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THE KRAEPELINIAN DICHOTOMY IN TERMS OF EMPLOYMENT OUTCOMES

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SUMMARY

We assess the effectiveness of return to employment, and hence social inclusion in patients with chronic schizophrenia and bipolar affective disorder within a British community mental health team.

Key words: *schizophrenia - bipolar disorder – employment - accomodation*

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INTRODUCTION

We have been requested, as a matter of policy, to record the employment status of all patients treated by Bedford East CMHT. Enabling patients to return to social inclusion as they recover from serious mental illness is a key aim of treatment in community psychiatry, endorsed by the WHO declaration for Mental Health in Europe, however it was our long standing clinical impression that many middle aged patients with schizophrenia remained extremely socially isolated. We did not have the same clinical impression regarding patients with Bipolar Affective Disorder.

AIM

We decided to take advantage of the available data in order to examine the employment status of all patients with Schizophrenia actively treated by the Bedford East Community Mental Health Team (CMHT) and compare this to the employment status of all those in the team who suffered from Bipolar Affective Disorder.

Table 1. Basic demographics

Variable	Schizophrenia n=191	Bipolar Affective Disorder n=91	Schizoaffective Disorder n=40
Age / year			
<25	7	8	0
25-34	23	9	5
35-44	53	16	7
45-54	59	27	11
55+	48	31	15
Not recorded	1	0	2
Gender			
Male	128	43	13
Female	62	48	25
Not recorded	1	0	2
Employment status			
Employed	15	14	4
Unemployed	91	32	15
Voluntary	10	5	2
Other	8	9	3
Not recorded	67	31	16
Accommodation			
Own/Private	46	43	9
Rented/Council	39	11	9
Supported	17	4	1
Other	0	2	1
Not recorded	89	31	20

MATERIALS / METHODS

We identified cases with Schizophrenia and Bipolar Affective Disorder in an anonymous manner from a database held by the team and examined the employment status as recorded on the database. The database records all patients with all diagnoses seen by Bedford East CMHT since 2006. This therefore includes 1060 patients. From this we abstracted all patients, irrespective of gender, who suffered from Schizophrenia, Bipolar disorder, or Schizoaffective disorder. We had to eliminate from further analysis any patients with either of the three conditions who had equivocal data regarding their employment. We also chose, as another important factor regarding social isolation, to see what had been recorded regarding the patient's accommodation. Again we had to eliminate any patients whose data was equivocal.

As a consequence, slightly different data were analysed for employment than for accomodation. Therefore, for Employment, we assessed 124 patients with schizophrenia, 24 with schizoaffective disorder, and 60 with bipolar disorder. For accommodation, we assessed 102 patients with schizophrenia, 20 with schizoaffective disorder, and 60 with bipolar disorder.

The results were tabulated on an Excel Spreadsheet.

RESULTS

The basic demographics are tabulated below (see table 1).

Demographic Characteristics of the Database

The results are shown in tables as follows.

Table 2. Proportions with Employment

Condition	Employed	Unemployed	Voluntary	Other	Total
Schizophrenia. F20	15	91	10	8	124
% of total	12.00	73.40	8.00	6.45	
Schizoaffective Disorder F25	4	15	2	3	24
% of total	16.70	62.50	8.33	12.50	
Bipolar Affective DisorderF 31	14	32	5	9	60
% of total	23.0	53.3	8.39	15.0	

Table 3. Proportions with accommodation

Condition	Own/private	Rented/Council/ HA	Supported	Other	Total
Schizophrenia. F20	46	39	17	0	102
% of total	45.10	38.20	16.70	0	
Schizoaffective Disorder F25	9	9	1	1	20
% of total	45.00	45.00	5.00	5.00	
Bipolar Affective DisorderF 31	43	22	4	2	60
% of total	71.70	18.30	6.67	3.33	

Statistical Analysis

Chi-square tests were carried out to demonstrate the relationships between schizophrenia, schizoaffective disorder and bipolar disorder in terms of employment status and accommodation.

The results are tabulated below.

Statistical significance between schizophrenia and bipolar affective disorder were observed with respect to employment status, unemployment per se, and accommodation (ref. Tables 3, 4, 5); this was not observed with any other comparisons.

The statistical significance was particularly marked for unemployment per se. (see figure1).

Table 4. Chi-square test analyses for employment status

Condition	Schizoaffective disorder	Bipolar Affective Disorder
Schizofrenia	0.6480	0.0310
Schizoaffective Disorder		0.876

Table 5. Chi-square test analyses for unemployment (vs. "non-unemployment")

Condition	Schizoaffective disorder	Bipolar Affective Disorder
Schizofrenia	0.27500	0.00675

Schizoaffective Disorder		0.44500

Table 6. Chi-square test analyses for accommodation status

Condition	Schizoaffective disorder	Bipolar Affective Disorder
Schizofrenia	0.0773	0.00113
Schizoaffective Disorder		0.108

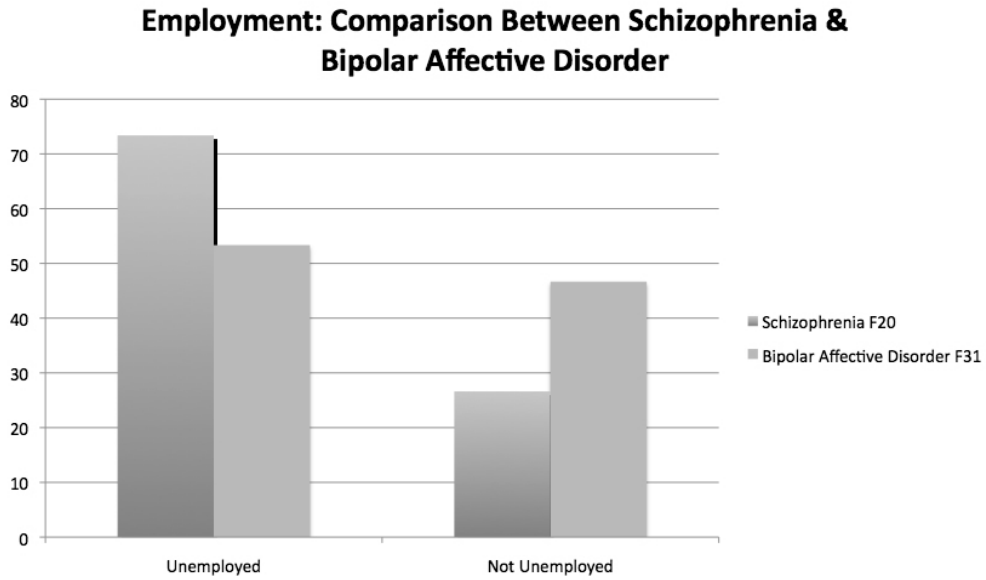

Figure 1. A significant association between these disorders & unemployment rates

DISCUSSION

Employment outcomes for serious mental illness were poor. However, schizophrenia patients had a lower chance of returning to employment than those with bipolar illness, partly due to the heterogeneity of the condition; bipolar patients had twice the chance of gainful employment as compared to schizophrenic ones.

Statistical significance between schizophrenia and bipolar affective disorder were observed with respect to employment status, unemployment per se, and accommodation (ref. Tables 3, 4, 5); this was not observed with any other comparisons.

The statistical significance was particularly marked for unemployment per se.

It has always been known that persons suffering with schizophrenia have a particularly poor likelihood of returning to gainful employment. There are many causes for this. Stigma within society is one. Others are negative symptoms of schizophrenia and the cognitive deficits which accompany the illness. It is of great importance that these factors be targeted in the treatment of the chronic phase of the schizophrenic illness. Regarding employment rates in schizophrenia, Steven Marwaha and Sonia Johnson have commented that the employment rate in schizophrenia appears to have declined over the last 50 years in the UK. They listed Barriers to getting employment as stigma, discrimination, fear of loss of benefits and a lack of appropriate professional help. Previous work history appeared to be the most consistent predictor of employment. Working is correlated with positive outcomes in social functioning, symptom levels, quality of life and self esteem (Marwaha 2004). Rosenheck et al, in a study in the US, have shown that participating in competitive or non-competitive employment was associated with a lower severity of symptoms, better neurocognitive functioning, and higher scores on a measure of intrapsychic functioning that encompassed motivation, empathy, and other psychological characterristics. Competitive employment, in contrast to other employment or no employment, was negatively associated with receipt of disability payments and also with being black. Patients who had greater access to rehabilitation services were more likely to have greater participation in both competitive and noncompetitive employment (Rosenheck 2006).

Priebe, et al examined the attitudes toward work, work incentives, and the impact of work on quality of life for people with schizophrenia in different Western countries. Twenty four randomly selected subjects with schizophrenia and schizoaffective disorder were interviewed (12 employed and 12 unemployed) at each of three sites: Boulder, Colorado, United States; Berlin, Germany; and Berne, Switzerland. There were no significant differences were found in the patients' attitudes to work and subjective well-being.The patients who were unemployed reported a lower subjective reservation (minimum financially worthwhile) wage than employed subjects in Berlin and Berne, whereas

the reverse was true in Boulder. All the employed patients displayed less psychopathology and had significant advantages in terms of objective and subjective measures of income and well-being: They were also more likely to stress the importance of work. Hence it appeared that work is associated with a markedly better quality of life for people with schizophrenia, and that disability pension programs in the United States might introduce disincentives to work (Priebe 1998).

What, however was more concerning were the surprisingly high rates of unemployment within the bipolar group. This may be reflected in difficulties in employment history due to the fluctuations in mood that these patients demonstrate, however another likely important factor is the cognitive deficits which accompany bipolar illness, which are less prominent, but may be present none the less. Such deficits need to be taken into account when developing the treatment package. Dickerson et al studied a group of bipolar patients and related their work history to their cognitive functioning. Fifty-one percent of the study participants had no current work activity, 21 percent worked part-time or as volunteers, and 27 percent had full-time competitive employment. Current employment status was significantly associated with cognitive performance, especially immediate verbal memory, total symptom severity, history of psychiatric hospitalization, and maternal education. There appeared to be no association between employment status and history of psychotic symptoms, number of years of education, or age at onset of illness. They concluded that cognitive testing should be carried out as part of a program to enable bipolar patients to resume work. (Dickerson 2004)

Regarding Accomodation, it is of interest that whereas many more patients with bipolar disorder than schizophrenia live in their own houses rather than in council accommodation, almost half (45%) of the patients with schizophrenia do. This presumably reflects patients with schizophrenia living in the family home with other members of the family. Thus, at least within the family, many patients with schizophrenia are not isolated. On the other hand the 16% of patients with schizophrenia who live in supported accommodation compared to only 6% for bipolar patients reflect the cognitive deficits which are much more prominent in a sub-group of Patients with schizophrenia. Clearly there is a need for treatments to enhance cognition in patients with schizophrenia.

It should, of course , be noted that this study is a retrospective study based on information in a database, which is constantly updated. It therefore is susceptible to the limitations of such studies. In particular, We had to compensate for incomplete information on some patients by eliminating them from the study. We do not feel however that this in any way changed the results.

CONCLUSIONS

These figures demonstrate that it is particularly difficult to achieve employment for patients with serious mental illness. CMHTs may not be effective in returning these persons to work. This adds to the recently made argument for identifying different phases in the illness of schizophrenia (Agius 2010) and for a more assertive approach by the creation of ad hoc chronic psychosis teams (Agius 2010, Singh 2010) who could give ongoing support to aid patients to return to social inclusion and possibly work.

REFERENCES

1. *Agius M, Goh C, Ulhaq S, McGorry P.The staging model in schizophrenia, and its clinical implications.Psychiatr Danub. 2010; 22:211-20.*
2. *Agius M A care pathway for schizophrenia.Br J Psychiatry. 2010; 197:500.*
3. *Dickerson FB, John J. Boronow JJ, Stallings CR. Origoni AE, Cole S, RH Yolken. Association Between Cognitive Functioning and Employment Status of Persons With Bipolar Disorder. Psychiatr Serv 2004;55:54-58.*
4. *Marwaha S, Johnson S Schizophrenia and employment A review .Social Psychiatry and Psychiatric Epidemiology 2004;39: 337-349.*
5. *Priebe S, Warner R, Hubschmid T, Eckle I. Employment, Attitudes Toward Work, and Quality of Life Among People With Schizophrenia in Three Countries.Schizophrenia Bulletin; 1998; 24: 469-477.*
6. *Rosenheck R, Leslie D, Keefe R, McEvoy J , Swartz M, Perkins D, Stroup S, Hsiao JK, Lieberman J,Barriers to Employment for People With Schizophrenia Am J Psychiatry 2006;163:411-417.*
7. *Singh SP Early intervention in psychosis.Br J Psychiatry.2010;196:343-5.*

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