

# Characteristics of people with severe mental illness who obtain employment

G. Butler,<sup>1</sup> L. Howard,<sup>1</sup> S. Choi,<sup>2</sup> G. Thornicroft<sup>1</sup>

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<sup>1</sup>Institute of Psychiatry, King's College London; <sup>2</sup>Seoul National University Hospital, Korea

Correspondence to Georgia Butler (Georgia.Butler@kcl.ac.uk)

**Aims and method** We explored sociodemographic and clinical factors associated with obtaining employment for people with severe mental illness. Standardised validated interviews and questionnaires were administered to participants who had been recruited into a randomised controlled trial of supported employment.

**Results** Older age and diagnosis of schizophrenia were found to be independent predictors of unemployment in the previous year. Other factors of unemployment such as ethnicity and educational level were not associated with obtaining employment.

**Clinical implications** Older people and those with a diagnosis of schizophrenia may need additional targeted help in obtaining employment if they are to be helped to meet their vocational aims. Further research is needed to determine how this can be done most effectively.

**Declaration of interest** None.

There is growing recognition that work and employment are important in maintaining and enhancing the health and social functioning of people with mental disorders and in promoting social inclusion, in addition to the economic benefits of employment.<sup>1,2</sup> However, people with severe mental illness have lower employment rates than those with other psychiatric difficulties. Studies have reported that 8–20% of people with a psychotic disorder obtain employment in the UK,<sup>3–5</sup> despite evidence that people with severe mental illness are eager to work and can be successfully employed.<sup>6–10</sup> Unemployment rates are also high for patients with affective disorders, although not as high for those with schizophrenia – studies report rates of 35–60% of unemployment.<sup>11–13</sup>

A number of barriers have been identified that may prevent people with severe mental illness from seeking and retaining a job. These range from concern about losing benefits, the belief that they will not be offered employment because of the stigma of mental illness, and worries concerning poor functioning and relapse arising from their mental health problems.<sup>8,14</sup> The educational achievement of people with severe mental illness is also often low owing to early illness onset,<sup>15</sup> which may also reduce their ability to obtain work.

Previous research has found that in general for people with mental illness, better employment outcomes are connected with younger age.<sup>16,17</sup> A meta-analysis has also reported that White individuals are significantly more likely than Black and minority ethnic individuals to obtain employment.<sup>17</sup> However, a study of long-term unemployment in an inner-city setting of adults with severe mental illness by Goldberg *et al* found that ethnicity was not

significantly associated with long-term unemployment.<sup>18</sup> There has been little research to establish whether these sociodemographic factors are also associated with employment outcomes in the UK, and we aimed to investigate the sociodemographic and clinical characteristics associated with having had a job in the previous year in people with severe mental illness who were being recruited into a randomised controlled trial of supported employment (further information available from the authors). Our hypotheses were as follows.

- Participants who have a diagnosis of affective disorder are more likely than those with a diagnosis of schizophrenia to have had some form of employment in the past year.
- Participants who have had a higher education are more likely than those who have not to have had some form of employment in the past year.
- Younger participants are more likely than older participants to have had some form of employment in the past year.
- Black and minority ethnic participants are less likely to have had a job in the past year compared with White participants.

## Method

Participants in this study had been recruited for a randomised controlled trial of a supported employment programme: the Supported Work and Needs study (further information available from the authors). The inclusion criteria consisted of severe mental illness (defined as

duration of illness over 2 years, a Global Assessment of Functioning score of 60 or below,<sup>19</sup> and psychotic or chronic affective disorder), receipt of out-patient or community psychiatric care from local mental health services, age 18–65 years, ability to read and speak English, and unemployment for at least 3 months prior to enrolment in the study. Each participant gave informed written consent.

Participants were recruited from two boroughs in south London: Central Croydon and South Lambeth. The participants' diagnosis was made by a member of the research team at recruitment on the basis of clinical interviews using the Structured Clinical Assessment in Neuropsychiatry (SCAN),<sup>20</sup> and information from the participants' case notes. At interview the researcher also collected sociodemographic information and gave the participants a job preferences interview, which asked questions concerning the respondent's employment history in the past year, including how many jobs they had had in the past year and the number of months worked, what type of job they ideally would like, and how many hours per week and what hourly payment they would prefer.

### Statistical analysis

Univariate associations between sociodemographic characteristics or clinical data and employment in the previous year were carried out using chi-squared tests for categorical variables and *t*-tests for continuous variables to investigate any associations between employment and a number of independent variables. A multiple logistic regression model was fitted to the data to find independent associations among the variables with employment in previous year as the dependent variable.

## Results

Table 1 sets out the baseline characteristics of the sample and univariate associations with having had a job in the past year. Overall, 72% of participants had a diagnosis of schizophrenia, 15% had bipolar disorder and 13% had depression (28% affective disorder). The mean age at baseline for women was 40 years (s.d. = 9.17) and for men it was 39 years (s.d. = 9.57). More men ( $n = 147$ , 67%) than women ( $n = 72$ , 33%) were recruited into the study. The ethnicity of the sample comprised White ( $n = 80$ , 37%), Black ( $n = 98$ , 45%), Asian ( $n = 28$ , 13%) and 'other' ( $n = 12$ , 5%). Owing to the small numbers in the sample, ethnicity was recoded into White or Black and minority ethnic. Only 32 (15%) participants in total had had a job in the previous year.

In the univariate analysis, living situation was associated with having had a job in the past year, with those living alone less likely to have had a job compared with those living as a couple or living with others. There was also a trend towards people with affective disorder being more likely than those with schizophrenia to have had a job in the past year.

Table 2 summarises the results of the logistic regression model for the dependent variable 'had a job in the past year'. After adjusting for the other variables in the model, it was found that participants who were older were significantly less likely to have had a job in the past year than their younger counterparts ( $P < 0.05$ ). Participants with a diagnosis of affective disorder were significantly more likely (OR = 3.22, 95% CI 1.24–8.31) to have had a job in the past year than those with a diagnosis of schizophrenia ( $P = 0.016$ ).

**Table 1** Sociodemographic characteristics of the sample and univariate associations with employment in the past year<sup>a</sup>

|                                      | Had a job in the past year | Did not have a job in the past year | Association with working | Unadjusted OR | <i>P</i> |
|--------------------------------------|----------------------------|-------------------------------------|--------------------------|---------------|----------|
| Research diagnosis, <i>n</i> (%)     |                            |                                     |                          |               |          |
| Schizophrenia                        | 18 (60)                    | 129 (75)                            | $\chi^2 = 2.716$         | 1.32          | 0.10     |
| Affective disorder                   | 12 (40)                    | 44 (25)                             |                          |               |          |
| Gender, <i>n</i> (%)                 |                            |                                     |                          |               |          |
| Male                                 | 25 (78)                    | 121 (65)                            | $\chi^2 = 2.005$         | 1.89          | 0.16     |
| Female                               | 7 (22)                     | 64 (35)                             |                          |               |          |
| Age, years: mean (s.d.)              | 34.9 (10.6)                | 40.18 (9.1)                         | $t = 2.988$              | 0.94          | 0.003    |
| Birthplace, <i>n</i> (%)             |                            |                                     |                          |               |          |
| UK                                   | 22 (69)                    | 128 (69)                            | $\chi^2 = 0.003$         | 1.02          | 0.96     |
| Non-UK                               | 10 (31)                    | 57 (32)                             |                          |               |          |
| Living situation                     |                            |                                     |                          |               |          |
| Living alone (with/without children) | 12 (37)                    | 105 (68)                            | $\chi^2 = 4.072$         | 2.19          | 0.04     |
| Living with others                   | 20 (63)                    | 50 (32)                             |                          |               |          |
| Education level, <i>n</i> (%)        |                            |                                     |                          |               |          |
| Up to secondary education            | 18 (58)                    | 125 (68)                            | $\chi^2 = 1.072$         | 1.50          | 0.30     |
| Tertiary/further education           | 13 (42)                    | 60 (32)                             |                          |               |          |
| Ethnicity, <i>n</i> (%)              |                            |                                     |                          |               |          |
| White                                | 9 (28)                     | 71 (39)                             | $\chi^2 = 1.328$         | 1.62          | 0.25     |
| Black and minority ethnic            | 23 (72)                    | 112 (61)                            |                          |               |          |
| Language, <i>n</i> (%)               |                            |                                     |                          |               |          |
| National language                    | 26 (81)                    | 159 (86)                            | $\chi^2 = 0.591$         | 1.47          | 0.44     |
| Other language                       | 6 (19)                     | 25 (14)                             |                          |               |          |

a. Some data missing (details available from the authors on request).

**Table 2** Associations with working in the past year (multiple logistic regressions)

|   | Adjusted OR (95% CI) | P     |
|---|----------------------|-------|
| Age   | 0.942 (0.901–0.985)  | 0.009 |
| Male v. female  | 1.981 (0.730–5.385)  | 0.180 |
| Other language v. national language                       | 1.883 (0.628–5.650)  | 0.259 |
| Affective disorder v. schizophrenia                       | 3.215 (1.244–8.309)  | 0.016 |
| Lives with others v. lives alone                          | 1.607 (0.676–3.819)  | 0.282 |
| Primary/secondary education v. tertiary/further education | 1.477 (0.609–3.581)  | 0.388 |
| White v. Black and minority ethnic                        | 2.103 (0.810–5.463)  | 0.127 |

## Discussion

We found that younger age and a diagnosis of affective disorder are independently associated with having had a job in the past year. Older age therefore appears to be a barrier to employment. This is consistent with previous research in which younger age is predictive of better vocational outcomes.<sup>21</sup> We also found that people with a diagnosis of affective disorder (bipolar disorder or depression) are more likely to have had a job in the past year than those with a diagnosis of schizophrenia. Again, this is consistent with previous research, which has indicated that people diagnosed with schizophrenia have worse employment outcomes than those with other diagnoses, and also that people diagnosed with affective disorders have better vocational outcomes generally than others.<sup>17</sup> Ethnicity and educational level were not significantly associated with employment in the previous year although there was a trend for White participants to be more likely to have had employment compared with Black and minority ethnic participants. This may reflect racial discrimination in society in general, and the effect of mental illness and ethnicity may need further investigation.

## Limitations of the study

This study has a number of methodological limitations. First, the data on employment were collected retrospectively and were not validated, although there is no reason to believe systematic bias is likely. Second, numbers in individual subgroups were small and we therefore may not have had the statistical power to detect differences. Third, other confounders that were not measured may play a part here, for example employment interventions available to patients, attitudes of different healthcare professionals to working with people with severe mental illness and length of unemployment. Finally, the population studied may not accurately represent unemployed people with severe mental illness because the original inclusion criteria for the trial were that individuals had to have been unemployed for 3 months prior to entry and were being selected for a supported work scheme, thus introducing bias into the sample.

Nevertheless, this study does confirm that diagnosis is independently associated with poorer employment outcomes, as is older age. We cannot know from these data whether this is due to stigma encountered by the

participants as has been described in a qualitative study,<sup>8</sup> to cognitive deficits as suggested by some researchers,<sup>22</sup> or to low levels of motivation. It is not clear how best to help such people, as interventions that can be effective – particularly supported employment<sup>23</sup> – may be less effective in this patient group. Further research is needed to determine the most effective vocational intervention for older patients and people with schizophrenia.

## About the authors

**G. Butler** and **L. Howard** work at the Health Services and Population Research Department, Institute of Psychiatry, King's College London, UK. **S. Choi** works at the Psychosocial Rehabilitation Department, Seoul National University Hospital, Seoul, Korea. **G. Thornicroft** works at the Health Services and Population Research Department at the Institute of Psychiatry in London, UK.

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## Controlled comparison of two crisis resolution and home treatment teams

P. Tyrer,<sup>1</sup> F. Gordon,<sup>1</sup> S. Nourmand,<sup>1</sup> M. Lawrence,<sup>2</sup> C. Curran,<sup>2</sup> D. Southgate,<sup>3</sup> B. Oruganti,<sup>4</sup> M. Tyler,<sup>5</sup> S. Tottle,<sup>5</sup> B. North,<sup>1</sup> E. Kulinskaya,<sup>1</sup> J. T. Kaleekal,<sup>4</sup> J. Morgan<sup>2</sup>

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<sup>1</sup>Imperial College London; <sup>2</sup>Pendine Centre, Cardiff; <sup>3</sup>Whitchurch Hospital, Cardiff; <sup>4</sup>South Cardiff Crisis Resolution and Home Treatment Team; <sup>5</sup>Cardiff and Vale NHS Trust

Correspondence to Peter Tyrer (p.tyrer@imperial.ac.uk)

**Aims and method** To compare an existing crisis resolution service with a new crisis resolution team (CRT) in Wales. The impact of the new team was measured by changes in bed days and admissions. A random sample of patients from each service was assessed for service satisfaction, social functioning and quality of life after first presentation.

**Results** The total number of bed days was reduced following the introduction of the new CRT (27.3%). The frequency and duration of compulsory admissions increased by 31% in the CRT between the first and second years and by 7% in the control service, offset by a greater reduction in informal admissions in the CRT (23.5%) compared with the control group (13.3%); overall bed usage was unchanged. Service satisfaction, social functioning and quality of life showed no important differences between the services.

**Clinical implications** Crisis resolution teams may reduce informal admissions in the short term but at the cost of more compulsory admissions later.

**Declaration of interest** None.

The notion of crisis resolution has been known for over 50 years but only recently has been integrated into general service strategies. It was first introduced and developed by Caplan,<sup>1</sup> whose influence has perhaps not been sufficiently acknowledged in the recent development of crisis resolution services for a different population, people with severe mental illness. The introduction of these teams nationally

has been an attempt to reduce the number of hospital admissions and is now part of UK government policy.<sup>2,3</sup> Despite this, the evidence for the effectiveness of the crisis resolution teams (CRTs) is relatively limited and only one randomised controlled trial has been carried out.<sup>4</sup> Nevertheless, it is fair to say that earlier studies<sup>5–7</sup> were also controlled and used similar methods as current CRTs. The