

Assessment of Causes of Psychiatric Readmissions in Selected In-Patient Mental Health Setup

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ABSTRACT

Introduction: In current psychiatric practices there are many opportunities to reduce readmission rates by further development and optimal utilization of biological and psychosocial intervention. Therefore the researcher has planned to take study which will reveal causes for psychiatric patient's readmission and plan the intervention.

Materials and Methods: The study was conducted among 100 patients in 2 selected inpatient mental health setups of Pune. There were 30 questions with multiple choices based on causes of psychiatric readmissions. The overall questions were divided into various factors like family factors, physical factor, psychological factor, hospitalized and personnel factors. Descriptive and inferential statistics were planned to analyze the data obtained through interviews.

Results: The commonest personal causes for readmissions are stoppage of medicine 56% with various reasons like side effects (96%), drug non compliance (72%), unnecessary stress (28%) and irregular follow up (77%). The psychological factors responsible for readmissions are lack of interest in friends and relatives (75%), aggressiveness (68%), abusive and assaultive (53%), irritability (58%), hallucination and wandering tendency (65%) and loss of interest in day to day activities (63%).

Conclusion: The commonest causes responsible for readmission are drug non-compliance, irregular follow up, stress, lack of insight, expressed emotions of family, burden on family, and commonest physical and psychological symptoms such as headache, insomnia, lack of personal hygiene, hallucination, aggressiveness, abusive, assaultive etc.


Keywords: Psychiatric Readmissions; Mental Illness; Schizophrenia.

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INTRODUCTION

Most of the psychiatric illnesses have a chronic relapsing course. It is estimated that the readmission rate for discharged patients is approximately 40-50 % within one year of their discharge from hospital.¹ Studies have observed that readmissions into psychiatric hospitals may be indicative of incomplete inpatient treatment during an earlier admission or poor follow up after discharge or reflect a breakdown in the service delivery system.² The mental health system is in the process of rapid change. The current emphasis in mental health service is on brief hospitalization and providing community-based services.³ Rapid readmissions to psychiatric wards may be a source of frustration, to treating teams, patients and their families. Rapid deterioration which leads to rehospitalization is distressing to patients and their caregivers.⁴ A study of readmission is important because it is a means of assessing the degree to which current hospital practices are achieving the goals that have been set that is to enable a patient to maintain himself in the community that is de-institutionalization to a larger scale.⁵ Many studies have been

done for assessing the causes of readmission in psychiatric setups. Factors that have been associated with readmission into psychiatric inpatient facilities include short duration of admission, staying alone, medication non-compliance and poor housing. Some studies have identified the causes for readmission as lower socioeconomic status, financial problem, older age, single marital status, female gender, co-morbid disorder including substance related disorders, sexual and impulse controlled disorders.⁶

In the 1st year following discharge, about 70% of the patient who don't receive any treatment, suffer from readmission. This figure drops to approximately 40% if the patient receives regular treatment. It further decreases upto 20% in case of optimal drug treatment along with psychiatric rehabilitation.⁷

In current psychiatric practices there are many opportunities to reduce readmission rates by further development and optimal utilization of biological and psychosocial intervention.⁸ Therefore the researcher has planned to take study which will reveal causes for psychiatric patient's readmission and plan the intervention.

MATERIALS AND METHODS

A descriptive exploratory survey approach was adopted in this study to assess the causes of readmissions of psychiatric patients. The purpose of descriptive study is to observe, describe and document aspects of a situation as it naturally occurs and sometimes to serve as a starting point for theory development.⁹

The study was conducted in 2 selected inpatient mental health setups of Pune. Both the setups were selected because of availability of required sample, suitable timing including administrative feasibility.

Both the institutes have various mental health services such as outpatient and inpatient care, counseling, physiotherapy, occupational therapy and recreational therapy. The readmission rate for the previous 3 years ranges from 35 – 40 % of the total admissions per year and has approximately 80-90 readmissions per month for the 1st institute and 15 -20% for the 2nd institute.

In the present study 2 types of variables were identified. Independent variables included in this study were drug non-compliance, irregular follow ups, stress, lack of insight, feeling of burden on family, expressed emotions of family and common physical and psychological signs and symptoms.

Extraneous variables included in this present study were patients' age, age at onset of mental illness, education, occupation, duration of illness, number of readmissions and faulty health habits are extraneous variables.

The total sample size was 100. Inclusion criteria comprised of the patients who were readmitted within 5 years of previous admission with diagnosis of schizophrenia and mood disorder and whose caregivers were available during study and the patients and their caregivers who were willing for participating in the study and can speak Hindi, Marathi and English. Exclusion criteria comprised of the mentally ill patients who were readmitted more than 5 years of previous admissions and the patients whose caregivers were with age below 18 years. The study was based on non-probability purposive sampling technique. In this study the patients selected were only those who were readmitted within 5 years of their previous admission and has diagnosis of schizophrenia and mood disorder. It mainly contained all the demographic aspects for patients and care givers covering the important areas like age,

education, occupation, sex, religion, marital status, duration of illness, number of readmissions in last 5 years including economical background.

It focused on various causes of psychiatric readmissions in mental health setups. It was prepared in view of conducting interviews of patients and care givers. There were 30 questions with multiple choices based on causes of psychiatric readmissions. It was expected from participants to select more options to know in depth about causes of readmissions. The overall questions were divided into various factors like family factors, physical factor, psychological factor, hospitalized and personnel factors. Various causes of readmission of psychiatric patients in inpatient mental health setups were analysed.

Descriptive and inferential statistics were planned to analyze the data obtained through interviews.

RESULTS

The commonest personal causes for readmissions are stoppage of medicine 56% with various reasons like side effects (96%), drug non compliance (72%), unnecessary stress (28%) and irregular follow up (77%) (table 1-3). The family factors affecting the readmissions of patients are family members conscious while communicating with patient (96%), overprotective (62%), patients feeling isolated from family (51%) and feeling of burden on family (88%) (table 4).

The physical factors responsible for readmissions are lack of insight (80-90%), common physical sign and symptoms are headache (100%), insomnia (92%), dizziness (72%), constipation (4%) and the side effects are slowness in activity (62%) and poor concentration (63%). A maximum number of patients require restrain (63 %) during present readmission (figure 1). The psychological factors responsible for readmissions are lack of interest in friends and relatives (75%), aggressiveness (68%), abusive and assultive (53%), irritability (58%), hallucination and wandering tendency (65%) and loss of interest in day to day activities (63%) (figure 2). The hospitalized factors for readmissions are ill experienced during previous hospitalization such as disliking of food (48%) and restriction for outing (34%) (table 5).

Table 1: Personal factors responsible for readmission of psychiatric patient's in mental health setups

S. No.	Causes of Readmission	Classification	F	%
1	Feels more Comfortable at:	Hospital	15	15
		Home	85	85
2	Reasons for occurrence of psychological signs and symptoms at home within previous 3 months:	Stopped the medicines by own	56	56
		Family members have neglected complaints of the patient	13	13
		No acceptance from friends	2	2
		Felt unnecessary stress of small matters	28	28
		Family provoked patient for becoming violent and angry	24	24
3	Regular visits to hospitals for follow up:	Present	23	23
		Absent	77	77
4	Frequency for regular follow up to the hospital	As per instruction of doctor	77	77
		Once in a month	03	03
		When medication is over	08	08
		Feeling of physical and psychological problems	31	31

Table 2: Personal factors responsible for readmission of psychiatric patient's in mental health setups (In continuation to table 1)

S. No.	Causes of Readmission	Classification	F	%
5	Reasons for irregular follow up:	Non accessibility of hospital	10	10
		Disagreement of patient for follow up	17	17
		Feeling of unpleasant about prescribed treatment	10	10
		No one accompanied for follow up	1	1
		Inadequate money for medication	1	1
6	Self drug compliance:	Regular	28	28
		Irregular	72	72
7	Duration of self drug compliances:	2 weeks	23	23
		1 month	36	36
		1 year and above	15	15
8	Various reasons for drug non compliance	Disliked the taste of medicine	25	25
		Experienced various side effects	14	14
		Did not feel any improvement	43	43
		Inadequate money	2	2
		Forgot to take medicines	7	7

Table 3: Personal factors responsible for readmission of psychiatric patient's in mental health setups (In continuation to table 1 and 2)

S. No.	Causes of Readmission	Classification	F	%
9	Experience of side effects of medicines:	Present	96	96
		Absent	4	4
10	Management of side effects by:	Stopping medicines	96	96
		Changing dosages of drugs	60	60
		Informing relatives	5	5
		Visiting doctor	77	77
		Changing the doctor	1	1
11	Measures other than doctor's prescription:	Followed	24	24
		Not followed	76	76
12	Various measures followed other than doctors prescription	Regular prayers and worship	24	24

Table 4: Family factors responsible for readmission of psychiatric patients in mental health setups

S. No.	Causes of Readmission	Classification	F	%
1	Experience at home after previous hospitalization:	Very much conscious communication by family members	96	96
2	Feeling of burden on family:	Present	88	88
		Absent	12	12
3	Reasons for feeling of burden on family:	Expense on medications and follow up	82	82
		Maintenance of drug compliance	74	74
4	Events affecting patient's physical and mental health:	Death of loved once	6	6
		Job loss of head of family member	1	1
		His / her failure in exam	1	1
		Financial crisis	4	4
		Other events	13	13

Table 5: Hospitalized factors responsible for readmission of psychiatric patients in mental health setups (N = 100)

S. No.	Causes of Readmission	Classification	F	%
1	Reasons for comfort at hospital:	Provision of comprehensive care	14	14
		Treatment received on time	12	12
		Doctors attend regularly	2	2
		Do not have fear of social stigma	6	6
		Family does not suffer due to strange behavior	6	6
		Experience various activities of daycare	3	3
2	Experience during previous hospitalization:	Disliked food	48	48
		Difficulty during sleep	18	18
		Not permitted to go out	34	34
		Lack of communication by staff members	2	2
		Troublesome behavior by others	3	3

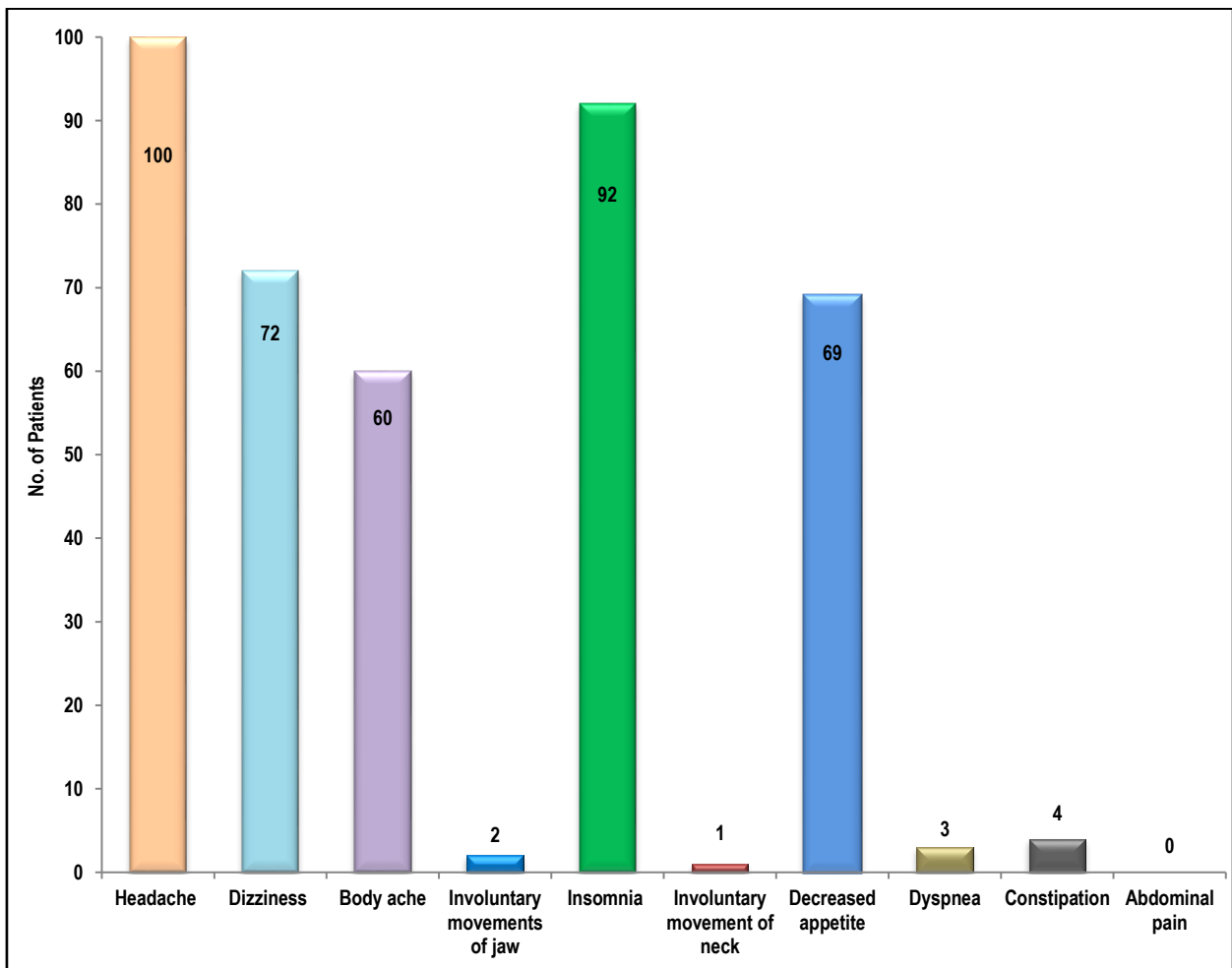


Figure 1: Bar diagram representing the physical signs and symptoms before readmission among readmitted patients

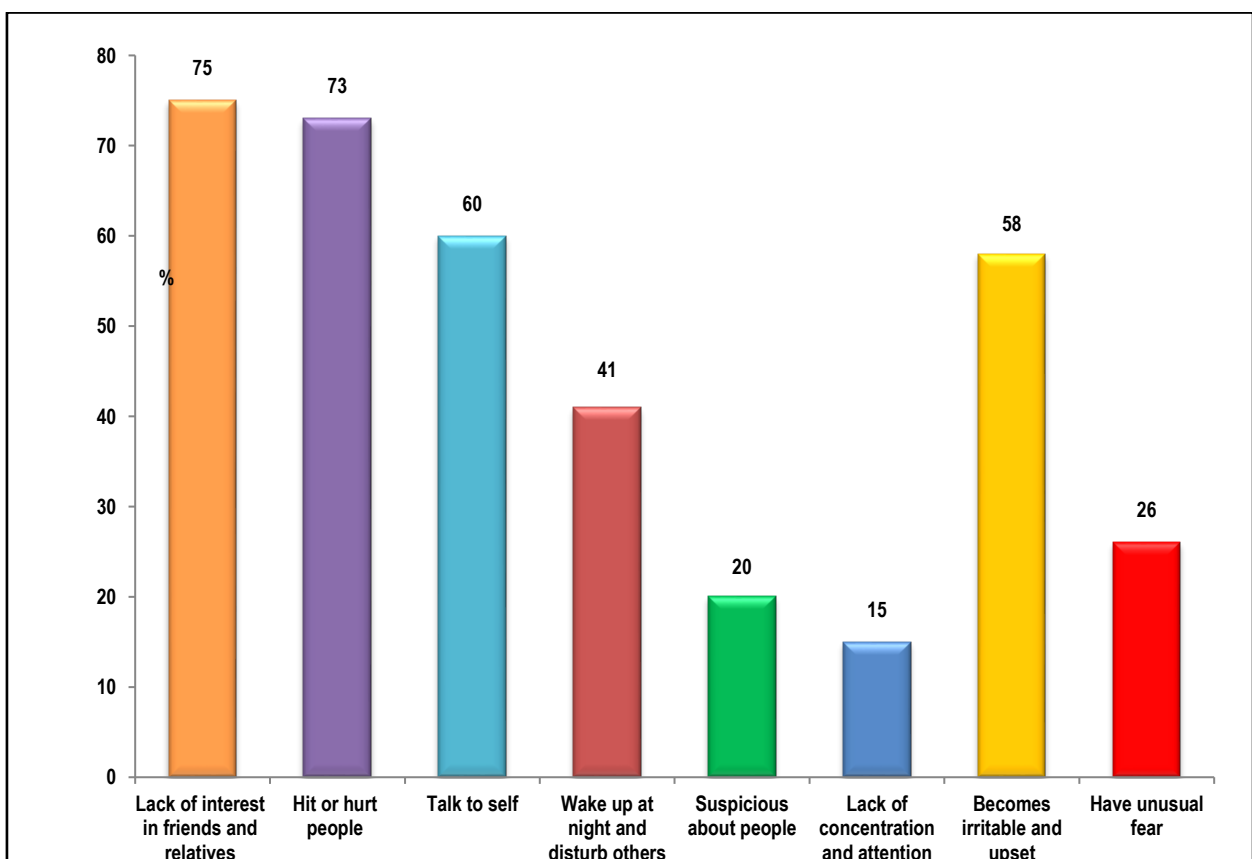


Figure 2: Bar diagram representing the psychological signs and symptoms before readmission among readmitted patients

DISCUSSION

Various causes of readmission of psychiatric patients in inpatient mental health setups were stoppage of medicine (56%), drug non-compliance (72%) and unnecessary stress (28%); Feeling of burden on family (88%) and expressed emotions of family (80%); Lack of insight (80%), common physical signs and symptoms (80-90%); Hallucination (65%), aggressiveness (68%), abusive and assaultive (53%), irritability (58%), wondering tendency (65%) and loss of interest in day to day activities (63%); the hospitalized factors for readmissions are ill experienced during previous hospitalization such as disliking of food (48%) and restriction for outing (34%).

Henrich and Carpenter conducted similar kind of study "A prospective study of the early warning signs of relapse in schizophrenic patients." The results indicated that the 10 most common early warning signs of relapse were hallucination (53%), suspiciousness (43%), change in sleep (43%), anxiety (38%), cognitive inefficiency (26%), anger (23%), somatic symptoms (21%), thought disorder (17%), inappropriate behavior (17%) and depression (17%).¹⁰

The study was done on "Relationship between family members and patient causing relapse in schizophrenic patients" by Brown and Baker. It was done by using a standardized instrument, the Camberwel Family Interview (CFI). It mainly assessed critical comments, hostility, over involvement and positive remarks on part of relatives towards the patient. The result indicated that the above factors were responsible for higher relapse rate and readmission rate.¹¹

A registry-based cohort study was done on "Hospital Readmission and Its Correlates among Psychiatric Patients in Taiwan" by Chih-Ming Lin and Chung-Yi Li. The aim was to estimate the short-term readmission rate within 60 days among 1,813 patients discharged from a psychiatric hospital in northwestern Taiwan. Readmission rates were 6% within 14 days, 9% within 30 days, and 12% within 60 days. Patients who received the scheduled ambulatory follow up had a significantly higher risk of readmission within 60 days. Among patients with schizophrenia, those who had a hospital stay longer than 60 days had significantly increased risk of readmission within 14 days as compared with those whose duration of stay was between 30 and 60 days. Patients who were more impaired may need to stay longer in the hospital, and more impaired patients may be at an increased risk of re-hospitalization.

The study also showed a positive association between attending a follow up ambulatory care visit and readmission. These patients may either have a poor prognosis, frequent contact with psychiatrists, the closer supervision associated with aftercare leading to a greater likelihood of re-hospitalization.¹²

The study was done on "Characterization of readmissions at a Portuguese psychiatric hospital: An analysis over a 21-month period" by David Dias Neto, Ana Catarina da Silva. The aim of the study was to characterize readmissions to Júlio de Matos Hospital (JMh), in comparison with the single admissions. The data gathered was made through the review of the clinical files of patients admitted over a period of 21 months. Of the 3,225 patients admitted in 21 months, 1,276 (39.6%) were readmissions. Furthermore, a readmitted patient was admitted, on average, 2.6 times during the study timeframe. The results showed certain common factors in the readmitted patient as a reduced social involvement, an increased prior institutionalization and an

increased incidence of Schizophrenic Schizophrenia and Abnormal Personalities.¹³

"Crisis discharges and readmission risk in acute psychiatric male inpatients" study was done by Dana JH Niehaus, Liezl Koen, Ushma Galal. Severe pressures on beds in psychiatric services have led to the implementation of an early ("crisis") discharge policy in the Western Cape, South Africa. The study examined the effect of this policy and length of hospital stay (LOS) on readmission rates in one psychiatric hospital in South Africa. The methods used were discharge summaries of adult male patients ($n = 438$) admitted to Stikland Psychiatric Hospital during January 1st, 2004, and August 31st, 2006. The results revealed that although shorter LOS was associated with decreased readmission rates, the effect of crisis discharges was far more powerful.

Patients discharged as usual had a far lower risk of readmission than those discharged due to bed pressures (that is crisis discharge). It can be concluded that the patient should not be discharged earlier due to problems with less bed strength and more admission rates.¹⁴

A study was done on "Prediction of readmission of psychiatric inpatients" by Feigon Sarah, Hays J. Ray. Using demographic and episode-based variables this study attempted to predict which patients would require frequent psychiatric hospitalizations. Records of 943 patients were randomly selected from 14,649 admissions and examined for a 5years period following initial admission. Sex, ethnicity, and age at first admission were not significantly related to readmission. Among the demographic variables, marriage, involuntary commitment and a longer length of stay at the original admission were associated with a higher rate of readmission.¹⁵

CONCLUSION

The commonest causes responsible for readmission are drug non-compliance, irregular follow up, stress, lack of insight, expressed emotions of family, burden on family, and commonest physical and psychological symptoms such as headache, insomnia, lack of personal hygiene, hallucination, aggressiveness, abusive, assaultive etc.

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