

PROTOCOL

Psychiatric comorbidity in hospitalized patients evaluated by psychiatric consultation in a Brazilian tertiary hospital: A study protocol

Comorbilidad psiquiátrica en pacientes hospitalizados evaluados por consulta psiquiátrica en un hospital terciario brasileño: un protocolo de estudio

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ABSTRACT

Introduction: the prevalence of mental disorders in the general population has been increasing in recent years, with the incidence of these diseases being even higher in hospitalized populations. The rates of depression in these patients are four to five times higher than in the general population. In this regard, it is important to understand the incidence of psychiatric disorders in different sectors of tertiary hospitals to recognize, locate, and treat the main pathologies and provide better medical care to hospitalized patients.

Objective: to assess the prevalence of psychiatric disorders and the demographic profile of patients hospitalized in a tertiary hospital in Brazil who underwent psychiatric consultation.

Method: this is an observational, descriptive, analytical, and retrospective study that will be conducted through the collection of patient records via psychiatric consultation, gathering demographic data and hospitalization-related data such as the origin of admission, primary diagnosis, psychiatric diagnosis, proposed treatment, among others.

Conclusions: the identified challenges include the underutilization of psychiatric consultations and variability in the protocols adopted. Improving services requires data uniformity and proper diagnosis to optimize hospital care quality and reduce costs.

Keywords: Psychiatry; Mental Disorders; Hospitalization.

RESUMEN

Introducción: la prevalencia de trastornos mentales en la población general ha aumentado en los últimos años, siendo la incidencia de estas enfermedades aún mayor en la población hospitalizada. Las tasas de depresión en estos pacientes son de cuatro a cinco veces más altas que en la población general. En este sentido, es importante conocer la incidencia de los trastornos psiquiátricos en los diferentes sectores de los hospitales terciarios para poder reconocer, localizar y tratar las principales patologías presentes, proporcionando una mejor atención médica a los pacientes hospitalizados.

Objetivo: evaluar la prevalencia de trastornos psiquiátricos y el perfil demográfico de los pacientes hospitalizados en un hospital terciario en Brasil sometidos a consulta psiquiátrica.

Método: se trata de un estudio observacional, descriptivo, analítico y retrospectivo, que se llevará a cabo mediante la recopilación de historias clínicas de los pacientes a través de consulta psiquiátrica, recogiendo datos demográficos y datos relacionados con la hospitalización, como el sector de origen, diagnóstico principal, diagnóstico psiquiátrico, tratamiento propuesto, entre otros.

Conclusiones: los desafíos identificados incluyen la infrautilización de las consultas psiquiátricas y la

variabilidad en los protocolos adoptados. Mejorar los servicios requiere uniformidad de los datos y un diagnóstico adecuado para optimizar la calidad de la atención hospitalaria y reducir los costos.

Palabras clave: Psiquiatría; Trastornos Mentales; Hospitalización.

INTRODUCTION

Mental health is determined by several components, such as conflicts, social injustice, and physical illnesses. (1) During the illness process, emotional state variation is intense, but it is essential to understand the patient's context and recognize that a certain degree of emotional deterioration is expected in such situations. However, it is crucial to emphasize that this state may progress and become pathological, culminating in psychiatric disorders, such as depressive and anxiety disorders, among others. (2)

Regarding the prevalence of mental disorders, in 2021, the four most prevalent disorders were bipolar disorder, attention-deficit hyperactivity disorder, depressive disorder, and anxiety disorders, with incidences in the general Brazilian population of 1,2 %, 2 %, 4,97 %, and 9,9 %, respectively. (3) When psychiatric morbidity is analyzed in individuals admitted to tertiary hospitals, the numbers are even higher, with depression rates ranging from 12 % to 20 %, delirium at 15 %, and anxiety at 8 %. (4)

In this context, the importance of psychiatric consultation is understood, as less than 50 % of patients with psychiatric disorders are diagnosed and treated in its absence. (5) Moreover, psychiatric comorbidities in patients admitted to tertiary hospitals are associated with increased health service resource use due to longer hospital stays. (6) Another study linked the presence of psychiatric comorbidities, such as depression and anxiety, to a greater number of symptoms in patients with chronic diseases. (7)

Regarding anxiety disorders, several stressors for hospitalized patients have been identified in the hospital environment, with pain, inability to sleep, frustration, and fear of the unknown being the most reported. (8) However, other individual characteristics are associated with the emergence of mental disorders in hospitalized patients, such as age, as elderly patients, compared to younger patients, are more likely to develop depression in the hospital setting. (9)

In addition to the hospital environment itself, the underlying disease significantly impacts the patient's mental health. It is known that certain diseases are more related to psychiatric comorbidities, such as cardiovascular diseases, which are often accompanied by depressive and anxiety disorders, with a high incidence in cardiac patients. In patients with acute coronary syndrome, the prevalence of these disorders is 48,4 % for anxiety and 26,4 % for depression. Despite being very common, these diseases remain underdiagnosed and untreated in these patients. (10) In this context, psychiatric disorders and the absence of correct diagnosis and treatment can interfere in the post-hospitalization period, causing higher rates of hospital readmissions, as diseases like depression are consistently associated with lower adherence to treatment after hospitalization, creating a vicious cycle for the patient. (11) Therefore, to implement an adequate and effective system for treating psychiatric disorders, it is necessary to have knowledge about the population receiving treatment for such diseases. (12) Currently, there is still little knowledge about psychiatric care in patients hospitalized for other comorbidities.

Thus, this study aims to analyze psychiatric morbidity in a tertiary hospital in Bauru - São Paulo - Brazil, given the need to understand the prevalence of mental health disorders in hospitalized patients. By knowing the incidence of these diseases, it is possible to better coordinate care, understand patients' needs more deeply, and identify possible stressors and other factors associated with the onset and worsening of these disorders. Additionally, from these epidemiological data, better ways to screen and treat these patients with psychiatric disorders can be found. Therefore, identifying and addressing psychiatric disorders in hospitalized patients is crucial (8) to improve mental health, enhance hospitalization quality, and reduce healthcare costs associated with longer hospital stays. (13)

OBJECTIVES

The primary objective of this study is to evaluate the prevalence of psychiatric disorders in patients admitted to the Bauru Clinical Hospital (HCB) who underwent psychiatric consultation. Additionally, secondary objectives include assessing the demographic profile of hospitalized patients evaluated by the HCB psychiatry department and correlating hospital stay duration with the psychiatric diagnosis.

METHOD

Study design

This is an observational, descriptive, analytical, and retrospective study. The study will be conducted by collecting data from medical records of patients admitted to any unit of the Bauru Clinical Hospital (HCB) who

underwent psychiatric consultation between February 2024 and February 2025. Psychiatric consultations at HCB are conducted upon request by the attending physician or other multidisciplinary team members, such as psychologists, social workers, and nurses. After the consultation request, the patient is assessed by a psychiatrist on the team through anamnesis, discussions with other team members, and family meetings. Using the medical records, data will be collected on the primary diagnosis, length of stay, outcomes, as well as demographic data, reasons for the consultation, psychiatric diagnosis, psychiatric history, psychiatric treatment, referrals, and other relevant information.

Sample selection and data collections

Patients with the following characteristics will be selected for analysis: patients admitted to any unit of the HCB, patients who underwent psychiatric consultation, and patients hospitalized between February 2024 and February 2025. Data will be collected retrospectively, and the data collection team will be properly trained to ensure uniformity in the process and prevent selection bias or human error. Researchers will follow a standardized protocol, which includes detailed instructions on what information needs to be collected, how to identify and record relevant data, and how to handle potential inconsistencies in the records.

Inclusion Criteria:

- Patients hospitalized in the HCB during the study period between February 2024 and February 2025.
- Patients who underwent psychiatric consultation.
- No age limit.
- Availability of complete medical records.

Exclusion Criteria:

- Patients transferred to other institutions or who died before completing the necessary evaluation for the study.

Statistical Analysis:

The prevalence of mental disorders in the HCB inpatient population will be estimated by analyzing patient medical records. Based on the data, distribution curves for each psychiatric diagnosis will be determined, establishing mean, standard deviation, and range. The prevalence estimate of mental disorders will be calculated as a simple percentage, according to the criteria of the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders: text revision (DSM-5-TR). Additionally, associations between demographic variables, clinical characteristics, and psychiatric diagnoses will be evaluated to identify correlations.

Descriptive Analysis:

Initially, a descriptive analysis of the variables will be performed, presenting means, standard deviations, and confidence intervals for continuous variables, and absolute and relative frequencies for categorical variables. For continuous variables such as age and length of hospital stay, mean, median, standard deviation, and interquartile range will be presented. For nominal variables such as gender and psychiatric diagnosis, frequency tables and percentages will be presented.

For group comparisons, the following statistical tests will be used:

- Student's t-test or Mann-Whitney test (for continuous variables).
- Chi-square test (χ^2) (for categorical variables).

The significance level for all tests will be set at $p < 0,05$. Statistical analyses will be performed using the SPSS version 21.0 statistical package. Additional analyses will be conducted in subgroups of interest, such as patients admitted to specific units (e.g., ICU vs. general ward) or patients with chronic comorbidities (e.g., cardiovascular diseases) to evaluate differences in the prevalence and type of psychiatric disorders in these subgroups.

Ethical considerations

This study will be conducted in accordance with the ethical guidelines established by the Declaration of Helsinki and the Brazilian norms regulated by Resolution 466/12 of the National Health Council. The research protocol will be submitted for review and approval by the Research Ethics Committee involving Human Subjects of the Bauru School of Dentistry, University of São Paulo (FOB/USP), before the start of data collection.

Since the study will be conducted by analyzing medical records of patients who were hospitalized and underwent psychiatric consultation, there will be no need for direct informed consent from the patients, as the study is retrospective. However, all confidentiality and privacy standards will be strictly followed.

DEVELOPMENT

In developing countries like Brazil, studies on psychiatric consultation face several limitations that hinder scientific production and the generation of robust data. Replicating the results of previous studies is still challenging due to the use of individual protocols in studies.⁽¹⁴⁾ Thus, new data are still needed to further develop and improve consultation services.⁽¹⁵⁾

Other difficulties encountered in psychiatric consultation services in general hospitals include underutilization⁽¹⁶⁾ and also utilization by patients who do not require psychiatric consultation.⁽¹⁷⁾ It is not uncommon for the service to be called upon due to patient refusal of the medical intervention proposed by the medical team and other incidents that do not require psychiatric consultation, causing an overload that may compromise the quality of care provided.⁽¹⁶⁾ Therefore, more data on the use of psychiatric consultation in general hospitals are needed to better understand the actual demand and optimize its use, avoiding both underutilization and misuse.

There are several strengths in our study. First, all participants will undergo a psychiatric diagnosis through clinical evaluation and according to DSM-5-TR criteria, by the same evaluator. Second, the psychiatric consultation team evaluates the research subjects at multiple time points, allowing for the observation of small changes, leading to precision in recording the results. Several challenges have been identified in the proposed study, such as the difficulty in obtaining previous psychiatric data in cases with follow-ups in other services, and participants who were not evaluated by psychiatry due to the clinical team's failure to identify mental health symptoms.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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