

Prevalence of Anxiety and Depression Among Working Adults and Its Association with Work-Related Stress: A Community-Based Cross-Sectional Study

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Abstract

Background: Workplace mental health is increasingly recognized as a public health concern. Anxiety and depression among working adults often go unnoticed, affecting productivity and quality of life.

Objective: To determine the prevalence of anxiety and depression among working adults in a semi-urban community and assess its association with perceived work-related stress.

Methods: This cross-sectional study involved 400 working adults aged 21–60 years. Data were collected using the **Generalized Anxiety Disorder-7 (GAD-7)** scale, **Patient Health Questionnaire-9 (PHQ-9)** for depression, and **Perceived Stress Scale (PSS)**. Sociodemographic and occupational variables were recorded. Statistical analysis included chi-square tests and Pearson correlation.

Results: The prevalence of moderate to severe anxiety and depression was 25.3% and 29.8% respectively. High perceived stress was reported in 38.5% of participants. Significant associations were found between high stress levels and both anxiety ($p < 0.001$) and depression ($p < 0.001$). Individuals with longer working hours and lower income had higher rates of mental distress.

Conclusion: Anxiety and depression are prevalent among working adults and are strongly linked with work-related stress. Mental health interventions focusing on stress management and early screening are essential for this population.

Keywords: Anxiety, depression, working adults, stress, PSS, PHQ-9, GAD-7, mental health

Introduction

Mental health disorders among working-age populations are a growing concern worldwide. Among these, anxiety and depression are the most common and disabling conditions, often linked to occupational stress, lifestyle imbalance, and poor social support [1,2]. These disorders can lead to reduced productivity, absenteeism, and long-term disability, thus significantly affecting the individual and the economy [3].

Stress is an inevitable part of working life. While mild stress may enhance performance, chronic work-related stress is a significant risk factor for mental illness [4]. Long working hours, lack of control, poor workplace relationships, job insecurity, and financial constraints are important contributors [5,6].

In India, where the workforce is diverse and often exposed to challenging work environments, understanding the mental health burden among working adults is critical. However, limited community-based data exist on the prevalence of anxiety and depression in this population [7]. The National Mental Health Survey of India (2015–16) estimated that nearly 10% of the adult population suffers from common mental disorders, with work-related stressors being significant contributors [8].

This study was designed to estimate the prevalence of anxiety and depression among employed adults in a semi-urban setting and assess its association with work-related stress.

Materials and Methods

This community-based cross-sectional observational study was conducted over a six-month period in a semi-urban area affiliated with a tertiary care teaching hospital. The selected area represented a socioeconomically diverse population, with individuals engaged in various forms of employment, including government, private sector, and informal work. Ethical approval for the study was obtained from the Institutional Ethics Committee, and written informed consent was obtained from all participants prior to data collection.

The study included 400 working adults aged between 21 and 60 years who had been employed in paid work for at least one year and resided in the locality for more than six months. Participants were selected using stratified random sampling to ensure proportional representation from different occupational backgrounds. Individuals currently undergoing psychiatric treatment, with a known history of major neurological illness or substance dependence (excluding nicotine), were excluded from the study. Those unable to complete the questionnaires or unwilling to participate were also excluded.

Data collection was carried out by trained postgraduate residents in psychiatry, assisted by community health workers. Interviews were conducted in a confidential setting at the participants' homes or workplaces, based on their preference. A structured data sheet was used to collect sociodemographic and occupational details

such as age, gender, marital status, education, income, working hours, job satisfaction, and existing physical health conditions.

Standardized instruments were used for psychological assessment. Depression was assessed using the Patient Health Questionnaire-9 (PHQ-9), with a cutoff score of 10 indicating moderate to severe depression. Anxiety was evaluated using the Generalized Anxiety Disorder-7 (GAD-7) scale, where scores of 10 or more indicated moderate to severe anxiety. The Perceived Stress Scale (PSS-10) was used to measure the level of stress, with a score of 20 or above considered as high perceived stress. All questionnaires were available in English and the local language, and were pilot-tested prior to use.

The collected data were entered in Microsoft Excel and analyzed using SPSS version 22.0. Descriptive statistics were used to summarize demographic and clinical variables. Associations between categorical variables such as stress levels and depression or anxiety were tested using the chi-square test. Pearson correlation was used to assess the relationship between PSS scores and the scores for depression and anxiety. A p-value of less than 0.05 was considered statistically significant.

Participants found to have high levels of anxiety or depression were referred to the psychiatry outpatient department for further evaluation and counseling.

Results

Demographics:

Characteristic	Number (n = 400)	Percentage
Mean age (\pm SD)	38.2 \pm 9.4 yrs	–
Males	238	59.5%
Females	162	40.5%
Married	302	75.5%
Daily work hours >9 hrs	186	46.5%
Monthly income < ₹25,000	143	35.8%

Prevalence of Depression (PHQ-9):

Depression Severity	Number (%)
Minimal (0–4)	176 (44%)
Mild (5–9)	105 (26.2%)
Moderate (10–14)	64 (16%)
Severe (15–27)	55 (13.8%)

Total mod–severe:	119 (29.8%)
Prevalence of Anxiety (GAD-7):	
Anxiety Severity	Number (%)
Minimal (0–4)	204 (51%)
Mild (5–9)	94 (23.5%)
Moderate (10–14)	56 (14%)
Severe (15–21)	46 (11.5%)
Total mod–severe:	102 (25.3%)

Perceived Stress (PSS-10):

- **High stress (PSS ≥ 20):** 154 (38.5%)
- **Moderate stress (PSS 14–19):** 168 (42%)
- **Low stress (PSS ≤ 13):** 78 (19.5%)

Association Between Stress and Mental Health

Stress Level	Moderate–Severe Depression (%)	Moderate–Severe Anxiety (%)	p-value (Depression)	p-value (Anxiety)
Low	6/78 (7.7%)	5/78 (6.4%)	< 0.001**	< 0.001**
Moderate	38/168 (22.6%)	32/168 (19%)		
High	75/154 (48.7%)	65/154 (42.2%)		

Pearson Correlation:

- **PSS vs PHQ-9:** $r = 0.63, p < 0.001$
- **PSS vs GAD-7:** $r = 0.59, p < 0.001$

Discussion

This study shows a high prevalence of moderate to severe depression (29.8%) and anxiety (25.3%) among working adults. These findings are in line with national surveys and support the increasing burden of workplace-related psychological distress [8,9]. Similar prevalence rates have been reported in urban Indian and Southeast Asian populations, reflecting the rising psychosocial demands of modern work environments [10].

High levels of perceived stress (38.5%) among participants suggest that psychosocial work conditions are a major determinant of mental health [11]. Chronic stress alters hypothalamic–pituitary–adrenal axis function and can contribute to both anxiety and depressive symptoms [12].

Longer working hours and lower income were also associated with greater psychological morbidity in this study. International evidence shows that individuals working more than 55 hours per week are at higher risk of depression and anxiety [13]. Financial stress has also been shown to compound psychological distress, especially in low- and middle-income settings [14].

Significant correlations between PSS, PHQ-9, and GAD-7 scores further establish that stress is both a predictor and a mediator of anxiety and depression [15]. These findings highlight the urgent need for workplace wellness policies and mental health screening among employees. Evidence-based interventions such as employee assistance programs, cognitive-behavioral therapy (CBT), and organizational changes to reduce workload and improve job control have shown promising results [16,17].

Conclusion

Anxiety and depression are highly prevalent among working adults and are significantly associated with elevated perceived stress. Workplace interventions including stress management programs, flexible working hours, and access to mental health services can substantially improve employee well-being.

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