

# An analysis of acute admissions to a general hospital psychiatric unit

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## ABSTRACT

Rapid turnover of patients in a general hospital psychiatric unit demands stabilization and discharge as soon as possible. It is likely that patients are being prematurely discharged because of this pressure.

**Aim:** The study sought to analyse admissions to an acute psychiatric unit with a view to determining the demographic distribution of the patients, duration of stay, and patterns of substance abuse with specific emphasis on patients discharged within seven days of admission.

**Method:** One hundred and thirty five consecutive patients, 18 years and older, who were admitted to the unit during a three-month period were included in the study. The data was obtained from a questionnaire, completed by the doctor on discharge.

**Results:** Nearly 40% of the patients were discharged within seven days of admission. Most of the patients were youthful, substance abusing males with a past psychiatric history of either an Axis I or a co-morbid Axis II disorder, and had defaulted on their regular follow up.

**Conclusion:** The profile of the short stay admissions suggests that our concerns regarding premature discharge are unjustified.

## Key words:

Acute admissions, Psychiatric, General hospital

## INTRODUCTION

In post-apartheid South Africa the organisation and delivery of mental health care is undergoing significant change. With the heritage of an under-resourced, fragmented and racially inequitable service that is heavily reliant on chronic custodial treatment, this change is long overdue.

The effectiveness of care in psychiatric hospitals is important to patients, care-givers, and policymakers irrespective of the quality and quantity of community care and the provision of newer psychotic drugs. Lund & Flischer<sup>1</sup> found that the national average length of admission is 219 days in psychiatric hospitals, 11 days in general regional hospitals and 7 days in general district hospitals. Inpatient costs use around 80% of mental health resources.<sup>2</sup> Recent emphasis on cutting the costs of psychiatric care has stimulated debate about the proper length of psychiatric hospitalization.<sup>3</sup>

In a review of several controlled studies on different lengths of psychiatric hospitalizations, Matees JA<sup>4</sup> noted that longer stay does not decrease subsequent hospitalization, and does not clearly improve social adjustment or diminish psychopathology. Long-term hospitalization may increase the patient's commitment to continued psychiatric care, but short stay with optimal aftercare planning may be just as beneficial. Long-term hospitalization is necessary clinically for some patients, but the evidence is consistent and convincing in indicating that hospitalization should be kept as short as feasible.

However, Segal et al<sup>5</sup> report that brief hospitalization (an average of six days) after the evaluation did not have a significant prophylactic effect, perhaps because the reduced length of inpatient stay did not allow adequate resolution of the patient's clinical condition. Reduced length of stay in hospital is cited as one of the reasons for failure of community care<sup>6</sup> and the emergence of "revolving door" and "new

long stay" patients.<sup>7,8</sup>

The important question still remains: how long should a person with mental illness stay in a hospital for optimum benefit (and least harm) both to the patient and to society. Helen Joseph Hospital (HJH) is a regional academic hospital situated in Auckland Park in Central Gauteng. It has a specialist psychiatric unit with facilities for 32 inpatients. It admits acutely ill patients from four regions of Gauteng. Statistics for 1999 showed that Helen Joseph Hospital admits on the average 53 new patients every month. This rapid turnover at HJH necessitates stabilization and discharge as soon as possible. Concerns were raised as to whether this pressure might result in patients being inadequately managed. The objectives of the current study were to analyse admissions to the acute psychiatric unit at Helen Joseph Hospital with a view to determining the demographic distribution of the patients, duration of stay, and patterns of substance abuse with specific emphasis on patients discharged within seven days of admission.

## METHOD

The study included 135 consecutive admissions, 18 years and older, to Helen Joseph Hospital during the period March to May 2000. All subjects gave verbal informed consent to participate in the study, which was approved by the Committee for Research On Human Subjects, University of Witwatersrand. Patients under the age of 18 years were excluded from the study. The study was in the form of a questionnaire (available from 1st author), which was completed by the doctor in charge at the time of discharge from the ward. Patients were diagnosed with psychiatric disorders according to the criteria for DSM-IV.<sup>9</sup> Discharge within seven days of admission was considered as short stay. Descriptive statistics were utilized and the percentage of patients for each variable is stated.

## RESULTS

### Characteristics of the total patient population

The characteristics of the patients are shown in Table 1. There was a relatively even distribution of patients across the age groups but sig-

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nificantly only 2% over the age of 65. The gender ratio was virtually 1:1 and Black patients were in the majority. Only 22% of the patients were married. 73% of the patients were unemployed, despite the fact that about 70% of the patients had a minimum of a Grade 10 education. Substance abuse was common amongst the patients, with alcohol being the most widely abused.

**Table I: Characteristics of the total patient group.**

AGE	18-30 years	34
	31-45 years	43
	46-64 years	21
	>65 years	2
GENDER	Male	46
	Female	54
RACE	Black	45
	White	31
	Colored	17
	Indian	7
MARITAL STATUS	Single	52
	Married	22
EMPLOYMENT STATUS	Separated/divorced	26
	Employed	27
	Unemployed	73
HIGHEST LEVEL OF EDUCATION	Nil - Grade 10	70
	Grade 10-12	6
	Degree/Diploma	12
	Unknown	12
PRESENCE OF SUBSTANCE ABUSE	Yes	51
	No	49
TYPE OF SUBSTANCE	Cannabis	38
	Alcohol	44
	Benzodiazepine	9
	Other	9

### Characteristics of the patients in the short stay group (discharged within seven days of admission)

The characteristics of this group of patients are shown in Table II. 37% of the patients had a duration of stay in the hospital that was short. Within this group, 63% were males, 49% were between ages 18 – 30 years and 61% were abusing substances. 61% of this short stay group had been previously admitted to a psychiatric hospital of which 41% had a previously diagnosed Axis I disorder and 93% had a previously diagnosed Axis II disorder.

## DISCUSSION

### The total patient population

According to the latest South African census the population is 43,586,097 and the racial distribution is: black 75.2%, white 13.6%, Colored 8.6%, Indian 2.6%.<sup>10</sup> The distribution of the study population was reasonably representative of that of the country as a whole. It is possible that many of the patients who reported being single (52%) were in fact co-habiting and not legally married.

The high rate of unemployment amongst the patient population

**Table II: Characteristics of the patients that were discharged within seven days of admission**

GENDER	Male	63
	Female	37
AGE (years)	18-30	49
	31-45	29
	46-65	22
	>65	-
SUBSTANCE ABUSE	Yes	61
	No	39
ADMISSION STATUS	Previous admission	61
	First admission	39
PREVIOUS DIAGNOSIS	Axis 1 disorder	44
	Axis 2 disorder	93
FOLLOW – UP IN LAST 6 MONTHS	Regular	
	Irregular	

may be a reflection of the economic climate prevailing in the country or that mentally ill patients are stigmatised and find it difficult to obtain work.<sup>11</sup>

### Short stay sub-group of patients

An analysis of this group of patients revealed a profile of patients that were mostly males, between ages 18 and 30 and abusing substances. In a study in Western Cape, Van der Merwe et al<sup>12</sup>, identified a similar group of patients that were discharged within 7 days of involuntary admission to a psychiatric hospital. They concluded that these involuntary admissions were unnecessary and should have been managed by a general hospital. The proposed Mental Health Care Bill<sup>13</sup> allows for 72 hours involuntary admission to a general hospital, after which the patients have to be reassessed, thus decreasing the amount of time such patients stay in the hospital.

The findings of the current study further highlights this group of patients and lends some support to such a provision in the new Bill.

As general hospitals search for ways to cut costs without sacrificing efficiency, particular attention has been focused on factors that may be predictive of the length of stay.

McCrone et al<sup>14</sup> and Caton et al<sup>15</sup> in their reviews concluded that diagnosis alone, even when clearly defined, is not an accurate predictor of length of stay but may have predictive ability when combined with other data.

Saravay et al<sup>16</sup> found that depression, anxiety, and organicity, measured by psychological tests, were significantly correlated with longer hospital stay, whilst Sajatovic et al<sup>17</sup> suggest that women over age 50 have longer stays than younger women.

Goffman<sup>18</sup> suggests that longer hospitalisation led to difficulties for patients in re-entering the “real world.” In addition, short stay care with discharge planning and a date for discharge is both focused and coordinated compared with standard care (similar to the care provided in stroke units). Patients may also prefer short hospital stays (which may help improve engagement in treatment).

The current study found the following common features in the short stay group: young males, abusing substances, a previous admission to a psychiatric hospital and co-morbid psychological (Axis II) disorder. It is possible that Axis II disorders usually present in a crisis situation and require containment for a few days after which they can safely re-integrate into society. These findings are similar to those of other studies and can serve to predict the length of stay and to obviate long costly admissions.

Reduced length of stay in hospital is cited as one of the reasons for the emergence of “revolving door” and “new long stay” patients. Variables with the highest predictive power for readmission were the interval between first and second admissions, the length of stay in the first admission<sup>19</sup> and a diagnosis of a psychotic disorder.<sup>20</sup> In addition psychiatric disorders appear to place an individual at risk for irregular medical care.<sup>21</sup> In the short stay group of the current study, the majority were patients with a previous admission for an Axis I disorders who had relapsed due to defaulting on their medication. With re-introduction of their maintenance medication they settled quickly. Regrettably other details of their previous admissions were not recorded.

## CONCLUSION

Concerns regarding the rapid turnover and thus inadequate management of short stay patients are perhaps unjustified, in that the profiles of such patients suggest that a longer duration would not be warranted.

It may be precisely these patients who do not receive adequate rehabilitative intervention that contribute to the “revolving door” phenomenon, placing pressure on an already strained system. With psycho-education before discharge, identification and appropriate onward referral to a longer stay setting we believe that we could reduce this risk.

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### COMMENTARY

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Length of hospitalisation has undeniable budgetary implications for the already cash-strapped government hospitals. The new Mental Health Care Act obliges general government hospitals to admit acute psychiatric patients. The management of general hospitals would like to see any admissions to be as short as possible. While psychiatrists do not oppose it out of hand, they would not like to compromise the quality of treatment. It is bound to cause tension. There already is a vast difference in what psychiatrists and general hospital management mean by acute admission periods. Seven days or less (as in this paper) will fall well on the ears of general hospital management.

Moosa and Jeenah tackled the topical question concerning length of psychiatric hospitalisation and adequacy of management. Their subjects were 135 consecutive patients of 18 years or older who were admitted to an acute inpatient psychiatric facility. They then concentrated their efforts on those who were discharged within 7 days. They collected information like: demographic data; DSM IV diagnosis, compliance with treatment before admission; substance abuse; duration of stay.

The authors found that nearly 40% of all patients were discharged within 7 days. They show that most of those subjects had the follow-

ing characteristics: having been young males, having abused substances, having had previous admissions to a psychiatric hospital, having had a comorbid Axis II disorder, and having defaulted on treatment.

Moosa and Jeenah argue that for this specific group, a short stay was most likely effective, and that for them continued successful treatment outside of hospital probably relies on interventions that are not necessarily the domain of inpatient management.

The worth of the study lies in its having shown that it can be expected that a sizable proportion of patients admitted to an acute psychiatric inpatient facility, could be managed by brief admission. It has obvious implications for planning and budgeting.

However, the final conclusion namely, that concerns regarding early (the authors write, "premature") discharge are unjustified, may be overoptimistic, since one cannot generalize from this group of subjects to all other categories of acute psychiatric inpatients. The study did not address those subjects that were admitted briefly, but did not fit the characteristics of the group (for instance being middle aged, not abusing substances, having complied with treatment etc). Neither did the study concentrate on the larger proportion of patients that were hospitalised longer.

Although it is good news that one can expect many acute psychiatric admissions to be brief with adequate results, one must spare a thought for other categories of acute psychiatric inpatients where a stay of 7 days or less will prove to be inadequate. **SAPR**

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