NHS

National Treatment Agency for Substance Misuse

A national survey of retention in residential rehabilitation services

Dr Petra Meier, Manchester Metropolitan University

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Key findings

Factors relating to treatment services are strongly related to retention in residential treatment services in England. This confirms the findings of the National Drug Evidence Centre, in relation to community services (Millar *et al*, 2005).

Fifty-seven of 87 residential services replied to the survey (65%). These consisted of traditional or modified 12-step programmes (39%), therapeutic communities (TC) or modified TCs (41%), psychotherapeutic programmes (9%) and eclectic programmes (13%). Planned treatment duration varied from one to 12 months, with an average of 22 weeks (five months).

Of the participating services, 48 per cent of clients admitted in 2004 completed treatment, 32 per cent dropped out and 19 per cent were disciplinarily discharged.

The study, a survey of residential rehabilitation services in England, found the factors associated with better client retention were fewer beds, less housekeeping duties, higher service fees and between one and two hours per week of individual counselling.

Total structured activities of more than 39 hours per week were associated with lower overall retention rates.

Higher rates of single room occupancy and higher ratios of staff to clients were also associated with improved retention profiles in participating services.

The key conclusion is that residential rehabilitation services can be structured to improve retention rates and that, while client characteristics are important, services must take considerable responsibility for the retention outcomes they achieve.

Introduction

The Department of Health's Public Service Agreement target relating to drug treatment has been "to increase the participation of problem drug users in drug treatment programmes by 55 per cent by 2004 and by 100 per cent by 2008". However, accessing treatment alone is insufficient and there is clear evidence from the UK that retention for at least three months is associated with significantly greater likelihoods of lasting improvements (Gossop *et al*, 1999). This mirrors the findings of the Drug Abuse Treatment Outcome Study in the US, which also reported a critical three month threshold for improved treatment effectiveness (Simpson *et al*, 1997).

However, achieving this objective has proved more elusive, with UK studies reporting rates of non-retention before the three-month threshold ranging between 52 and 75 per cent (Gossop *et al*, 1999; Keen *et al*, 2001). It emerged that of those leaving treatment prematurely, three-quarters decided to leave of their own accord, but as many as a quarter of clients were told to leave after rule infractions (Meier, 2004). It is in this context that the revised drug strategy has identified retention as a core treatment objective, requiring that services "increase year on year the proportion of users successfully sustaining or completing treatment" (Home Office 1998, 2002).

Previous research has primarily focused on client characteristics, many of which cannot be influenced by treatment providers (Meier, Barrowclough and Donmall, 2005). However, client characteristics provide only part of the explanation around treatment retention, as shown in the analysis conducted by the National Drug Evidence Centre of the National Drug Treatment Monitoring System data (Millar *et al*, 2005). In assessing retention in community services, the authors reported that service variables predicted a significantly greater proportion of the variance in retention than client characteristics.

The analysis of residential rehabilitation services in England attempted to audit differences in retention, dropout and disciplinary discharge rates across residential rehabilitation services for drug users in England, and to identify service factors that explain such differences, paying special attention to factors that are influential early in treatment, when the risk of dropout is typically highest.

Survey methods

95 residential rehabilitation services in England were identified. Eight were excluded after replying: four were alcohol only, two were day care services and two were supported housing services. Therefore, the target sample consisted of 87 services, of which 57 replied (65.5%). Where data was not provided, information was extracted from the NTA's residential services directory.

Results

Profile of participating agencies

Treatment philosophy

The 57 services that returned the questionnaire had admitted 4,434 clients in 2004. Around 14 per cent were traditional 12-step programmes, 25 per cent used a modified 12-step approach, almost 25 per cent were therapeutic communities (TCs), 16 per cent used a modified TC approach, nine per cent offered psychotherapeutic approaches, and 13 per cent described themselves as eclectic. Planned treatment duration varied from one to 12 months, with an average of 22 weeks (five months).

Treatment stage

Thirty-four services (39.1%) provided detoxification prior to primary rehabilitation, of which ten provided secondary treatment. Nineteen services (21.8%) provided primary treatment for clients without detoxification, 25 (28.7%) provided primary and secondary treatment only, and nine (10.3%) were dedicated second-stage houses.

Weekly cost

Fees ranged from £215 to £3,800 per week. When private hospitals are excluded, the average weekly fees was £667 for detoxification and primary treatment, £476 for services providing detoxification, primary and secondary treatment, £469 for services providing primary treatment only, £412 for services providing primary and secondary treatment only and £390 for second-stage only services.

Treatment

Most services provided a mixture of individual and group counselling, lectures, domestic duties and leisure activities. The mean provision of individual counselling per week was 2.6 hours, but ranged from no individual counselling to 20 hours per week. The average intensity of group counselling was 12 hours per week, (range = 0–40 hours). Clients spent on average six hours a week in lectures or education and were required to do up to 30 hours of domestic duties per week, with a mean of seven hours. In 12-step services, clients were required to do less housekeeping (4.5 hours per week) than in TCs (10.5 hours) and other services (5.5 hours). Overall, clients spent between 13 and 66 hours per week in organised activities (average = 35 hours).

Staffing

Programmes had up to 35 therapeutic staff (mean of 7.5 full-time equivalent counsellors). On average, 61 per cent of the counsellors in each service were ex-users. Caseloads per counsellor varied from just one client to ten clients, with an average of five.

Size of the service

Services had between four and 112 beds, with an average of 23. The mean number of admissions per year was 82 (range = 6–369). Services had an average of 21 members of staff, including therapeutic and non-therapeutic staff.

Primary substance

On average, primary drug users made up 45 per cent of the services' clients, followed by 31 per cent who were in treatment for both drug and alcohol use, and 22 per cent of primary alcohol users. Most services accepted criminal justice referrals (94%), while the proportion of dual diagnosis clients admitted was low (3%).

Retention rates in 2004

The retention data for 2004 indicates that just under half (48%) of clients completed all treatment as scheduled, 32 per cent of clients dropped out, and 19 per cent were asked to leave by the treatment service. The retention rates varied widely between services, with between three and 92 per cent of all admitted clients completing treatment, between zero and 93 per cent of clients dropping out and between zero and 55 per cent of clients being asked to leave.

There is some indication that completion rates had improved slightly between 2002 and 2004 (2002: 46.8%, 2003: 47.9%, 2004: 48.3%). This results from a decrease in the proportion of clients dropping out (2002: 37.2%, 2003: 35.4%, 2004: 32.0%), although the proportion of discharged for disciplinary reasons increased slightly in this period (2002: 16.2%, 2003: 16.9%, 2004: 18.5%).

Predictors of treatment retention

There is evidence that longer treatment duration is negatively related to retention, as completion rates fall from 69 per cent for services with a planned duration of less than three months, to 27 per cent for services with treatment durations of 7–11 months. Programmes offering treatment for twelve months or more appeared to have good completion rates, although there were only a small number of services in this category.

Twelve-step programmes were more successful at retaining clients (56% of clients retained) than TCs (41%), with eclectic/other services falling in between (53%) – see Table 1. While adherence to the original philosophy appears to improve retention in 12-step programmes, this is not so for TCs. Traditional and modified TCs did not differ in terms of completion rates and although traditional TCs had larger dropout rates, modified TCs lost more clients due to disciplinary discharge.

	Treatment philosophy	Mean %	Number
Completion	12-step & 12-step based	56.2	18
	Therapeutic communities and therapeutic communities-based	41.2	26
	Eclectic/other	53.2	9
Dropout	12-step & 12-step based	24.6	18
	Therapeutic communities and therapeutic communities-based	39.5	26
	Eclectic/other	25.1	9
Disciplinary discharge	12-step & 12-step based	18.3	18
	Therapeutic communities and therapeutic communities-based	17.9	26
	Eclectic/other	21.0	9

Table 1: Differences in retention by treatment philosophy

Treatment activities and retention

Both individual counselling and domestic duties appeared to play a major role in predicting retention, as did the amount of overall programme a client was scheduled to attend.

Individual counselling

Services providing up to one hour per week had significantly lower completion rates than services providing more than an hour of individual counselling. The highest completion and lowest dropout rates were observed in services providing 1–2 hours of individual counselling a week.

Group counselling

The amount of group counselling did not impact on overall completion rates, but services that provided between eight and 14 hours a week had higher dropout rates than those providing up to seven hours or more than 15 hours. The best retention rates were observed in the group with the least group work.

Domestic duties

Services with the most time spent on domestic tasks had the poorest completion and highest dropout rates. There was little difference in retention between those services requiring 0–4 hours or 4–8 hours, but dropout rates almost doubled when more than eight hours a week of housekeeping work was required.

Total amount of treatment

Significantly more clients completed treatment in services providing up to 38 hours of treatment per week, compared to services providing more than 39 hours.

Service factors affecting retention

- Completion rates were lower and dropout rates higher when a service had more beds, but total number of admissions per year did not play a role in retention. The total number of staff was related to disciplinary discharge rates, but not to dropout and completion rates
- Services with more clients per counsellor had higher dropout and lower completion rates, with more clients lost due to disciplinary discharge. Services with fewer members of therapeutic staff per bed also had higher dropout rates – again staffing levels appear to play an important role
- Neither the proportion of therapeutic staff with formal counselling qualifications nor the proportion of ex-users amongst the therapeutic staff had an impact on retention.

Treatment environment and retention

There is a strong effect for room sharing – services which have mostly single rooms have better retention rates than services where most clients share rooms (see Figure 1).

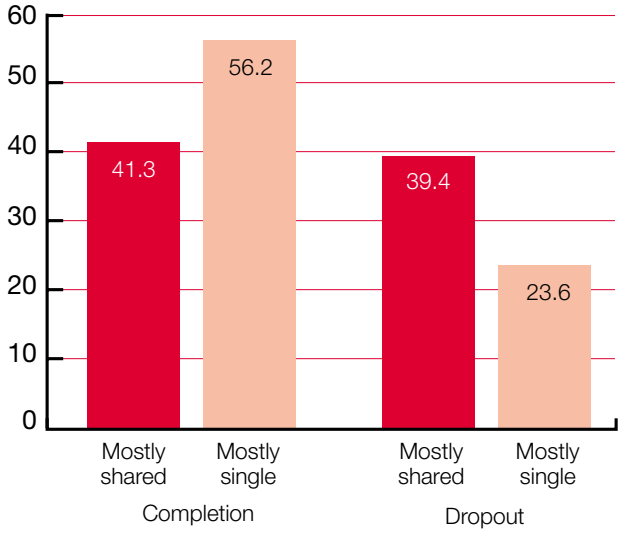

Figure 1: Room sharing and retention

Caseload composition

The proportion of clients referred from the criminal justice system (CJS) was not significantly related to disciplinary discharge or dropout rates, but was associated with a slightly lower overall completion rate. Similarly, the proportion of dual diagnosis clients accepted had no impact on retention rates, nor did services with greater user involvement in decision making processes.

Costs and other management issues

Higher weekly fees were significantly related to higher completion rates and to lower disciplinary discharge rates. There is a slight trend for services with more managers per staff to be less successful at retaining clients, and to discharge more clients.

Overall predictors of retention

- Four variables explained more than half of the variance in treatment completion using regression analyses. A higher number of beds and more housekeeping duties were both associated with lower completion rates, whereas higher service fees and more individual counselling were related to higher completion rates.
- Dropout rates were again predicted by four variables, accounting for 56 per cent of the variance. Higher numbers of beds, more housekeeping duties and the type of agency predicted dropout. Services with mainly shared rooms also had higher dropout rates.
- Disciplinary discharge rates were less effectively predicted, with only 16 per cent of the variance explained. Services with more staff and counsellors with smaller caseloads had lower disciplinary discharge rates.

Discussion and recommendations

The average retention rate reported for 2004 was 48 per cent, a slight improvement over the preceding two years, yet this remains extremely variable across the services responding. The study has shown that this variability in retention and dropout rates can be predicted at service level, with aspects of service structure, physical environment, cost and treatment programme predictive of differences in retention and dropout.

The effects of treatment philosophy and treatment duration are difficult to separate, as 12-step programmes tend to be both shorter in duration than TCs and other programmes, but were also more successful in retaining clients. However, these programme differences (and programme duration) were no longer significant predictors of retention once differences in funding and programme content were accounted for. The finding gives a clear indication that adequate funding can help to deliver treatment in a manner that improves client retention. Therefore, services charging more per client per week were more successful at retaining clients.

The total time per week clients spent in structured activities, including both therapeutic and non-therapeutic activities, was high and more than 38 hours in at least one-third of services. This seems quite a demanding schedule, considering that the normal working week for employees is 37 hours. This issue of burden is supported by the effects of individual counselling and domestic work – optimal levels of individual counselling were between one and two hours per week, while clients were asked to do more than eight hours of housekeeping per week had dropout rates almost double that of services where clients were expected to help for up to eight hours (45% compared to 27%). In the overall analysis, when domestic duties are accounted for, programme philosophy no longer impacts on retention. In other words, individual counselling and level of domestic duties are far stronger predictors of retention than treatment philosophy.

Services with smaller counsellor caseloads had significantly higher completion and lower disciplinary discharge rates, while the number of therapeutic staff per bed was inversely related to dropout, supporting a commitment to workforce development as a means of promoting retention. Overall staffing levels played a more important role than either the formal staff qualifications or the number of ex-user staff in predicting retention. The importance of adequate resourcing was supported by the finding that services with lower levels of room sharing had better retention and lower drop-out rates (39% vs. 24%). It is also surprising that 55 per cent of services had mainly shared rooms, as national care standards (National Treatment Agency for Substance Misuse 2002b) require that accommodation in residential rehabilitation services should be mainly in single rooms.

In contrast to findings for community-based prescribing services (Millar *et al* 2004), the proportion of CJS-referred clients, did not influence dropout in this study which does, however, provide further support for the assertion that service standards predict retention better than client characteristics alone. Therefore, although services that had higher proportions of alcohol than drug users retained more clients, the proportion of dual diagnosis or CJS-referred clients did not affect overall dropout or retention rates (although the numbers were small).

It is important to recognise the limitations of the study. Although services were reassured that their responses would be confidential, there may have been a reluctance to report poor retention rates. Similarly, the reliability of the data may vary because of the lack of available information, and in spite of a response rate of 65%, no generalisations can be made to services who did not participate. Finally, while focusing on service factors is crucial, it is essential to develop methods to integrate client and service predictors of treatment retention and outcomes.

However, the clear study conclusions are that, to successfully retain clients, residential rehabilitation services must have:

- sufficient staff, especially therapeutic staff
- sufficient funding
- a well-developed treatment schedule that is not too demanding for the client in terms of housekeeping duties or the overall time spent in structured activities, and which incorporates sufficient levels of individual counselling.

Apart from this, services should not have too many clients in treatment and should avoid room sharing wherever possible.

A further inference is that, with just over half the client group not completing treatment, sufficient provision is made to safeguard the wellbeing and continuity of care for those who drop out. Services should, wherever possible, help clients to make appropriate arrangements for support, accommodation and treatment in the community. This can be done by arranging appointments, supporting travel and immediate needs, and ensuring that community services in the client's preferred area are available to provide essential supports, to ensure that treatment gains are not lost at this point.

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Reader information

Document purpose	The study aims to analyse differences in retention, dropout and disciplinary discharge rates across residential rehabilitation services for drugs in England.
Title	Drug misuse treatment and reductions in crime
Author	Dr Petra Meier, Manchester Metropolitan University
Publication date	June 2005
Target audience	Primarily providers and commissioners of drug treatment services in England, and service users and carers
Circulation list	Commissioners of treatment services Co-ordinators and chairs of local partnership (e.g. drug action teams and crime and disorder reduction partnerships) Regional government department leads on drugs Central government department leads on drugs Royal Colleges
Description	An audit of residential rehabilitation services in England
Contact details	National Treatment Agency for Substance Misuse Until 16 July 2005: 5th floor, Hannibal House, Elephant and Castle, London SE1 6TE. Tel 020 7972 2214. Fax 020 7972 2248. **From 18 July 2005:** 8th floor, Hercules House, Hercules Road, London SE1 7DU. Tel 020 7261 8801 Fax 020 7261 8883 Email nta.enquiries@nta-nhs.org.uk www.nta.nhs.uk
Gateway/ROCR approval	The NTA is a self-regulating agency in relation to the Department of Health Gateway

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