

Day Care in an Inner City

I. Characteristics of Attenders

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The socio-demographic and clinical characteristics of patients attending psychiatric day care in an inner-urban catchment area were assessed using structured techniques. The overall prevalence of the use of day care was high (164 per 100 000 total population), and 86% of attenders were in prolonged psychiatric contact. Of those in prolonged contact, the clinical and social morbidity of 68 attenders at National Health Service day hospitals was strikingly similar to that of 42 attenders at other units. Users of a 'community mental health centre' and two work centres were less disabled than attenders at other day units. Implications of these results for the organisation of day services and training of staff are discussed.

Day care forms a vital component of the contemporary community-orientated psychiatric service. However, there is considerable confusion among planners and practitioners about what it actually is, what its legitimate functions are and how these functions may best be carried out (Holloway, 1988a). This paper presents the results of detailed clinical and social assessment of the chronically mentally ill day-care attenders living in the inner-city catchment area of a teaching hospital's department of psychological medicine. A companion paper (pp. 810–816) presents an evaluation of the day units serving the area using the 'needs-assessment' technique developed by the Medical Research Council Social Psychiatry Research Unit (Brewin *et al*, 1987). Users' views of their care, an evaluation of the drug treatment provided to attenders and a normalisation-based evaluation of the service have been reported previously (Wainwright *et al*, 1988; Holloway, 1988b, 1989).

The catchment area within which the study was carried out forms part of the sixth most socially deprived health district in England and Wales according to the Jarman indices (Jarman, 1981). The district's social deprivation is reflected in heavy use of all forms of medical care (Golding *et al*, 1986), including in-patient psychiatric care (Holloway *et al*, 1988). At the time of the study, formal psychiatric day care was provided in six settings. These were a purpose-built day hospital (day hospital A); three day centres run by the local authority social service department (day centres A, B and C); a work centre for the handicapped run by a voluntary agency; and the rehabilitation day hospital serving the other sector of the district (day hospital B). People disabled by mental illness could also attend the local Remploy factory. The local-authority day centres each served a part of day hospital A's catchment area together with a part of an adjacent health district. The work

centre served and was funded by three London boroughs.

A census was taken of all users of these psychiatric day units who lived in the catchment area. Attendance was defined as use of the facility on one occasion within the previous month. Day services for the elderly mentally ill and the mentally handicapped were not surveyed. Patients under 18 years of age and those over 65 with a primary diagnosis of dementia were excluded from the survey.

Attenders were divided into two groups, those who had been in continuous contact with psychiatric services of any kind for a year or more without a break of more than three months, and those whose continuous contact was less than a year. In all, 133 attenders were identified, of whom 115 were in 'prolonged psychiatric contact' (86%) and 18 were in 'brief contact'. The proportion of prolonged-contact attenders in day hospitals (87%) was very similar to the proportion in other settings (85%). This paper presents data collected on the 110 prolonged-contact attenders who agreed to be included (the 'prolonged-contact sample').

The estimated population of the catchment area was 81 000 in 1984, representing an overall rate of use of psychiatric day care of 164 per 100 000 total population. This figure does not readily translate into a number of 'day places' used by the local population, since most of the units allowed or even encouraged users to attend less than a full week. Day hospitals were used by 98 per 100 000 (60%) and other facilities by 67 per 100 000 (40%). This excludes the day-activity services provided within hospitals for in-patients and what little psychogeriatric day care was available within the catchment area.

Method

Data were collected on the sociodemographic background, history of contact with psychiatric services, social functioning, social skills, material conditions, and clinical and behavioural problems of attenders. Attenders who agreed to participate in the study were interviewed and a member of staff who knew the attender well was asked to fill in a series of questionnaires. The staff informant was subsequently interviewed to confirm that problems identified at interview and from the questionnaires remained active. Where possible, background and historical data were corroborated using the medical case notes.

A Social Performance Interview (SPI) was carried out. This provided ratings of the performance by the respondent within the past month in 12 significant areas of social functioning: personal hygiene, shopping, cooking, household chores, managing money, child care, use of public transport, use of public amenities, leisure activities, literacy, numeracy, and decision-making. The rating scale and a sample item are shown in Appendix 1. A rating manual was produced giving examples of ratings of each item.

The item scores on the SPI were used to calculate overall social performance scores. The coefficient α (Cronbach, 1951) for item scores of the SPI schedule was 0.71, indicating that the items are of adequate internal consistency, and providing justification for summing scores across items. The inter-rater reliability of the SPI was assessed by obtaining independent ratings from a series of audio-taped interviews which had been transcribed. Item reliabilities were high, with weighted κ values (Cicchetti, 1976) falling below 0.79 for only two items (weighted κ 0.51 for cooking, 0.43 for leisure activities). The intercorrelation between overall social performance scores obtained during the inter-rater reliability study was high ($r=0.93$, $P<0.0001$). The social performance scores are used as a measure of overall social morbidity in this paper.

A staff-rated Social Performance Questionnaire (SPQ) was also obtained, covering the same 12 items as the SPI. An example of an SPQ item is shown in Appendix 2. The coefficient α for the SPQ was 0.72. The inter-informant reliability of the SPQ was assessed by obtaining ratings on 17 attenders at day hospital A. The social performance total scores correlated highly ($r=0.90$, $P<0.001$); individual item reliability was also reasonably satisfactory, weighted κ being under 0.7 for only four items. The Pearson correlation coefficient between the SPI scores and the SPQ scores for the whole sample was 0.72 ($P<0.0001$), giving some support to the validity of these two independent measures of social disability.

Information from the SPI and SPQ was combined to provide an overall rating of functioning in 11 areas (literacy and numeracy forming a single item), and the existence of a clinically significant problem in functioning in an area was confirmed at interview with a key staff informant. Out of 150 problems in social functioning identified in the cases where both SPI and SPQ data were available, 52 were rated in the SPI alone, 74 in both schedules, 18 in the SPQ alone and 6 from other sources.

Three social-skills items (non-verbal communication, conversation and social mixing, and initiation of

conversation) were rated on a three-point scale at interview with the attender, and by a staff informant in a questionnaire. Social skills scores were calculated from the interview and questionnaire. Correlation between the two scores was significant but not high (Pearson correlation coefficient $r=0.56$, $P<0.0001$). Agreement between staff raters was higher ($r=0.64$, $P<0.0001$). Data from both sources were combined to provide a global rating of social-skills problems.

The financial and housing situations of attenders were assessed at interview: a significant problem was rated as present if the respondent reported damp, overcrowded or noisy housing, homelessness, debt, or inadequate money for food. The welfare benefits received by attenders were recorded.

Assessment of clinical state and behavioural problems

The case-note psychiatric diagnosis of attenders was recorded, and a study diagnosis was made following the full assessment procedure. Case-note and study diagnoses differed in 13 of the 89 attenders on whom psychiatric case notes were available.

Eleven clinical and behavioural problems were assessed: delusions/hallucinations, depression, anxiety symptoms, poor concentration/memory impairment, drug/alcohol abuse, side-effects of medication, physical illness, slowness/underactivity, socially embarrassing behaviour, aggression, and psychosocial distress.

Current mental state was assessed using the development version of the Present State Examination 10th edition (PSE-10; Brugha *et al.*, 1988). The author received training in the use of the instrument and participated in assessing its reliability. PSE-10 requires a rating of concentration and includes the Mini Mental State Examination (Folstein *et al.*, 1975). The reported consumption of drugs and alcohol was noted and the CAGE questionnaire (Ewing, 1984) was administered. Two measures of side-effects were carried out, the TAKE examination (Wojcik *et al.*, 1980) and the Abbreviated Tardive Dyskinesia Scale (Simpson *et al.*, 1979). Attenders were asked to report significant physical illness. The behavioural problems slowness/underactivity, socially embarrassing behaviour and aggression were rated within the PSE. Psychosocial distress (i.e. severe worry about personal relationships, housing and financial conditions) was rated during an interview investigating the respondent's personal circumstances. Additional information in each problem area was obtained from a questionnaire filled in by staff, and the current existence of an active problem was confirmed at interview with a staff informant.

Results

For the sample as a whole the numbers of men and women were almost equal (48% male, 52% female), although eight of the ten patients attending units offering sheltered work were men. The mean age was 46 years, with a range of 20–80 years. All ten attenders aged over 65 years attended day hospital A. Six of these had begun attending before the age of 65. The proportion of attenders from ethnic

minority groups (24%) was identical to the overall proportion within the catchment area (Lambeth Council, 1981). However, 64% of the under-30s in the sample were from ethnic minorities; a similar finding has been reported in the in-patient unit serving the catchment area (Patrick *et al*, 1989).

Exactly half the sample were single, 18% were married or cohabiting, and 32% were separated, widowed or divorced. Nearly half of the sample (48%) lived with a relative, either a spouse (18%), parents (17%) or some other relative (13%). (The last figure includes two attenders who were living with dependent children as a single-parent family, as well as patients living with siblings or other kin.) Just over a third of the sample (35%) lived independently in a flat or house. Of the 19 attenders (17% of the sample) living in some form of residential provision, only eight were in facilities used exclusively by the mentally ill. The other 11 were in facilities used by a variety of single, homeless persons. This reflects the dearth of specialised accommodation within the district, particularly of an intensively staffed nature.

The three Remploi workers and one patient attending day hospital B were receiving payment for their work, and could be said to be in regular employment at the time of the census. One other attender had a part-time job in addition to attending a day unit. Of the other 105 attenders, only five had worked in the past year, while 74 had not worked in the last five years. All those not working received benefits from the state.

Personal hygiene was significantly poor in 12% of the sample. Daily living skills such as shopping (24%), cooking (25%), household chores (32%), managing money (21%) and use of public transport (18%) were commonly impaired. More day-hospital patients were rated as experiencing a problem in using public transport than attenders at other units (17 out of 68 compared with 3 out of 42: $\chi^2 = 5.56$, 1 d.f., $P < 0.02$). This reflects the insistence of other day units that attenders be able to make their own way to their unit. There were no other significant differences in social functioning between day-hospital and other attenders. However, attenders at day centre B (the 'community mental health centre') had significantly lower total SPI scores than attenders at the other two main day units serving the catchment area. Mean SPI scores for each unit in the study are presented in Table 1.

A social-skills problem was rated as present in 30% of the sample. No attender at day centre B, the work centre or the Remploi factory had severely impaired social skills, while a social-skills problem was rated in 41% of attenders at day centre A and 36% of attenders at day hospital A. The difference between day centre B and day hospital A was significant ($\chi^2 = 7.4$, 1 d.f., $P < 0.01$), as was the difference between centres A and B ($\chi^2 = 6.6$, 1 d.f., $P < 0.01$). A severe housing or financial problem was rated in 18% of the sample. There was no evidence of a difference between day-hospital attenders and those attending other units.

Clinical characteristics of prolonged-contact attenders

Clinical characteristics of the sample are summarised in Table 2. Just under half of the sample received a diagnosis of schizophrenia, schizoaffective psychosis or paranoid psychosis. Schizophrenia was the commonest diagnosis in all settings except day centre B, where the majority of attenders suffered from neurotic problems or alcohol abuse.

Most patients in the sample had substantial psychiatric histories. The mean length of time since first psychiatric contact, generally an episode leading to in-patient admission, was 15.0 years. Only ten attenders had never been in-patients. The mean number of previous admissions reported by patients was 3.7, with 44 patients reporting being admitted five or more times. (Attempts were made to verify the patients' reports from case-notes, but psychiatric case-notes were not always available for the patients not attending hospitals.) The day-hospital attenders had on average been admitted more often than attenders at the other units (mean number of admissions for day hospital patients = 4.2, for attenders at other units = 3.0: ANOVA, $F = 5.88$, 1 d.f., $P < 0.02$). Fifteen attenders, although in continuous psychiatric contact, had been in their day unit for less than a year. The mean length of current stay was 3.1 years. Twenty-four patients had been continuously attending their day unit for more than 5 years. There was no difference in average length of stay between day-hospital attenders and those attending other units.

Schizophrenia was diagnosed in 17 of the 26 Afro-Caribbean and Asian attenders, compared with 36 of the other 84 attenders ($\chi^2 = 4.03$, 1 d.f., $P < 0.05$). Of the 53 attenders with a diagnosis of schizophrenia, 35 were men ($\chi^2 = 11.8$, 1 d.f., $P < 0.01$). (Conversely, only 3 of the 15

Table 1
Social Performance Interview scores and clinical and behavioural problems of 110 prolonged-contact attenders

	Day hospital A (n = 64)	Day hospital B (n = 4)	Day centre A (n = 17)	Day centre B (n = 13)	Day centre C (n = 6)	Work centre (n = 3)	Remploi factory (n = 3)
Social Performance Interview Score	4.95 ¹	5.50	5.62 ²	2.46 ^{1,2}	6.00	3.00	2.66
Mean number of clinical and behavioural problems	3.7 ³	3.8	4.2	2.9	2.0	3.3	1.0

1. Difference between day hospital A and day centre B: *t*-test, $t = 2.81$, $P < 0.01$.

2. Difference between day centre A and day centre B: *t*-test, $t = 2.64$, $P < 0.02$.

3. ANOVA, $F = 2.2$, 6 d.f., $P < 0.05$.

Table 2
Clinical characteristics and previous service use of 110 prolonged-contact attenders

	Day hospital A (n=64)	Day hospital B (n=4)	Day centre A (n=17)	Day centre B (n=13)	Day centre C (n=6)	Work centre (n=3)	Remploy factory (n=3)
Age: years							
mean ¹	47.2	56.0	45.1	41.4	40.5	28.7	51.0
range	20-80	40-64	27-60	22-52	26-64	27-29	34-63
Diagnosis							
% schizophrenia	47	75	47	23	50	100	100
% affective psychosis	19	-	6	8	17	-	-
% neurosis	20	25	12	38	17	-	-
% other	14	-	35	33	17	-	-
Previous psychiatric admissions ²	4.2	5.0	3.6	3.0	1.7	1.3	4.3
Past psychiatric history: ³							
years	14.5	30.5	15.4	13.0	11.8	5.7	27.0
Years in unit ⁴	2.9	6.7	3.0	2.6	3.2	1.3	5.0
Age at first psychiatric contact	32.8	25.5	29.7	28.4	28.2	23.0	24.0
Attenders seeing psychiatrist number (%)	64 (100)	4 (100)	10 (58)	5 (38)	3 (50)	3 (100)	1 (33)

1. Differences between all day units: ANOVA, $F=1.80$, 6 d.f., $P=0.15$, NS.

2. Differences between all day units: ANOVA, $F=1.84$, 6 d.f., $P=0.10$, NS.

3. Differences between all day units: ANOVA, $F=3.19$, 6 d.f., $P<0.01$.

4. Differences between all day units: ANOVA, $F=2.66$, 6 d.f., $P<0.02$.

patients with a diagnosis of manic-depressive illness were men.) Similar results were found in a survey of prolonged-contact users of day care from Camberwell (Wing, 1982), and ethnic differences in diagnostic composition have been reported in case-register studies, local surveys and national studies of admission patterns (Bebbington *et al*, 1981; Dean *et al*, 1981; Patrick *et al*, 1989).

A rating of clinical depression was given for 38% of attenders, while 34% exhibited specific neurotic symptoms such as anxiety. Significant physical illnesses were common (36% of the sample), as were side-effects of medication (30%), poor concentration (52%) and psychosocial distress (75%). Socially embarrassing behaviour was rated as a problem in 23%, slowness and underactivity in 18% and aggression in only 7% of the sample. There were few differences between day-hospital patients and attenders at the other units. Clinically, significant depression was more common among day-hospital patients, being rated in 31 out of 68, compared with 11 cases out of 42 in the other units ($\chi^2=4.14$, 1 d.f., $P<0.05$).

The drinking behaviour of attenders at day centre B was very different from that of the sample as a whole, with 11 out of 13 attenders admitting to consuming alcohol in the previous month, compared with only 40 of the other 96 attenders rated on this item. A striking number of attenders at day centre B had drug or alcohol problems: 6 out of 13, compared with a total of 10 of the 96 attenders at the other settings. The three Remploy workers lacked psychiatric problems, although two suffered from side-effects of their medication and one was physically ill.

The mean number of clinical and behavioural problems for the sample as a whole was 3.6: day-hospital attenders

had a mean score of 3.8, compared with 3.2 for attenders at other units (ANOVA; $F=1.96$, 1 d.f., $P<0.2$, NS). The mean scores of attenders at each unit are shown in Table 1. There were significant differences between units, with the highest mean scores at day centre A and the two day hospitals.

Discussion

This cross-sectional survey inevitably fails to provide a full picture of the dynamics of the use of psychiatric day care within the catchment area. However, throughput of attenders within the local day-care system is slow. One year after the census, 75% of both the prolonged-contact and brief-contact samples were still attending their day unit. The apt metaphor of a 'stage army' has already been applied to a population in contact with a day-care service (Pryce, 1982). The relatively enduring nature of disability among prolonged-contact day patients has been documented (McCreadie *et al*, 1988).

Day hospitals offered places to more attenders than social service department and voluntary sector day centres and a largely long-term rather than acute service. Other studies have reported similar findings (Wykes *et al*, 1982; Pryce *et al*, 1983; McCreadie *et al*, 1984; Brewin *et al*, 1988). There is evidence that in many areas the day-care system envisaged in the Government White Paper *Better Services for the*

Mentally Ill (Department of Health and Social Security, 1975), in which 'acute' day care would be provided by the National Health Service, with longer-term 'social' day care being provided by local-authority day centres, has not developed.

The differing assessment methods and inclusion criteria of the epidemiologically-based studies of day care that have been carried out in Britain (Wing, 1982; Pryce *et al*, 1983; Brugha *et al*, 1988) make comparison between studies difficult. There is, however, an enormous range in utilisation of day services, from 31 per 100 000 in Scotland (McCreadie *et al*, 1984) to 164 per 100 000 in the present study. This range must reflect both variations in the levels of provision and the association between service use and socio-economic deprivation (Hirsch, 1988).

The finding that, on average, day-centre clients were as disabled as, or even more disabled than, those who attended day hospitals has also been previously reported (Wykes *et al*, 1982; Brewin *et al*, 1988). Wykes *et al* (1982) noted that although average levels of disability were similar, the day hospitals in their study accepted patients with more problems than the other units, and therefore the most disabled attenders were in the day hospitals. There was no evidence that this was the case in present study. The needs for treatment and care of prolonged-contact users in the two service systems appeared very similar. The logic of a jointly managed, integrated day service seems overwhelming; the barriers to such a development are formidable (Audit Commission, 1986), but not insurmountable, given sufficient will at a senior level (Vaughan, 1986).

The low level of psychiatric disability encountered at one of the day centres (centre B, the 'community mental health centre') deserves comment. This unit was the only source of local-authority day care to a proportion of the catchment area. The philosophy of the unit, whose staff rejected concepts of mental illness and concentrated on providing a "flexible and responsive environment to anyone in the community who considers himself to have a mental health problem", differed from the more pragmatic approach of other units. It may be that the drop-in service offered produced a social environment within which more socially disabled people felt uncomfortable and consequently stopped attending (Bender & Pilling, 1985). There is a continual danger for services for the mentally ill to move away from providing for those with long-term and apparently intractable problems, to more fashionable and apparently therapeutic activities with the less disabled.

It has for many years been Government policy that local-authority social service departments play the leading role in the provision of community care. This has been given new impetus with the publication of the White Paper *Caring for People* (Her Majesty's Stationary Office, 1989). The implications for the transfer of responsibility for the prolonged-contact day-care users identified in this study are potentially very alarming. A substantial transfer of material resources from the National Health Service would have to occur (without any guarantee that these resources would continue to be allocated for the mentally ill). In addition, day-centre workers will require skills of assessment and treatment of the manifold needs of the mentally ill. Staff will also need an understanding of the issues involved in maintaining a rehabilitative environment that fosters increased independence of users (Lavender & Sperlinger, 1988).

The degree of psychiatric morbidity experienced by day-care users has clear implications for the training needs of staff. The nature of that morbidity, comprising clinical and behavioural problems, impairments of social functioning and individual and societal reactions to mental illness (Wing, 1972), calls into question the division between 'medical' and 'social' care that lies at the heart of the proposed structure of services for community care set out in *Caring for People* (Hollaway, 1990).

Appendix 1: SPI rating scale and sample item

Social Performance Interview rating scale

NB Rating performance in past month

- 0 = No difficulties in area, or minor difficulties without significant restriction of function.
- 1 = Significant restriction of function and/or extra help required for adequate performance.
- 2 = Marked restriction in function and/or considerable degree of extra help required for adequate performance.
- 6 = Has chosen not to perform though has demonstrated ability within the past year.
- 7 = No opportunity to perform within the past year.
- 8 = Unsure.
- 9 = N/A.

Please record answers to the probes.

SRP2 Shopping

In the past month have you shopped for yourself?

What sorts of things have you bought?
Do you find any difficulties using the shops?

Appendix 2: SPQ sample item

Rate SRP2 Shopping

SRP2 Shopping

NB For calculating the SPI total score 6 and 7 are scored as 2.

Went into shops and purchased goods	0
Only went into shops when accompanied by a family member, another patient or member of staff	1
Resisted going into shops even if accompanied	2

Acknowledgements, references and author details are given at the end of the accompanying paper (pp. 810–816).

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Day Care in an Inner City II. Quality of the Services

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Seven units providing psychiatric day care to residents of an inner-city area were surveyed. The extent to which the clinical and special problems of attenders were adequately managed by the services was measured using a 'needs-assessment' technique. Units differed in the proportion of clinical and social problems that were rated as 'unmet needs', although the extent of 'unmet need' was not clearly related to the morbidity of attenders at a unit or the available staffing.

A number of reviews of the extensive empirical literature that now exists in the field of psychiatric day care have recently been published (Herz, 1982; Wilkinson, 1984; Rosie, 1987; Creed *et al*, 1989). One general feature of this literature is a failure to provide an adequate account of the process of day care (Herz, 1982). 'Process' refers to the service provided: whether it meets users' needs and offers appropriate and effective treatment deployed in an efficient and cost-effective manner (Shepherd, 1988). This paper employs a 'needs-assessment' technique developed at the Medical Research Council Social Psychiatry Research Unit (Brewin *et al*, 1987) to investigate the quality of care provided by day services in an inner-city catchment area. The needs-assessment technique produced a measure of the extent to which attenders' clinical and social problems were being adequately managed by the services, and allowed comparisons to be made between units. A companion paper (pp. 805–810) describes the characteristics of the

users of day care in an inner-urban catchment area who were in prolonged psychiatric contact.

The aims of the study were to relate the extent to which units met the needs of their 'prolonged-contact' attenders to the resources available at each unit and the morbidity of attenders. It was hypothesised that needs would be more likely to be met at units that were better staffed.

Information on the seven units serving the catchment area was collected systematically using a structured interview which provided data on the staffing, available and occupied places, referral policies, and organisation of each unit. The types of treatment and the activities provided at the unit were also recorded. Respondents (in the case of the day hospital, the senior nurse; in the case of the day centres, the entire staff team) were also asked a number of open-ended questions about the purpose and philosophy of the unit and the difficulties that had been encountered in meeting the needs of attenders. In addition, each unit was asked to provide a copy of its operational policy.