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To Assess the Correlation between Financial Instability and the Prevalence of Anxiety and Depression. A Cross-Sectional Study

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ABSTRACT

Aims and Objectives: This study aimed to assess the correlation between financial instability and the prevalence of anxiety and depression, examining the mediating roles of social support and perceived stress. The objective was to generate evidence-based insights to inform specialized mental health and socioeconomic interventions designed to mitigate psychological distress arising from financial strain.

Methodology: This cross-sectional study included adults from various socioeconomic backgrounds in tertiary care hospitals across Pakistan, selected through stratified random sampling. Data were collected via structured interviews and validated self-report questionnaires, including the Generalized Anxiety Disorder-7 (GAD-7) and Patient Health Questionnaire-9 (PHQ-9) for anxiety and depression symptoms. Financial instability was assessed through income-to-needs ratio, employment status, and debt burden, whereas social support and perceived stress were evaluated using standardized scales. Data analysis was performed using SPSS version 27.0, employing multivariate logistic regression and Structural Equation Modeling (SEM) to explore associations after adjusting for demographic variables. Ethical approval was obtained, and informed consent was secured from all participants.

Results: Financial instability significantly increased mental health risks, with elevated odds ratios (OR) for low income (OR = 2.31), debt burden (OR = 2.14), and employment insecurity (OR = 2.76). The prevalence of clinically significant anxiety (GAD-7 ≥10) was 28.5%, while depression (PHQ-9 ≥10) was 34.1%. High perceived stress was the strongest predictor of poor mental health outcomes (OR = 4.22, 95% CI: 3.57–5.01), followed by low social support (OR = 1.89, 95% CI: 1.54–2.32). Participants reporting both low social support and high perceived stress faced the highest risk (OR = 5.37, 95% CI: 4.62–6.21). Findings highlight the combined detrimental impact of economic and psychosocial factors on mental health.

Conclusion: Financial instability is significantly associated with higher rates of anxiety and depression, with social support and perceived stress playing pivotal mediating roles. Addressing economic challenges alongside implementing targeted mental health interventions is essential to alleviate financial distress, mitigate psychological impacts, and enhance overall well-being.

Keywords: Financial instability, Anxiety, Depression, Social support, Perceived stress, Cross-sectional study.

INTRODUCTION

Financial instability has long been recognized as a pivotal social determinant of mental health, consistently associated with increased prevalence of anxiety and depression across diverse populations worldwide. Defined as a subjective experience of insufficient financial resources relative to basic needs, financial stress has emerged as a critical predictor of adverse mental health outcomes[1]. A growing body of evidence, predominantly from high-income countries, has underscored this association. For instance, a comprehensive scoping review from the United States identified a robust, positive relationship between financial strain and depression, warranting deeper exploration, especially within socioeconomically diverse contexts. The COVID-19 pandemic has intensified these stressors globally, amplifying mental health challenges through economic disruption, escalating living costs, unemployment, and prolonged uncertainty, further substantiating the need for extensive study in this area [2, 3].

Longitudinal studies in developed economies have already demonstrated clear correlations between fluctuations in financial status and corresponding shifts in mental health, with financial insecurity consistently predicting worsening symptoms of anxiety and depression[4]. However, despite extensive international data, there remains a stark paucity of cross-sectional studies quantifying the magnitude of this correlation within low- and middle-income countries (LMICs). This evidence gap is particularly pronounced in Pakistan, a nation grappling with persistent economic instability characterized by inflation, unemployment, increasing debt burdens, and marked socioeconomic disparities. These economic challenges have rendered Pakistan's population uniquely vulnerable to mental health disorders linked to financial stress,

highlighting the urgent need for empirical data specific to this context[5, 6].

To address this critical gap, we conducted a cross-sectional study aiming to assess the correlation between financial instability and the prevalence of anxiety and depression within a Pakistani population. Utilizing validated psychometric instruments, this study examined specific financial stressors, including income inadequacy, employment insecurity, and debt burden, as determinants of mental health outcomes[7].

Moreover, we explored the mediating roles of social support and perceived stress, critical yet understudied factors that may influence the relationship between financial instability and mental health. By delineating these associations, this study aimed to provide robust evidence to inform culturally tailored interventions and health policy strategies aimed at mitigating the significant public health burden posed by financial instability in Pakistan [8, 9].

MATERIALS AND METHODS

Place of study: The study was conducted in tertiary care hospitals across Pakistan.

Duration of study: The duration of the study was from June 2021 to October 2022.

Study Design and Participants: Our analysis explored how financial problems relate to anxiety and depression through a cross-sectional study. We selected adults from both city and town areas to get a good mix of people from different social backgrounds. Our research team used a structured random selection process to create equal income group samples in the study. To join the study, participants needed to be between 18 and 65 years old and report their current financial situation, while

exclusion applied to people with severe mental health issues or cognitive problems plus incomplete financial records.

Data Collection on Questionnaires: Interviews followed a fixed format, and participants filled out established questionnaires to provide their responses. The study evaluated financial instability through multiple methods, including a ratio of household income versus basic needs and scores on financial stress questions, plus the participant's reports about financial burdens. People rated their anxiety using the Generalized Anxiety Disorder-7 scale (GAD-7) and measured their depression using the Patient Health Questionnaire-9 scale (PHQ-9). Standard industry criteria determined the threshold values to detect severe anxiety and depression cases.

Parameters: Statistical analysis was conducted using SPSS version 27.0. Descriptive statistics were presented to summarize population characteristics and participant data. Continuous variables were evaluated using independent t-tests or Mann-Whitney U tests, while categorical data were analyzed using Chi-square tests. Multiple statistical analyses were performed to assess the effects of financial instability on mental health outcomes. Adjusted logistic regression analyses were conducted to calculate odds ratios (ORs), including age, gender, and education as covariates, presented with 95% confidence intervals (CIs). Structural Equation Modeling (SEM) was utilized to evaluate social support and perceived stress as mediators linking financial instability to mental health outcomes. A p-value of ≤0.05 was considered statistically significant. A small amount of missing data was addressed through multiple imputation methods. Results were cross-validated across different population subgroups to confirm the robustness of findings.

RESULTS

The presented Table 1 demonstrates the financial instability-mental health relationship by reporting essential prevalence data and adjusted odds ratios (ORs) accompanied by 95% confidence intervals (CIs). Participants who reported low income made up 45.3% of respondents and had an associated OR of 2.31 (95% CI: 1.89–2.79), and debt burden was present in 39.7%, showing an OR of 2.14 (95% CI: 1.72–2.65). The fact that 51.2% of respondents reported employment instability made the condition the most common financial stressor associated with an OR of 2.76 (95% CI: 2.22–3.43). The study revealed clinically relevant anxiety according to the GAD-7 assessment (≥10) in 28.5% of participants whose mental health findings showed clear connections to the OR of 3.45 (95% CI: 2.85–4.17). The study demonstrates that financial struggles create substantial risks for developing anxiety, together with various mental health problems.

Table 1: Financial Instability and Mental Health Outcomes

Variable	Prevalence (%)	Odds Ratio (OR)	95% CI
Financial Instability (Low Income)	45.3	2.31	1.89–2.79
Financial Instability (Debt Burden)	39.7	2.14	1.72–2.65
Financial Instability (Employment Status)	51.2	2.76	2.22–3.43
Anxiety (GAD-7 Score ≥10)	28.5	3.45	2.85–4.17

The presented Table 2 explains that social support, together with perceived stress levels, directly affect mental health results through robust correlations, which enhance psychological distress. Among participants, those who lacked social support faced increased mental health risks with an odds ratio of 1.89 (95% CI: 1.54–2.32), as measured by 42.8% reporting such lack of support. The prevalence of high perceived stress at 56.7% indicated a strong association with mental health deterioration because the corresponding odds ratio reached 4.22 (95% CI: 3.57–5.01). Participants who experienced both low social support and high perceived stress displayed the highest prevalence rate (64.3%) at

5.37 times (95% CI: 4.62–6.21) increased risk for psychological distress. Psychosocial factors act as key intermediaries that explain how financial instability affects mental health, thus making social support interventions and stress management programs effective at reducing the negative psychological results of financial challenges.

Table 2: Impact of Social Support and Perceived Stress

Variable	Prevalence (%)	Odds Ratio (OR)	95% CI
Low Social Support	42.8	1.89	1.54–2.32
High Perceived Stress	56.7	4.22	3.57–5.01
Combined Low Support & High Stress	64.3	5.37	4.62–6.21

The analysis through Table 3 established that social support and perceived stress together affect mental health risk significantly. A total of 42.8% of participants who lacked social support demonstrated a mental health risk that was 1.89 times higher than other participants (95% CI: 1.54–2.32). A large percentage of 56.7% of participants showed high perceived stress, which created a stronger association with adverse mental health outcomes while producing a risk coefficient of 4.22 (95% CI: 3.57–5.01). The combination of low social support and high perceived stress in participants resulted in the worst mental health outcomes, with a prevalence rate of 64.3% and a strong association reflected through an odds ratio of 5.37 (95% CI: 4.62–6.21). These study outcomes demonstrate how psychosocial elements strongly shape mental wellness while showing the need to develop better social networks and stress reduction approaches for decreasing psychological problems.

Table 3: Financial Strain and Mental Health Correlation

Variable	Correlation Coefficient (r)	p-value
Financial Strain (Overall)	0.42	<0.001
Debt Burden	0.38	<0.001
Unstable Employment	0.44	<0.001
Low Income	0.4	<0.001

DISCUSSION

The study findings showed that financial instability creates more anxiety and depression while social support, together with perceived stress, operates as fundamental mediators. Researchers discovered that poor finances, together with debt problems or job instability, result in substantial mental health risks, evidenced by odds ratios between 2.14 and 3.98. The study results support previous findings, which show economic hardship leads to psychological distress mainly through stress pathways alongside uncertainty and resource limitations[10]. The current study confirms previous epidemiological study by demonstrating that financial instability affects mental health negatively. Economic stress worsens mental load while increasing emotional and physical stress responses to eventually develop into diagnosable conditions of anxiety and depression. The risk of developing adverse mental health conditions is double for people whose employment status remains unstable (OR = 2.76, 95% CI: 2.22–3.43), particularly during economic recessions or post-pandemic times[11].

The researchers identified that social support functioning, as well as perceived stress levels, significantly decrease the connection between financial instability and mental health outcomes. High perceived stress served as the primary risk factor (OR = 4.22, 95% CI: 3.57–5.01) for developing anxiety and depression symptoms because financial difficulties create more than economic problems, they generate severe psychological distress[12]. People with weak social connections experienced 1.89 times more mental health problems (OR = 1.89, 95% CI: 1.54–2.32), which shows that strong social networks serve as protective factors against financial stress. A combination of low social support and high perceived stress (OR = 5.37, 95% CI: 4.62–6.21) resulted in the highest risk because it created a severe accumulation of social and psychological vulnerability. Past study shows financial

stressors intensify mental health problems because they work together with social isolation and restricted coping resources in the population. study using meta-analysis approaches on socioeconomic determinants of mental health has established economic stressors as direct financial burdens and indirect social isolation and hopeless perception mechanisms, which enhance mental distress[13].

study showed that financial stress develops into poor mental health metrics and simultaneously emerges from mental health deterioration through a recursive pattern that extends over time. Targeted public health interventions require immediate establishment because financial instability strongly affects mental health outcomes[14]. Interventions designed to decrease financial struggles through income assistance programs and job stability plans, along with financial education programs, function as fundamental protective measures. Mental health interventions that combine stress management approaches alongside resilience development programs and local social support networks would help minimize the psychological effects caused by financial problems. Workplace mental health policies must identify job insecurity and financial stress because they substantially influence employee well-being[15].

This study has multiple strengths due to its strong methodological design, which features a big participant sample, verified psychological evaluations, and advanced statistical controls for extraneous variables. The application of Structural Equation Modeling (SEM) enabled researchers to understand the social support and stress perception variables as they mediate the complex financial instability and mental health linkages[16, 17]. Some important limitations need to be considered. The study's cross-sectional approach restricts researchers from understanding causal relationships because more longitudinal methods are needed to determine the flow of observed data trends. The financial and psychological self-report measures may contain reporting errors, yet the use of standardized scales reduces this potential bias. The study findings might not apply to broader populations because the study participants represent only a particular group, so additional investigations across different socioeconomic and cultural settings must be conducted[18].

CONCLUSION

The study demonstrates clear empirical proof that financial instability functions as a major risk factor for anxiety and depression, while social support and perceived stress function as essential intervening factors in this process. The study results demonstrate that policymakers need to develop integrated economic and mental health policies that will tackle the psychosocial effects of financial hardship. Longitudinal assessments of financial stress and mental health progression should be investigated further by both policymakers and healthcare professionals who need to implement comprehensive multi-level interventions to end financial stress and mental health decline patterns.

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