



# Echocardiography Findings Among Hospitalized Psychiatric Patients in Iran

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## Dear Editor

The increasing prevalence and burden of psychiatric disorders globally necessitates a comprehensive approach to patient care, one that includes diligent physical examinations and specialized evaluations to prevent mortality (1,2).

Recent studies have underscored the alarming rate of comorbidities in psychiatric patients, particularly cardiovascular diseases (3-5). Factors such as unhealthy lifestyles, substance abuse, and certain psychiatric medications contribute to this heightened risk (6-8). Yet, physical ailments in psychiatric settings are often neglected or insufficiently managed (9). For instance, a study in Iran revealed that 99.3% of psychiatric patients had at least one positive result in their initial physical examination, with 33% displaying cardiac abnormalities. Furthermore, T wave alterations were observed in 31.9% of the cases, and arrhythmias were identified in 14% of instances (10). These findings frequently go undiagnosed, as many psychiatrists either lack confidence in performing physical examinations or believe they should be conducted by other specialists (10-14).

Our review of medical records from 334 psychiatric patients who received cardiac consultations at Iran Psychiatric Hospital in 2018 underscores this issue. The average age of these patients was 38.27 years, with a significant portion being single, having a low educational level, and engaging in smoking or substance abuse. Schizophrenia and Bipolar disorder type 1 were the most common diagnoses, and Risperidone and Quetiapine were the prevalent medications prescribed. Echocardiography requested for these patients revealed that 51.6% had abnormal cardiac findings, with mild Mitral and Tricuspid valve Regurgitation (MR and TR) being the most common (21.38 and 19.49%). Additionally, Atrial Fibrillation (AF) was observed in 2.5% of cases, increased pulmonary pressure in 6.28%, and total frequency of mild and moderate Left Ventricular Hypertrophy (LVH) was reported at 8.17%. These findings are concerning, especially considering the known risks of premature death from cardiovascular diseases in

psychiatric patients (15-18).

Postmortem cardiac findings in schizophrenia patients indicate that cardiovascular diseases, suicide, and drug toxicity are major factors in premature mortality. The occurrence of unexplained, often sudden deaths could point to cardiac arrhythmias as a contributing cause, emphasizing the importance of the 2.5% AF incidence observed in our study (18).

The study's findings highlight the urgent need for regular cardiac examinations and specialized evaluations in psychiatric patients. For instance, our study identified pulmonary hypertension in a higher percentage of psychiatric patients compared to studies of the general population, suggesting an elevated risk of mortality (19,20). The prevalence of this condition has not been investigated in psychiatric patients, nor within the general Iranian populace, necessitating further study and reinforcing the need to integrate

cardiac care into psychiatric treatment protocols.

In summary, incorporating cardiac assessments into psychiatric care is imperative. We must embrace a holistic approach to patient care, ensuring equal attention to both mental and physical health.

### **Ethical Considerations**

Ethical principles were considered based on the Declaration of Helsinki. The study was approved by the IUMS ethics committee (IR.IUMS.FMD.REC.1399.369).

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### **Conflict of Interest**

There was no conflict of interest in this manuscript.

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