

Demographic and clinical risk factors for readmission in patients with schizophrenia and bipolar disorder at Steve Biko Academic Hospital: a comparative and quantitative cross-sectional study

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Background

Schizophrenia and bipolar disorders are chronic mental illnesses associated with readmission to hospital and poor quality of life. The re-emergence and worsening of psychiatric symptoms are the main contributors for admission. The main aim of this study was to compare the demographic and clinical risk factors of patients with schizophrenia and bipolar disorder as they contribute to readmission to hospital.

Method

This was a retrospective cross-sectional study. Patients diagnosed with schizophrenia or bipolar disorder admitted to Steve Biko Academic Hospital, psychiatric unit, in 2018 and had a previous admission between 2016 and 2018 were selected.

Results

In the period of 2018, the number of patients who had relapsed and readmitted to Steve Biko Academic Hospital was slightly higher in patients with bipolar disorder (53.1%) compared to patients diagnosed with schizophrenia (46.8%). In both groups, most patients were females (58.8% vs 41.1%) in patients diagnosed with bipolar disorder and (63.3% vs 36.6%) in patients with schizophrenia. Most patients were single (91.2% vs 83.3%), unemployed (64.7% vs 70%) for bipolar disorder and schizophrenia, respectively. A significant number of patients with bipolar disorder had achieved tertiary education (55.9%) compared to (30%) in patients with schizophrenia $p=0.04$. A substantial number of patients had a comorbid substance use disorder (52.9% vs 53.3%), were not adherent to medication on self-report (14.7% vs 3.3%) for bipolar and schizophrenia, respectively. Patients with bipolar disorder had a higher rate of comorbid medical conditions (26.5%) compared to (6.7%) in patients with schizophrenia which was statistically significant $p=0.03$. In both groups, more than 90% of patients were receiving oral medication only.

Discussion

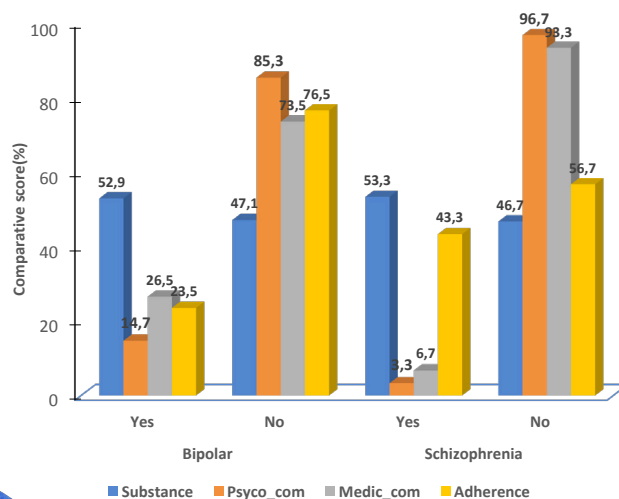
The clinical and demographic risk factors for readmission due to relapse were similar in both groups. Being female, single, unemployed, and having a comorbid substance use disorder and poor adherence to medication were the commonest risk factors leading to readmission to hospital.



Table 1: Demographic characteristics

| Variable | Bipolar disorder | Schizophrenia | p-value | Significant |
|----------------------------------|------------------|-----------------|---------|-------------|
| Age | | | | |
| Mean (SD) | 36.353 (11.873) | 37.967 (14.750) | 0.63 | No |
| Sex | | | | |
| Male | [14/34(41.17%)] | [11/30(36.66%)] | 0.72 | No |
| Female | [20/34(58.82%)] | [19/30(63.33%)] | 0.68 | |
| Relationship status n (%) | | | | |
| Single | [31/34(91.2%)] | [25/30(83.3%)] | 0.34 | No |
| Married | [3/34(8.8%)] | [4/30(13.3%)] | 0.56 | No |
| Divorced | 0 | [1/30(3.3%)] | 0.29 | No |
| Level of education n (%) | | | | |
| Secondary | [12/34(35.3%)] | [19/30(63.3%)] | 0.03 | Yes |
| Tertiary | [19/34(55.9%)] | [9/30(30.0%)] | 0.04 | Yes |
| Unknown | [3/34(8.8%)] | [2/30(6.7%)] | 0.75 | No |
| Employment status n (%) | | | | |
| Employed | [12/34(35.3%)] | [9/30(30.0%)] | 0.65 | No |
| Unemployed | [22/34(64.7%)] | [21/30(70.0%)] | 0.65 | No |
| Level of income n (%) | | | | |
| 0-1000.00 | 0 | [1/30(3.3%)] | 0.29 | No |
| >3000.00 | [5/34(14.7%)] | [7/30(23.3%)] | 0.38 | No |
| Disability grant | [6/34(17.6)] | [4/30(13.3%)] | 0.63 | No |
| Unknown | [23/34(67.6)] | [18/30(60.0%)] | 0.53 | No |

Figure 2: Clinical risk factors



Conclusion

The early identification and management of patients at risk for relapse will assist in the reduction of the number of patients being admitted to hospital. It will also improve patient's quality of life and reduce the economic burden associated with their management.