



ESTIMATING THE FREQUENCY OF MENTAL HEALTH ISSUES IN INPATIENTS ON A NEUROLOGY UNIT AND EVALUATING THE EFFECTIVENESS OF SCREENING QUESTIONNAIRES

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ABSTRACT

Studies on neurology ward patients have demonstrated elevated prevalence of mental health disorders. Previous reports have indicated a wide range of prevalence rates (39% to 64%) of psychiatric morbidity in neurological patients, with a notable poor identification rate of mental diseases in this population. This study aims to investigate the hypothesis that the psychiatric morbidity in neurological patients may influence their disease behaviors. The research, conducted at the Government General Hospital in Guntur, India, involved 58 neurological patients who completed the self-administered Illness Behaviour Questionnaire (IBQ). The IBQ, a 62-item measure with dichotomous (Yes/No) responses, was utilized to assess various components of sickness behaviors. Importantly, interviewers were unaware of the IBQ subscale ratings. Among the participants, 31 met DSM-III-R criteria for a mental condition, and 25% (8 patients) were diagnosed with depressive disorder (major depressive disorder or dysthymia). The study's findings suggest that neurological patients with psychiatric morbidity tend to exhibit more severe disease behaviors compared to their counterparts without psychiatric morbidity. If confirmed, these results emphasize the importance of considering the impact of mental morbidity on specific aspects of sickness behavior in the development of treatment approaches.

Keywords: Mental disorder, Psychiatry, Neurology, Depression.

Introduction:

Negative attitudes towards illness and the perception of physical problems as unmanageable are often linked to underlying mental health challenges [1]. Despite increasing concerns about the economic impact of psychiatric morbidity, the psychological aspects of physical sickness are frequently overlooked. A notable aspect of deviant disease behavior involves portraying sickness in a negative light [2]. Even when a doctor or another appropriate social agent provides a clear explanation of the illness's nature and the recommended treatment based on a thorough assessment, abnormal illness behavior can persist concerning one's own health [3].

It has been proposed that patients with psychological anguish exhibit atypical sickness behavior more frequently than patients with biological disease or those without distress. However, the participants in these studies, regardless of the presence of mental morbidity, exhibited physical symptoms categorized as "functional." In a specific study, individuals with physical symptoms related to a medical condition were examined separately from those whose symptoms lacked a clear medical connection. This particular study aimed to assess the various manifestations of sickness behavior among medical patients [4].

Therefore, it is impossible to provide a definitive response about the impact of mental illnesses on sickness behavior because of variables resulting from the diverse nosological backgrounds of each patient sample. Additional research revealed that patients who believe their disease has little bearing on their lives—that is, who believe their sickness has little effect on their sense of self and capacity for coping—are less likely to exhibit symptoms of anxiety and sadness [5]. Contrary to the findings of the mentioned study, other research indicated a positive association between how patients perceive illness and the bias in recalling illness-related words (referred to as "illness schemas") [6]. However, these studies did not establish a significant correlation between the way patients perceive illness and psychiatric symptoms. The difficulty in generalizing these findings arises because the existing literature lacks a standardized assessment of the quantifiable burden of suffering, which could serve as a benchmark [7, 8].

The question of whether psychiatric morbidity can impact or be impacted by the nature of illness behavior in patients with well-defined physical diseases remains unanswered according to the available literature. Consequently, it remains unclear whether the patients' perception of how their illness affects their lives truly represents the extent of their suffering, their illness schemas, or another concept that might be relevant to this context [9].

Aim:

In this study, we investigated the possibility that neurological patients' disease behaviors may be influenced by their psychiatric morbidity; we also evaluated the potential effects of these influences on the different elements of the clinical presentation of illness behaviors.

Methodology:**Settings:**

The investigation was carried out in the Government General Hospital's neurology department in Guntur, India. The Department receives admissions from its emergency service, which accepts walk-in patients for evaluation and treatment, as well as in-patient services, where patients are seen twice a week by appointment.

Sample Collection:

The sample was made up of 58 neurological inpatients, 20 women and 38 men, ages 18 to 72 (mean \pm S.D.: 41.1 ± 12.6 years), who were admitted one after the other over a six-month period in 2023 to two of the Department of Neurology's four inpatient units. To be considered a representative sample of all hospitalized individuals during the study period, the patients included exhibited a variety of diagnoses and varying degrees of sickness severity. Each of the 58 patients provided informed permission to take part in the research. Nine participants were removed from the research because they were unable to finish the self-administered questionnaire or did not want to participate. 56 patients (96% of the total) were married, 8 had divorced (14.2%), and 2 had never married (3.4%). Just 40 patients (68.9%) had completed just lower elementary school, 11 had completed high school (18.96%), and 7 had completed higher education (12%).

Study Procedure:

Patients answered the self-administered Illness Behaviour Questionnaire (IBQ), which was used in this investigation [10]. The IBQ subscale ratings were unknown to the interviewers. IBQ is a 62-item measure that allows for dichotomous (Yes/No) responses. The questionnaire generates scores in seven subscales derived from factors such as disease conviction, hypochondriasis, psychosomatic concern, affective inhibition, affective disturbance (dysphoria), denial, and irritability. Past studies have confirmed the questionnaire's validity and reliability. Additionally, the patients' sociodemographic information was recorded. Standard clinical procedures and laboratory tests were employed to establish the neurological diagnosis.

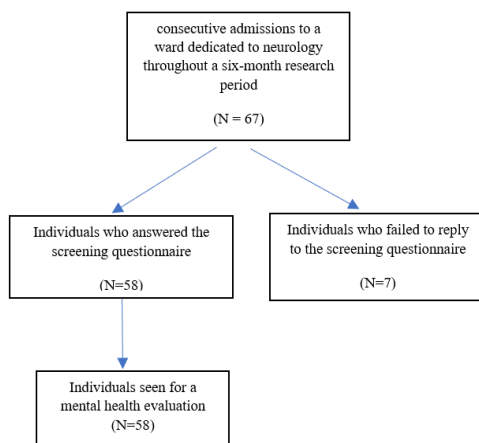
Data Analysis:

The study employed the Chi-Square test to identify possible differences in the proportions of neurological diagnoses among various groups. Additionally, one-way analysis of variance (ANOVA) was utilized to examine the variations in scores on the seven subscales across the groups.

Results:**Patients' characteristics:**

Figure 1 illustrates the 67 consecutive admissions that occurred throughout the research period. This investigation covered 58 patients in all. Of the patients, 26% had been hospitalized for diagnostic testing, and 74% had a known neurological diagnosis. Distribution of neurological diagnosis are represented in the Table 1.

Figure 1: Screening Process



Risk factors for mental health disorders:

The incidence of mental illness did not change across the groups according to respondents' age, sex, or whether or not they had a confirmed neurological diagnosis. As indicated in Table 2, the prevalent psychiatric diagnoses were primarily major depressive episode and dysthymic disorder, with generalized anxiety disorder following closely.

Table 1: The patient sample's distribution of neurologic diagnoses, N = 58

Diagnoses (N =58)	N (%)
Neuromuscular disorder	24 (41.3)
Epilepsy	11(18.9)
Degenerative disease of CNS	4(6.8)
Parkinson’s disease	4(6.8)
Motor neuron disease	3(5.1)
Cerebrovascular disease	2(3.4)
Brain stem syndrome—cranial nerve involvement	2(3.4)
Headache	8(13.7)

Table 2: Mental health evaluation, N= 58

Conditions characterized by depressive symptoms	8
Major depressive disorder	6
Dysthymic disorder	
Conditions marked by symptoms of anxiety	10
Generalised anxiety disorder	2
Agoraphobia	4
Adjustment disorder	
Somatisation disorder	1
False Beliefs (Delusions) Disorder	0
Total	31

Table 3: Comparing neurological patients according to the seven IBQ measures with and without mental problems

Scales	Psychiatric individuals with neurological conditions	Patients with neurological disorders but no psychological issues	F	P
Hypochondriasis	3.06 ± 1.9	2.25 ± 1.18	4.8	0.021
Disease conviction	2.32 ± 1.08	2.15 ± 1.28	3.7	0.02
Psychosomatic concern	1.03 ± 0.09	1.06 ± 0.13	0.9	Not Significant
Affective inhibition	1.06 ± 1.07	1.48 ± 1.01	0.41	Not Significant
Affective disturbance	2.32 ± 1.10	2.95 ± 1.82	4.3	0.01
Denial	2.22 ± 1.02	2.13 ± 1.11	4.1	0.002
Irritability	1.8 ± 1.14	1.76 ± 1.20	6.6	0.0013

Discussion:

Out of the 58 neurological patients, 31 met the DSM-III-R criteria for a mental condition, and approximately 25% of them, specifically 8 patients, received a diagnosis of depressive disorder (major depressive disorder or dysthymia). The prevalence of depressive disorders suggested the impact of mental illnesses on sickness behavior components, as individuals with psychiatric comorbidity demonstrated elevated scores in irritability, affective disturbance, disease conviction, and hypochondriasis [11, 12]. This study distinguished the particular elements of disease behavior that were strongly associated to psychiatric morbidity, and it is consistent with studies where patients scored considerably higher on the disease Behavior Scale than healthy controls. All the evaluations are represented in Table 3.

According to this research, the former are more afraid of being sick than the latter. It has been proposed that individuals suffering from hypochondriasis may believe that optimal health is only experienced at times when there are no symptoms and may interpret signs as a sign of illness [13]. Even though these patients are aware that their anxieties are unfounded, they may not be able to overcome their apprehensive attitudes about sickness. An elevated score on the Disease Conviction subscale might indicate that individuals with mental illnesses are more inclined to resist reassurance and express greater confidence in the severity of their illness.

Conclusion:

The current study's findings show that, in comparison to their peers without psychiatric morbidity, neurological patients with psychiatric morbidity often exhibit more severe disease behaviors. If these results hold true, it will be important to consider the impact of mental morbidity on certain aspects of sickness behavior when developing treatment approaches.

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