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Prevalence of Anxiety and Depression in Hospitalized Patients

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ABSTRACT

Hospitalization can be defined as the confinement of a patient in a hospital or the period of such confinement. Most health-care professionals concentrate on the possible somatic illness often overlooking the emotional factors associated with pain, disability and uncertainty to cope with the medical problem which may lead to feelings of anxiety and depression. Anxiety is a state of apprehension or unease arising out of anticipation of danger while depression is the sadness of mood or loss of interest and/or pleasure in almost all activities. Screening for anxiety or depression is not routinely employed despite symptoms of anxiety and depression being common at this point. The Prospective, cross-sectional study was carried out to screen hospitalized patients for anxiety and depression and find the correlation between them. Thirty patients, aged 30-50 years, hospitalized for at least 10 days & conscious and with no history of diagnosis of current or past psychiatric disorder or any previous history of hospitalization were screened on Beck's Anxiety Inventory and Beck's Depression Inventory. The prevalence of anxiety symptoms was found to be higher in males than females (16.64.97, 11.92.92); whereas depressive symptoms was higher in females than males (16.69.51, 15.75.94). The correlation between anxiety and depression score was found with significant *p* value <0.05. The study showed prevalence of anxiety and depressive symptoms in hospitalized patients as well as correlation between the two. It suggests that the introduction of these scales into general hospital practice would facilitate the large task of detection and management of emotional disorder in hospitalized patients and ensure an all rounded approach towards rehabilitation.

Key Words: Anxiety, Depression, Hospitalization

INTRODUCTION

Hospitalization can be defined as the confinement of a patient in a hospital or the period of such confinement. It can be an experience of being comforted and "cared for". However, when there is a loss of our normal activity and routines, it harbors feelings of loss of control over one's life. This coupled with the pain, disability and uncertainty to cope with the medical problem, can lead to feelings of anxiety and depression.[1]

Anxiety is a 'normal' phenomenon, which is characterized by a state of apprehension or unease arising out of anticipation of danger. Anxiety is often differentiated from fear, as fear is an apprehension in response to an external danger while in anxiety the danger is largely unknown (or internal). Normal anxiety becomes pathological when it causes significant subjective distress and/or impairment in functioning of an individual. Persons with trait anxiety often have episodes of state anxiety. The symptoms of

anxiety can be broadly classified in two groups: physical and psychological.[2] Fear is the emotional response to real or perceived imminent threat, whereas anxiety is anticipation of future threat.[3] Anxiety & depression share biological basis. They can occur sequentially or they can co-occur.[4]

The most important feature of depression is the sadness of mood or loss of interest and/or pleasure in almost all activities (pervasive sadness), present throughout the day (persistent sadness). The depressed mood varies little from day to day and is often not responsive to the environmental stimuli. The loss of interest in daily activities results in social withdrawal, decreased ability to function in occupational and interpersonal areas and decreased involvement in previously pleasurable activities. The lifetime risk of depression in males is 8-12% and in females is 20-26%. However, the life-time risk of depressive episode is about 8%.[2] Prevalence estimates of the disorder in the community are unclear. However, rates are expected to be higher in males and school-age children than in females and adolescents.[3]

Most health professionals concentrate on the possible somatic illness often overlooking the emotional factors involved in the same. These negative feelings of anxiety and depression not only play a role in the etiology of the illness but also, affect the prognosis of the disease.[1] Therefore, the aim of this study was to screen hospitalized patients for anxiety and depression and find the correlation between the them.

MATERIALS & METHOD

The cross-sectional study was conducted from September 2019 to January 2020 in private hospital. Written informed consents were obtained from the patients.

Inclusion & exclusion criteria: Patient aged 30 - 50 years, hospitalized for at least 10 days & who were conscious were included. Whereas, patients with a diagnosis of current or past psychiatric disorder & those with previous history of hospitalization were excluded from the study.

Procedure: Patients who met inclusion & exclusion criteria were screened on Beck's Anxiety Inventory and Beck's Depression Inventory.

Assessment Measures:

1. The Beck Anxiety Inventory (BAI)-

The Beck Anxiety Inventory (BAI), created by Aaron T. Beck and other colleagues, is a 21-question multiple-choice self-report inventory that is used for measuring the severity of anxiety in children and adults. The questions used in this measure ask about common symptoms of anxiety that the subject has had during the past week (including the day you take it) (such as numbness and tingling, sweating not due to heat and fear of the worst happening). It is designed for individuals who are of 17 years of age or older and takes 5 to 10 minutes to complete. The BAI contains 21 questions, each answer being scored on a scale value of 0 (not at all) to 3 (severely). Higher total scores indicate more severe anxiety symptoms.[5]

2. Beck's Depression Inventory (BDI)-

The Beck Depression Inventory (BDI, BDI-1A, BDI-II), created by Aaron T. Beck, is a 21-question multiple-choice self-report inventory, one of the most widely used psychometric tests for measuring the severity of depression in adolescents and adults. Items are summed to create a total score, with higher scores indicating higher levels of depression. It is worth noting that the BDI-II is not only extensively applied for research purposes but also in clinical practice.[6]

STATISTICAL ANALYSIS:

The data was analyzed using windows-based IBM Corp. Released 2016. IBM SPSS Statistics for Windows. Version 24.0. (Armonk;NY:IBM Corp.). Unpaired *t* test was used for comparison of mean between two groups. Pearson correlation test was used as statistical test of

significance. The value of *P* was set at 0.05 level of significance.

RESULTS

TABLE 1: SCORES OF BAI AND BDI

SCORE	Sex	N	Mean	SD	Confidence Interval	
					Upper limit	Lower limit
BAI	Male	20	16.6	4.97	14.274	18.926
	Female	10	11.9	2.92	9.811	13.989
BDI	Male	20	15.7	5.94	12.920	18.480
	Female	10	16.6	9.51	9.797	23.403

Table 1 shows the demonstrates the prevalence of anxiety symptoms was higher in males than females (16.6±4.97, 11.9±2.92); whereas depressive symptoms was higher in females than males (16.6±9.51, 15.7±5.94).

TABLE 2: CORRELATION BETWEEN BAI AND BDI

N=30	BDI	
	Pearson Correlation (r)	Sig. (two tailed) (p)
BAI	0.5869	0.000652***

****Highly significant*

Table 2 shows correlation between BAI and BDI score which is markedly positive with significant p value <0.05.

DISCUSSION

Thirty hospitalized patients who met the inclusion criteria were screened for anxiety and depression using BAI and BDI. The evidence for correlation between anxiety & depression in hospitalized patients is limited. Screening of hospitalized patients for mood disturbances could help in identifying those with a higher probability to develop poor outcomes. This is of particular importance when considering that depression and anxiety have been associated with readmission, higher morbidity and mortality, and even post-discharge psychiatric diagnosis.[7] Hence in this study, the prevalence of anxiety and depression in hospitalized patients was analyzed for correlation between the two. The study demanded the patient to be completely oriented in time, place and person as the scoring of the questionnaires were subjective and answered by the patients themselves. Also, the study excluded the patients with previous history of hospitalization as they might have got accustomed to the hospital environment during their stays due to which they might have not shown significant rise in depression and anxiety levels in the period of their current stay.

In this study, hospitalized patients showed symptoms of anxiety and depression. This can be supported by Gammon J. who conducted study to find psychological effects of hospitalization; which showed elevated levels of depression and anxiety in hospitalized patients.[8] According to studies Depression and depressive symptoms are more prevalent in females than in males. It is important to realize that some instruments meant for screening depression may include gender-biased items and therefore give too high scores of depression in females.[9]

The current study tried to analyzed for association between anxiety & depression in hospitalized patients and found that there was correlation between the two. The above findings are supported by Haug et al. who concluded that the association was equally strong for anxiety & depression, and somewhat stronger association was observed for co-morbid anxiety & depression in both men & women.[10]

The study was conducted on a small sample size with more male population in comparison to female population. The study has considered the patient only in the context of hospital stay. Also other factors which may affect the patient's responses to the questionnaire are not taken into consideration.

CONCLUSION

The current study concludes that there is prevalence of anxiety and depression in hospitalized patients. The mental health of a patient plays a major role in not only the aetiology but also, the prognosis of the disease. Most health care professionals are aware of this aspect of the

illness but tend to neglect it in the face of the more obvious somatic symptoms. Hence, all health care professionals must approach the patient and design their treatment in a more holistic manner. This all rounded approach towards rehabilitation will not only ensure improved effectiveness of the treatment but also, better rapport between the patient and the health-care team.

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