding the prevalence and types of these disorders is crucial for developing effective support systems to enhance both their well-being and patient care quality.

**Objective:** To assess the prevalence and types of mental health disorders among allied health professionals, identifying potential risk factors impacting their mental well-being.

**Methods:** A cross-sectional survey was conducted among 110 allied health professionals using three standardized questionnaires: the General Health Questionnaire (GHQ-12), the Patient Health Questionnaire (PHQ-9), and the Generalized Anxiety Disorder Assessment (GAD-7). Participants were recruited using stratified random sampling to represent a range of specializations and geographic areas. Data were collected at baseline and after a three-month period to evaluate changes in mental health status. Statistical analysis included descriptive statistics, paired t-tests, and regression analysis to identify significant predictors of mental health outcomes.

**Results:** The initial assessment showed average scores of 15.2 (SD=3.6) for GHQ-12, 9.8 (SD=2.1) for PHQ-9, and 10.5 (SD=3.2) for GAD-7. At the three-month follow-up, these scores decreased to 14.1 (SD=3.8), 8.7 (SD=2.3), and 9.3 (SD=3.5), respectively, with statistical significance (p-values of 0.045 for GHQ-12, 0.033 for PHQ-9, and 0.028 for GAD-7).

**Conclusion:** The study demonstrated a significant reduction in symptoms of mental health disorders among allied health professionals over the study period. These findings suggest that targeted interventions and continued support can effectively enhance the mental health of this critical workforce.

**Keywords:** Allied Health, Anxiety, Depression, GHQ-12, GAD-7, Mental Health, PHQ-9, Prevalence, Stress

## INTRODUCTION

Allied health professionals, comprising a diverse array of roles critical to healthcare systems, face unique stressors inherent to their responsibilities in patient care, management, and clinical outcomes (1). These stressors, intensified by long hours, high demands, and frequent exposure to human suffering, predispose these workers to higher risks of mental health disorders (2). Understanding the mental health challenges faced by this segment of the healthcare workforce is crucial for developing effective interventions and support mechanisms, which not only enhance their well-being but also ensure the sustainability of quality patient care (3).

Research into the mental health of allied health professionals has grown, yet it remains fragmented, with varying focuses and methodologies that can obfuscate comprehensive conclusions (4). This study aims to bridge this gap by conducting a rigorous cross-sectional survey to map the prevalence and types of mental health disorders among these professionals (5). By employing standardized diagnostic criteria and robust statistical tools, the study seeks to provide reliable data that can inform health policy and workplace practices (6). Moreover, this approach allows for the identification of specific disorders prevalent in this cohort, such as anxiety, depression, and burnout, which are often reported but not systematically studied in this group (7).

The strength of this study lies in its comprehensive scope and the utilization of established diagnostic frameworks, which enhance the reliability of the findings (8). Additionally, the focus on a wide range of professional roles within the allied health field allows for a broad understanding of the sector (9). However, the study's cross-sectional nature introduces limitations, primarily its inability to ascertain causality between identified mental health conditions and the work environment (10). Longitudinal studies would be required to establish temporal relationships and potential causal factors contributing to mental health outcomes (11).

Controversially, while the healthcare system relies heavily on these professionals, the recognition of their mental health needs and the provision of necessary support remains inadequate (12). This disparity raises ethical concerns about the welfare of those tasked with caring for the health of populations (13). Furthermore, the stigma associated with mental health issues within professional circles can deter individuals from seeking help, thereby exacerbating their conditions and potentially compromising patient care (14). Addressing these challenges necessitates a cultural shift within healthcare institutions towards more supportive and less stigmatizing attitudes concerning mental health (15).

This research contributes to the ongoing debate on how best to support the mental well-being of healthcare workers (16). It highlights the need for healthcare policies that are inclusive of mental health resources and support systems tailored to the unique challenges faced by allied health professionals (17). Implementing such policies not only benefits the workers but also enhances the overall quality of healthcare by ensuring that those providing care are themselves supported (18).

The study underscores the significant prevalence and variety of mental health disorders among allied health professionals, drawing attention to the critical need for targeted interventions and policies. The findings serve as a call to action for healthcare leaders, policymakers, and researchers to prioritize mental health in the workplace, thus fostering a healthier work environment that can sustain the demands placed on these essential healthcare providers.

## **MATERIAL AND METHODS**

In this study, a total of 110 allied health professionals were recruited from various healthcare settings across urban and rural areas to participate in the survey. The sample included a diverse range of professions such as physical therapists, occupational therapists, radiologists, and laboratory technicians. Participants were selected using a stratified random sampling method to ensure representativeness across different specialties and geographic locations.

The research utilized three questionnaires to assess the mental health status of the participants. The General Health Questionnaire (GHQ-12), a well-validated tool, was employed to gauge general mental health and identify potential psychiatric disorders in the respondents. This questionnaire, consisting of 12 items, measures the severity of mental distress and the inability to carry out normal functions. Additionally, the Patient Health Questionnaire (PHQ-9) was used to specifically screen for the symptoms of depression. This tool includes nine questions that correspond to the diagnostic criteria for major depressive disorder. The Generalized Anxiety Disorder Assessment (GAD-7), consisting of seven items, was administered to assess the presence and severity of anxiety symptoms.

Data collection was conducted over a three-month period, where participants were invited to complete the questionnaires online. This method ensured privacy and encouraged candid responses from the participants, who were assured of the confidentiality of their responses. Upon completion, the responses were securely transferred to a database for analysis.

Statistical analysis was performed using SPSS software. Descriptive statistics were used to summarize the demographic characteristics and the overall mental health status of the participants. The prevalence of general mental health issues, symptoms of depression, and anxiety disorders were calculated based on the scores from the GHQ-12, PHQ-9, and GAD-7, respectively. Inferential statistics, including chi-square tests and logistic regression, were employed to explore associations between demographic factors (such as age, gender, years of experience) and mental health outcomes.

The methodological approach of this study, incorporating a comprehensive assessment of mental health through validated tools and a robust analysis plan, was designed to ensure the reliability and validity of the findings. This approach facilitated a thorough investigation into the mental health challenges faced by allied health professionals, providing valuable insights into the prevalence and types of mental health disorders within this critical workforce segment.

## **RESULTS**

The study results indicated a significant improvement in mental health among allied health professionals over a three-month period. The General Health Questionnaire (GHQ-12) scores decreased from 15.2 to 14.1, the Patient Health Questionnaire (PHQ-9) scores from 9.8 to 8.7, and the Generalized Anxiety Disorder (GAD-7) scores from 10.5 to 9.3. Statistical analysis confirmed these changes as significant, with p-values of 0.045 for GHQ-12, 0.033 for PHQ-9, and 0.028 for GAD-7, suggesting effective interventions or natural improvements in the participants' mental health conditions.

Table 1: Demographics of Health professionals

Characteristic	Total Participants (N=110)	Details
Age		Mean (SD): 35.7 (8.2) years
Gender		Male: 45 (41%) Female: 65 (59%)
BMI (kg/m <sup>2</sup> )		Mean (SD): 26.4 (4.5)
Location		Urban: 70 (64%) Rural: 40 (36%)

The study cohort comprised 110 allied health professionals with an average age of 35.7 years (SD = 8.2) and a mean BMI of 26.4 (SD = 4.5). The gender distribution was 41% male (n=45) and 59% female (n=65). Participants were predominantly from urban areas (64%, n=70), with 36% (n=40) from rural settings.

Table 2: Baseline and 3-month follow-up values

Test Name	Baseline Mean (SD)	3-Month Mean (SD)	P-Value
General Health Questionnaire (GHQ-12)	15.2 (3.6)	14.1 (3.8)	0.045
Patient Health Questionnaire (PHQ-9)	9.8 (2.1)	8.7 (2.3)	0.033
Generalized Anxiety Disorder (GAD-7)	10.5 (3.2)	9.3 (3.5)	0.028

The table presents a comparative analysis of mental health assessments conducted using the General Health Questionnaire (GHQ-12), Patient Health Questionnaire (PHQ-9), and Generalized Anxiety Disorder Assessment (GAD-7) among 110 allied health professionals at two time points: baseline and a 3-month follow-up. Initially, the average scores were 15.2 (SD = 3.6) for GHQ-12, 9.8 (SD = 2.1) for PHQ-9, and 10.5 (SD = 3.2) for GAD-7. By the 3-month mark, these scores decreased to 14.1 (SD = 3.8), 8.7 (SD = 2.3), and 9.3 (SD = 3.5), respectively. The statistical analysis revealed significant improvements, with p-values of 0.045 for GHQ-12, 0.033 for PHQ-9, and 0.028 for GAD-7, indicating a meaningful reduction in symptoms over the study period.

## DISCUSSION

The findings of this study underscored significant improvements in the mental health of allied health professionals, as evidenced by reductions in scores across the General Health Questionnaire, Patient Health Questionnaire, and Generalized Anxiety Disorder Assessment over a three-month period (19). These results highlight the potential efficacy of interventions aimed at reducing work-related stress and mental health issues among healthcare workers. Such interventions are crucial, given the high rates of burnout and mental health disorders historically reported in this group (20).

However, while the data suggests improvements, the inherent limitations of the study's design must be considered. The use of self-reported measures, although practical and widely accepted in psychological assessments, may introduce biases related to social desirability and self-awareness. Additionally, the cross-sectional nature of follow-up assessments restricts the ability to draw firm conclusions about causality. It remains uncertain whether the observed improvements were due to specific interventions, changes in workplace practices, or merely natural fluctuations in mental health status (21).

The study also did not account for external factors such as personal life stressors or broader economic conditions that could have impacted the mental health of participants during the study period. Future research should aim to incorporate these variables to provide a more comprehensive understanding of the factors influencing mental health in allied health professionals (22).

Debatably, the commitment to improving mental health in the workplace may reflect an increasing recognition of the importance of mental well-being among healthcare providers. This shift is crucial not only for the health of the workers but also for the quality of care they provide. Effective mental health support for healthcare workers can lead to better patient outcomes, more stable healthcare systems, and reduced costs related to employee turnover and absenteeism (23).

## CONCLUSION

The study presented important findings that contribute to the ongoing discussion about mental health in the healthcare sector. The significant reductions in mental health symptomatology among allied health professionals over the study period are encouraging, suggesting that targeted interventions can be effective. Nonetheless, the research highlighted the need for continued efforts to support the mental health of healthcare workers, incorporating more robust methodologies and broader contextual factors to fully understand

and address these issues. Further research is necessary to build on these findings and develop comprehensive strategies that ensure the well-being of those who care for our health.

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