

**LONG HOSPITAL STAY MAY LEAD TO DEPRESSION?**Ashish Vilas Saboo<sup>1</sup>, Anurag Virendra Khapri<sup>2</sup><sup>1</sup>Associate Professor, Department of Psychiatry, Dr. PDM Medical College, Amravati, Maharashtra.<sup>2</sup>Resident, Department of Psychiatry, Dr. PDM Medical College, Amravati, Maharashtra.**ABSTRACT****BACKGROUND**

A significant percentage of patients admitted in the hospital for some other ailments for duration longer than their expectations may suffer from depression during their hospitalization. Aim of the study is to assess the prevalence of depression in patients hospitalized for long duration.

**MATERIALS AND METHODS**

Patients admitted in indoor wards of different departments of the hospital fulfilling selection criterion were recruited for the purpose of the study. The recruited persons who were likely to have to stay for 3 weeks or more were interviewed in detail at time of admission and after 3 weeks of hospitalization by using the special proforma prepared for the study and were administered Brief Assessment Scale (BAS) for Depression & Hamilton's Depression Rating Scale (HDRS). The data collected from the patients was entered in Excel sheet & then tabulated and analysed.

**RESULTS**

Initially about 100 patients were recruited for the study; out of which 70 patients from different wards were admitted for 21 days or more. About 39 patients i.e. 55.71% were found to be suffering from depression at the end of 3 weeks of hospital stay as compared to just 12% at the time of admission. Also, the severity of depression found to be more in patients after 3 weeks of hospital stay.

**CONCLUSION**

This study shows us that depression can be a negative outcome of patients hospitalized for long duration. One needs to keep that in mind while treating patients on indoor basis.

**KEYWORDS**

Depression, Hospitalization, Long Stay.

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**BACKGROUND**

Many medical conditions require hospitalization for a long duration, patients having certain medical illnesses, post-operative patients of orthopaedic and surgery department, patients with chronic debilitating diseases like TB, cancer, etc usually have a long stay for one month or more. But, however serious the conditions may be the patients are usually not mentally prepared for long hospital stay. This prolonged hospitalization then acts as a stressor to the patient and can have psychological consequences like Depression.

Depression is a mental disorder characterized by feeling of sadness, loneliness, despair, low self-esteem and self-reproach; accommodating signs include psychomotor retardation or at times agitation, withdrawal from

interpersonal contact and vegetative symptoms, such as insomnia and anorexia.<sup>1</sup>

Depression is second most common chronic condition (after hypertension) treated in general medical practice.<sup>2</sup> It is characterised by feelings of low mood, loss of interest in activities, negative thoughts, withdrawn from interpersonal contacts, irritability, thoughts of hopelessness, helplessness, worthlessness, guilt feelings and insomnia.

Depression can occur primarily or secondary to other medical conditions. Primary depression affects about 10 to 15% of population worldwide.<sup>3</sup>

Depression is viewed as psychological consequence of medical illness. Patient with co-morbid medical condition and major depressive disorder are at high risk of rapid progression of medical illness.

There is higher prevalence of major depressive disorder (MDD)<sup>4,5</sup> in medically ill subjects than normal population.<sup>6</sup> Also presence of depression is associated with lower recovery rates and poorer function in individuals with medical illness.<sup>7</sup>

We therefore aimed to investigate if long term stay in the hospital is associated with increased incidence of depression. In general, the patients in the medical or surgical wards are admitted in the hospital for one or two

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weeks. So, we took 3 weeks or more as the duration of prolonged hospital stay. Several studies have investigated the relationship between depression and hospital outcome in specific populations (e.g. cardiovascular patients, diabetes patients, etc)<sup>8-11</sup> and most have reported positive associations.

**Aim of the Study**

To study prevalence of depression in patients hospitalized for longer duration and also to assess the severity of depression.

**MATERIALS AND METHODS**

**Study Subjects**

Patients included are above 18 years who are admitted in different wards of hospital for duration of 3 weeks or more with not diagnosed case of any psychiatric illness and willing to give consent for study.

**Methods**

A semi structured interview carried out by using Brief Assessment Scale for depression (BAS) and Hamilton Depression Rating Scale (HDRS) to patients admitted in different wards of hospital likely to have a stay of 3 weeks or longer for presence and assessment of depression. All the subjects were assessed twice, initially at the time of admission & then again after a period of three weeks.

**Study Design**

Cross-sectional observational study.

**Sample Size**

By considering prevalence of depression to be in range of 11% to 20% at 20% absolute precision and 95% confidence interval, the estimated sample size is 66, which are rounded off to 70 patients. Approximately 100 patients were taken for study having likely stay for having 3 weeks or more.

**Duration of Study**

6 months.

**RESULTS**

This study was a cross sectional study in design; subjects were recruited on a purposive basis from the in-patient Department of Medicine, Surgery, Gynaecology, Respiratory Medicine, Orthopaedics and Dermatology in hospital. Recruitment was accomplished by using inclusion and exclusion criteria's and consent was taken for the participation in the study.

Initially about 100 subjects were taken up for the study. Of these 70 patients were available for the second phase of the interview.

|                    | <b>At Admission</b> | <b>After 3 weeks</b> |
|--------------------|---------------------|----------------------|
| Depression Present | 12 (12%)            | 39 (55.71%)          |
| Depression Absent  | 88 (88%)            | 31 (44.28%)          |
| <b>Total</b>       | <b>100 (100%)</b>   | <b>70 (100%)</b>     |

**Table 1. Distribution of Patients According to Brief Assessment Scale for Depression**

As shown in Table 1, when 100 patients were enrolled for the study, approximately 12 patients were suffering from depression while 88 patients were found normal on this scale. When these patients were reassessed after three weeks of hospital stay only 70 patients were assessed, others were not available (discharged or died). 39 patients out of 70 i.e. 55.71% of the patients were detected to be suffering from depression and 31 patients i.e. 44.28% were normal.

|                     | <b>At Admission</b> | <b>After 3 weeks</b> |
|---------------------|---------------------|----------------------|
| No Depression       | 88 (88%)            | 31 (44.28%)          |
| Mild Depression     | 8 (8%)              | 12 (17.14%)          |
| Moderate Depression | 3 (3%)              | 19 (27.14%)          |
| Severe Depression   | 1 (1%)              | 8 (11.42%)           |
| Total               | 100 (100%)          | 70 (100%)            |

**Table 2. Distribution of Patients According to Hamilton Depression Rating Scale**

As shown in table 2, the scores as per the Hamilton's Depression Rating Scale (HDRS), at the time of admission out of 12 patients suffering from depression 8 patients had mild depression, 3 patients moderate depression while one patient had severe depression. When reassessed after three weeks there was significant in rise of all three categories of depression. Mild depression was seen in 12 out of 70 patients i.e. 17%, Moderate depression was seen in 19 i.e. 27% of patients while Severe depression was seen in 8 i.e. 11.4% of patients.

**DISCUSSION**

Health problems may linger longer if they are coupled with mental health problems. A new study finds that depression can be a complicating factor for more time spent at the hospital. Researchers suggest that treating depressive symptoms in patients with physical illnesses could result in shorter stints in the hospital and overall less cost in health care.

In our study, we found out that initially when we assessed all the subjects with different medical ailments the depression was present in 12% patients which is more or less comparable to the general population. In General population approximately 10 to 15% of the patients suffer from depression.<sup>3</sup> Also majority of the patients were having mild depression. But as carry out the second phase of our study, the figures changed over dramatically. Here more than 50% of the patients were suffering from depression. And also we found out that there were high numbers of patients with more severe depression as compared to in the beginning. This clearly indicates that these patients must have acquired Depression during their hospital stay.

The question arises why should so many patients acquire Depression in their hospital stay? The probable explanations may be as follows. The patients may get sick while going through all the sufferings, pains which they face during their long hospital stay. It is very obvious, longer the stay more is the sufferings. Patients observe the pain &

sufferings of others, also the troubles they cause to their relatives & caretakers; that can also lower their mood. Patients when staying in the hospital bed usually have nothing to do but lie down on the bed. It is a known fact that work and depression are opposite phenomena. Since the patients do not have any work to do other than just keep thinking and thoughts coming are also more of worrisome and negative in nature, naturally the patients become more susceptible to depression.

Also, depression can affect the outcome of other medical illnesses. It is proven fact that depression can affect wound healing. It can delay the healing process. So, recovery from the surgical illnesses is slow with depression. Similarly, depression can have adverse effects on many chronic medical illnesses like diabetes, hypertension, stroke, rheumatoid arthritis, osteoarthritis, neurodermatitis, psoriasis, malignancies, etc. Depression can not only worsen the symptoms of these illnesses but also can affect the efficacy of various medication & other treatment modalities of these illnesses. Depression can cause cognitive impairment in many elderly and susceptible individuals especially those with long standing chronic medical illnesses like diabetes, hypertension, cerebrovascular disorders. This declining cognition can further delay the recovery and can affect the quality of life.<sup>8-11</sup>

Long term hospitalization itself could cause a poor quality of life. That coupled with the prevalence of depression could further deteriorate the quality of life of the hospitalized patients. The goal of treatment should not only be symptomatic but also must be to restore patients' quality of life to near premorbid condition.

### CONCLUSION

Hospitalization is required in certain conditions; but an attempt is to be done to minimize the hospital stay as prolonged hospitalization can have its own implications. Depression can be one of the complications of prolonged hospitalization. One has to keep this thing in mind and diagnose the condition & manage it at the earliest.

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