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Who uses Recovery Colleges? Casemix analysis of sociodemographic and clinical characteristics and representativeness of Recovery College students

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Objective

Recovery Colleges support recovery for adults with mental health problems, through co-production and education principles. This study aimed to determine whether students at three Recovery Colleges in England were representative of mental health service users.

Method

Gender, age, ethnicity, diagnosis, involuntary detention and inpatient admission were extracted from clinical records. Data for all service user students enrolled and those who had attended 70% of a Recovery College course were compared to mental health services caseloads, using chi-square goodness of fit tests.

Results

Clinical records were identified for 1,788 students. Significant differences were identified for gender, age and diagnosis ($p < 0.001$). In some Colleges, more students had recent inpatient admissions or involuntary detentions.

Conclusions and Implications for Practice

Service user students were largely representative of mental health service users, although some groups were under-represented. Further research is needed to understand why, so that Recovery Colleges can continue to address inequalities.

Key words

Recovery College, demographics, accessibility, service use, inclusivity

Impact and Implications

This is the first multi-site investigation into the characteristics of Recovery College students. It found that students are largely representative of people using mental health services, at different stages of their recovery. However, Colleges and mental health services could work on improving access for male, younger and older service users, and individuals with certain mental health diagnoses.

Background

Recovery Colleges follow an adult education model, promoting self-management and recovery through co-produced courses (i.e., co-created and co-facilitated by experts-by-training and experts-by-experience). Since 2009 (Perkins et al., 2018), Colleges have spread rapidly, with around 77 in England 2021, and more worldwide. They foster processes of connectedness, hope, identity, meaning and empowerment (Leamy et al., 2011), helping students towards Bill Anthony's definition of recovery of "*living a satisfying, hopeful, and contributing life*" (Anthony, 1993, p. 527). Recovery Colleges contribute to service development (Perkins et al., 2012) and Anthony's vision for recovery-oriented systems (Anthony, 2000).

Recovery Colleges differ from clinical services; individuals self-enrol and graduate from courses from a prospectus. Many students also use mental health services provided by local National Health Service 'NHS Trusts', referred to hereafter as 'service user students'. However, Colleges are also attended by informal carers, mental health professionals, and the public.

Recovery Colleges are associated with outcomes such as developing a sense of identity and hope, increased opportunities, lifestyle, social and wellbeing benefits (Western Australia Mental Health Commission, 2018). Those who completed over 70% of a course showed reduced service use (Bourne et al., 2018).

A defining principle of Recovery Colleges is inclusivity (Perkins et al., 2012). However, there is little research on how they serve diverse populations. An evaluation of Sussex Recovery College in England, comparing the whole student cohort to the corresponding

Trust caseload (i.e. those using the local mental health services) and the local population, found that students were more representative of the population than the Trust caseload was in terms of ethnicity and sexual orientation, but men and over 60yrs were under-represented compared to both (Meddings et al., 2019). A one-College study found that service user students had similar illness severity to the Trust caseload (Bourne et al., 2018). Comparing the characteristics of mental health service users who register/ attend the Recovery College with the wider caseload may indicate if some groups of service users are accessing the College less.

Aims and objectives

Our aim was to assess the representativeness of Recovery College service user students compared to affiliated Trust caseloads, to determine whether the Recovery College is equally accessed by those using mental health services. The objectives were to compare the sociodemographic and clinical characteristics of the Trust caseload with (a) enrolled service user students and (b) completer service user students (who attended over 70% of a course).

Methods

Sample

The sample was comprised of adults (18yrs+) currently registered with mental health services across three NHS Trusts. Trusts incorporate various services within a catchment area, including community mental health teams, inpatient facilities, and specialist mental health services.

Settings

Leicester, South London and Maudsley (SLaM) and Sussex Recovery Colleges were selected from different regions of England, with different extents of urbanicity and ethnic diversity of their populations.

Measures

Gender, age category, ethnicity category, primary clinical diagnosis (grouped using ICD10 categories), Mental Health Act (legislation allowing compulsory detention/ treatment) and mental health hospital stay in the past 24 months were compared. The most recently recorded information was used.

Procedures

Research Ethics Committee approval was obtained (Nottingham REC1, 18.1.17, 16/EM/0484). At each site on 01/07/2017, the Recovery College manager identified current students who had self-reported that they also used Trust services. Attendance records showed who had completed a course, defined as >70% attendance (Bourne et al., 2018; Rinaldi, 2012). The Trust provided aggregated sociodemographic and clinical information for these students and for the Trust caseload. Researchers had no access to individual clinical records and the data were kept within Trust IT systems.

Analysis

Chi-square goodness of fit tests compared the proportions of (a) enrolled service user students and (b) completer service user students with the Trust caseload, using an online calculator (<https://www.socscistatistics.com/tests/goodnessoffit/default2.aspx>). Missing data were excluded. Bonferroni correction was used to adjust for multiple comparison, where $p < 0.001$ indicated significance.

Results

Recovery College managers reported a total of 2,654 students enrolled on 01/07/2017: 1,446 in Leicester; 348 in SLaM; and 860 in Sussex. Of these, 1,792 (67.5%) self-identified as service users. At the two Colleges where data were available, 116 (11.6%) students self-identified as informal carers (Sussex n=92(13.5%), SLaM n=24 (7.5%)) and n=73 (7.3%) as mental health staff (n=Sussex 36 (5.3%), n=SLaM 37 (11.5%)).

Trust clinical records were located for n=1,788 (99.8%) service user students. N=644 (36.0%) had attended 70% of a course (completer students): n=234 (26.5%) at Leicester, n=105 (44.9%) at SLaM, and n=304 (45.4%) at Sussex. Affiliated NHS Trust caseloads was comprised of n=23,749 for Leicestershire, n=33,381 for SLaM and n=39,241 for Sussex.

There were significantly more female than male service user students enrolled at Leicester and SLaM Recovery Colleges than the affiliated Trust caseloads ($\chi^2(1, 23745)=19.09, p<.001$) and ($\chi^2(1, 33366)=21.36, p<.001$). This pattern was similar but non-significant for completer service user students. With regards to ethnicity, no significant differences were found at the three sites. There was a significant difference in age at all Colleges across both groups. Use of summary data prevented post-hoc comparisons for significance, but percentages appeared to show relatively more middle-aged (45-65yrs) students, fewer under 25yrs and over 65yrs than in the overall Trust caseload (see Table 1).

Insert Table 1 here

In Leicester, the diagnoses of both enrolled ($\chi^2(4, 3685)=79.51, p<.001$) and completer ($\chi^2(4, 3685)=18.52, p<.001$) students differed significantly to those of the Trust caseload. There appeared to be relatively more students diagnosed with psychotic disorders, mood disorders and personality disorders, whilst other disorders were under-represented (see Figure 1 and Appendix 1). A similar pattern was observed for Sussex Recovery College ($\chi^2(4, 8733)=68.96, p<.001$) ($\chi^2(4, 8733)=31.39, p<.001$), but for SLaM this was non-significant.

Insert Figure 1 here

In Leicester, both groups of students were more likely to have had an inpatient admission than the Trust caseload ($\chi^2(1, 23746)=44.18, p<0.001$) ($\chi^2(1, 23746)=15.61, p<.001$), as were enrolled ($\chi^2(1, 39241)=19.51, p<.001$) but not completer students in Sussex (See Table 2). Enrolled but not completer students at Sussex were more likely to have experienced the Mental Health Act ($\chi^2(1, 39241)=32.00, p<.001$), with no significant difference found in SLaM, the other comparable College.

Insert Table 2 here

Discussion

Our findings align with the previous single-site study at Sussex Recovery College (Meddings et al., 2019), although men were no longer under-represented in our study in Sussex, perhaps due to changes by the College (e.g. wording of course prospectus). Increasing representation of younger and older Recovery College staff may help to increase diversity in age (Meddings et al., 2019). This is important, as those accessing mental health support are increasingly over 65yrs old (Faculty of Public Health and Mental Health Foundation, 2016;

Nash, 2017), and the majority of mental health conditions begin before 24yrs (Kessler et al., 2005).

Like Bourne et al (2018), our findings suggested that students were more likely to have severe non-psychotic disorders and psychosis. However, in two Colleges, those with diagnoses categorised as ‘other’, such as intellectual disabilities and dementias, who make up a high proportion of mental health caseloads, appeared to be under-represented. Healthcare staff may believe recovery is less relevant to particular groups (Slade et al., 2014), contrary to the philosophy that recovery is for all (Department of Health, 2011). Alternatively, there may be concerns about the learning expectations of a ‘College’, and accommodations for those with cognitive difficulties may need to be made more explicit.

Strengths and limitations

This study involved three diverse Recovery Colleges in different regions of England, and linkage to Trust-wide data. Several limitations apply. Only NHS-affiliated Recovery Colleges were included, limiting generalisability. Also, the services each Trust included in total caseload figures was unclear. Much data was missing, preventing comparisons for disabilities or sexuality and limiting validity of some conclusions. Finally, the study design prevented analysis of smaller groups (e.g. gender non-binary).

Conclusions

We found diversity amongst service user students, although some groups were under-represented. Recovery Colleges are adapting to encourage engagement of these students, e.g. co-producing more dementia courses (Lowen et al., 2019). A new form of Recovery College, ‘Discovery Colleges’, are being developed for younger students (Hopkins et al., 2018). Our

study directs future research to specific groups to explore why they may be under-represented, to continue addressing barriers to recovery.

Declaration of interest

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Table 1: Demographic characteristics of Recovery College service user students compared with affiliated Trust caseload

n (%)	Leicester Recovery College			SLAM Recovery College			Sussex Recovery College		
	Service user students	Completer students	Trust caseload	Service user students	Completer students	Trust caseload	Service user students	Completer students	Trust caseload
Total	884	234	23,749	234	105	33,381	670	304	39,241
Gender									
Female	556 (62.9)	147 (62.8)	13,248 (55.8)	150 (64.1)	60 (57.1)	16,198 (48.5)	387 (57.8)	181 (59.5)	21,636 (55.1)
Male	325 (36.8)	86 (36.7)	10,497 (44.2)	84 (35.9)	45 (42.9)	17,168 (51.4)	280 (41.8)	121 (39.8)	17,571 (44.8)
Missing	3	1	4	0	0	15	3	2	34
Comparison (chi-squared)	19.09 p<0.001	5.02 p=0.025		21.36 p<0.001	2.79 p= 0.095		2.15 p= 0.143	2.74 p= 0.098	
Ethnicity									
White / White British	637 (82.1)	163 (82.3)	13,834 (82.3)	126 (57.5)	60 (61.9)	15,663 (60.5)	571 (92.2)	262 (92.6)	29264 (90.6)
Asian / Asian British	80 (10.3)	23 (11.6)	2,108 (12.5)	16 (7.3)	3 (3.1)	1,361 (5.3)	7 (1.1)	3 (1.1)	441 (1.4)
Black / Black British	21 (2.7)	4 (2.0)	419 (2.5)	51 (23.3)	24 (24.7)	6,251 (24.1)	7 (1.1)	4 (1.4)	376 (1.2)
Mixed / other	31 (4.9)	8 (4.0)	450 (2.6)	26 (11.8)	10 (10.3)	2,615 (10.1)	34 (5.5)	14 (5)	2,214 (6.6)**
Missing	115	36	6938	15	23	7,491	51	21	6,946
Comparison (chi-squared)	8.95 p=0.299	1.89 p=0.596		2.95 p=0.400	0.93 p=0.818		1.68 p=0.641	1.64 p=0.651*	
Age									
Under 25	72 (8.2)	17 (7.3)	2,731 (11.6)	14 (6.0)	6 (5.7)	5,330 (16)	58 (8.7)	23 (7.6)	4,655 (11.9)
25-44	389 (44.2)	99 (42.5)	7,232 (30.6)	100 (42.7)	42 (40.0)	13,861 (41.6)	250 (37.3)	106 (34.9)	12,015 (30.6)
45-65	373 (42.3)	99 (42.5)	6,882 (29.2)	113 (48.3)	54 (51.4)	10,195 (30.6)	263 (39.3)	129 (42.4)	10,974 (28.0)
65+	47 (5.3)	18 (7.7)	6,761 (28.6)	7 (3.0)	3 (2.9)	3,927 (11.8)	99 (14.8)	46 (15.1)	11,597 (29.6)
Missing	3	1	143	0	0	68	0	0	0
Comparison (chi-square)	280.06 p<0.001	64.08 p<0.001		54.07 p<0.001	29.01 p<0.001		95.84 p<0.001	50.73 p<0.001	

Bold = significant at p<0.001 (Bonferroni corrected p value)

* Assumptions of the chi-square violated (expected frequency <5 in $>20\%$ of cells)

** Accuracy of the data extracted on the initial survey date for 'other' was queried, therefore proportions categorized for 'unspecified/ missing' were taken from the Trust Equality monitoring publications, then subtracted from 'other', as well as the total included, to create estimates for Sussex

Figure 1: Bar graphs to show diagnoses of Recovery College service user students compared with affiliated Trust caseloads

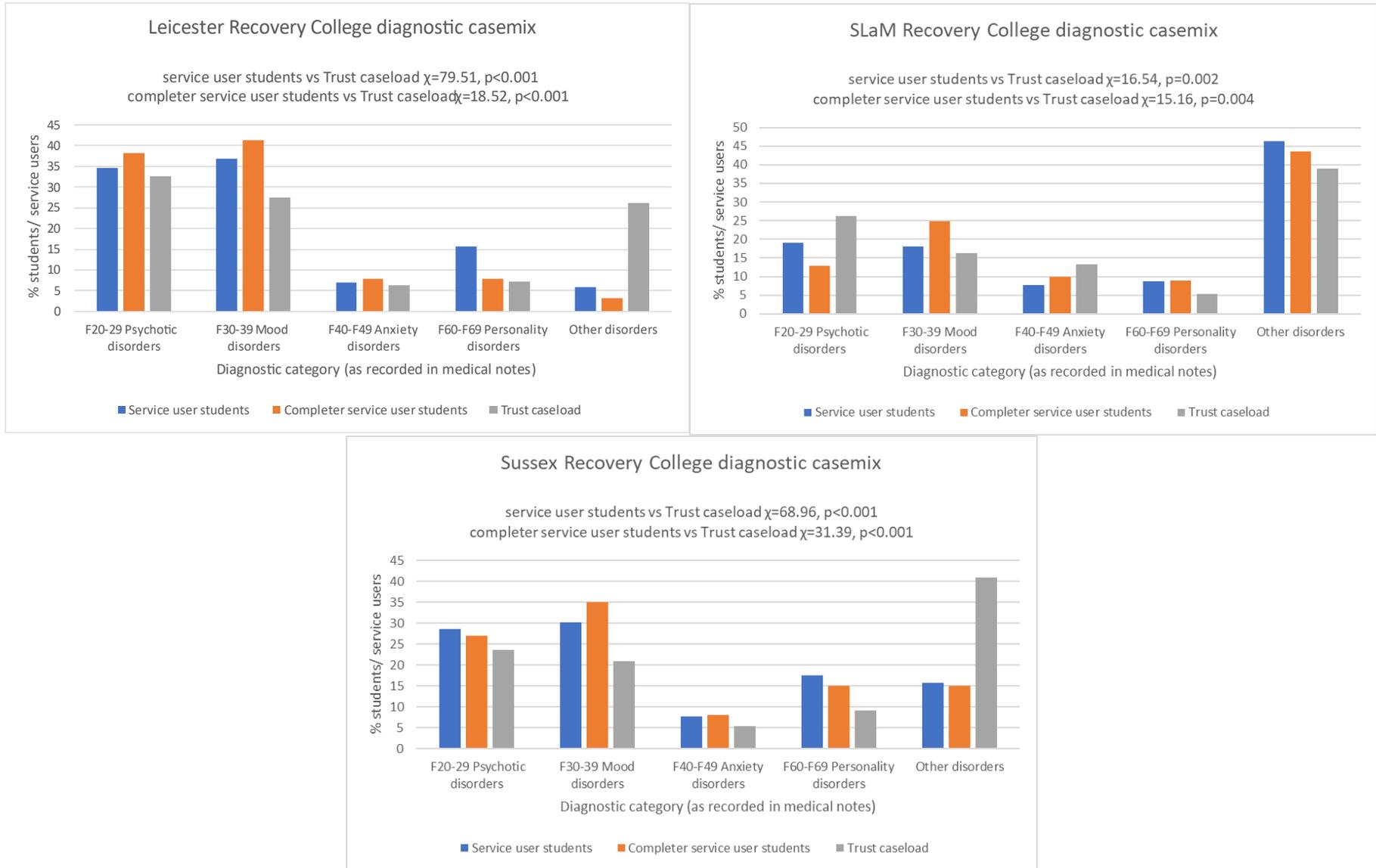


Table 2: Admission and MHA history of Recovery College service user students compared with affiliated Trust caseload

	Leicester Recovery College			SLaM Recovery College			Sussex Recovery College		
n (%)	<i>Service user students</i>	<i>Completer students</i>	<i>Trust caseload</i>	<i>Service user students</i>	<i>Completer students</i>	<i>Trust caseload</i>	<i>Service user students</i>	<i>Completer students</i>	<i>Trust caseload</i>
Mental health inpatient admission in past 24 months?									
Yes	124 (14.1)	35 (15.0)	1,897 (8.0)	23 (9.8)	11 (10.5)	3,965 (12.0)	52 (7.8)	13 (4.3)	1,668 (4.3)
No	757 (85.9)	198 (85.0)	21,849 (92.0)	211 (90.2)	94 (89.5)	29,416 (88.0)	618 (92.2)	291 (95.7)	37,573 (95.7)
<i>Missing</i>	<i>3</i>	<i>1</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Comparison (chi-squared)	44.18 p<0.001	15.61 p<0.001		1.04 p=0.307	0.23 p=0.631		19.51 p<0.001	$\chi=0$ p=0.984	
Use of Mental Health Act in past 24 months?									
Yes				16 (6.8)	7 (6.7)	3243 (9.7)	44 (6.6)	14 (4.6)	1127 (2.9)
No				218 (93.2)	98 (93.3)	30,138 (90.3)	626 (93.4)	290 (95.4)	38,114 (97.1)
				<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Comparison (chi-squared)	N/A	N/A		2.19 p=0.139	1.10 p=0.293		32.00 p<0.001	2.19 p=0.139	

Appendix 1: Diagnosis of Recovery College service user students compared with associated Trust caseload

n (%)	Leicester Recovery College			SLaM Recovery College			Sussex Recovery College		
	<i>Service user students</i>	<i>Completer students</i>	<i>Trust caseload</i>	<i>Service user students</i>	<i>Completer students</i>	<i>Trust caseload</i>	<i>Service user students</i>	<i>Completer students</i>	<i>Trust caseload</i>
Diagnosis									
F20-29 Psychotic disorders	95 (34.7)	24 (38.1)	1,204 (32.7)	39 (19.0)	13 (12.9)	5,584 (26.2)	67 (28.6)	27 (27.0)	2,057 (23.6)
F30-39 Mood disorders	101 (36.9)	26 (41.3)	1,017 (27.6)	37 (18.0)	25 (24.8)	3484 (16.3)	71 (30.3)	35 (35.0)	1,835 (21.0)
F40-F49 Anxiety disorders	19 (6.9)	6 (7.9)	237 (6.4)	16 (7.8)	10 (9.9)	2,823 (13.2)	18 (7.7)	8 (8.0)	469 (5.4)
F60-F69 Personality disorders	43 (15.7)	5 (7.9)	264 (7.2)	18 (8.8)	9 (8.9)	1,128 (5.3)	41 (17.5)	15 (15.0)	794 (9.1)
Other disorders	16 (5.8)	2 (3.2)	963 (26.1)	95 (46.3)	44 (43.6)	8300 (38.9)	37 (15.8)	15 (15.0)	3,578 (41.0)
<i>Missing</i>	<i>610</i>	<i>171</i>	<i>19562</i>	<i>75</i>	<i>32</i>	<i>12062</i>	<i>436</i>	<i>100</i>	<i>30,508</i>
Comparison (chi-squared)	79.51 p<0.001	18.52 p<0.001		16.54 p=0.002	15.16 p=0.004		68.96 p<0.001	31.39 p<0.001	