

Value of standard personality assessments in informing clinical decision-making in a medium secure unit

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Background Assessing those with personality disorder for treatment in secure settings is known to be unsatisfactory.

Aim To examine the utility of a standardised assessment of offenders with personality disorder referred for treatment in secure care in a naturalistic study.

Method A consecutive series of 89 men were assessed with a battery of four recommended instruments measuring personality and risk. Decisions on whether or not to admit were based on a multidisciplinary discussion informed by these assessments.

Results Of the 89 comprehensively assessed referrals, 60 (67%) were offered admission. High scores on the Psychopathy Checklist–Revised (especially on Factor 1) was the only measure that was associated with rejection. Of 44 patients discharged, 29 (66%) failed to complete treatment; none of the pre-admission assessments distinguished ‘completers’ from ‘non-completers’. Although skills were acquired on the unit, follow-up of 24 men in the community showed that this had only a marginal effect on re-offending rate (58%).

Conclusions Current recommended assessment methods appear unsatisfactory in identifying those who either (a) complete treatment or (b) benefit from treatment. Our results throw doubt on their value.

Declaration of interest None.

The detention of those with personality disorder for treatment in secure institutions has been criticised in the past because the assessments were considered too subjective with insufficient use of standardised measures (Reed, 1994; Fallon *et al* 1999). This has been supported empirically by Collins (1991), Berry *et al* (1999) and Milton (2000).

This lack of a standardised process led Reed (1994) and the Dangerous and Severe Personality (DSPD) Programme (Home Office & Department of Health, 2001) to recommend that personality disorder be assessed with multiple standardised measures. Despite these recommendations, there have been few empirical reports of their implementation. Milton *et al* (2007), in a preliminary study, described the results of this process in a medium secure setting. We expand on this sample and evaluate the process both with regard to treatment adherence and short- to medium-term outcome following discharge.

METHOD

The data for this report come from a dedicated facility that provides interventions for mentally disordered offenders with a personality disorder, the Personality Disorder Unit at Arnold Lodge in Leicester. This provides brief interventions to men with a personality disorder who are transferred primarily from prison, but also from the National Health Service with the intention of reducing their rate of re-offending and improving their social functioning. Those admitted had to have at least one personality disorder according to DSM–IV (American Psychiatric Association, 1994) or ICD–10 (World Health Organization, 1992) and be willing to have treatment. The main exclusion criteria were IQ < 80, history of psychosis, a score of 25 or more on the Psychopathy Checklist–Revised (PCL–R; Hare, 1991) and a history of

sadistic offending. These criteria were adopted in the hope of ensuring that those selected for the unit had a reasonable chance of responding to the treatment offered.

Assessment process

Referrals were made by medical practitioners in forensic or prison settings. Each referral was initially screened by a consultant psychiatrist to determine if there was sufficient evidence to proceed to a multidisciplinary assessment. Referrals deemed as inappropriate were screened out at that stage and the remainder had an independent assessment from the psychiatrist, psychologist and nurse attached to the unit. The psychiatrist, in addition to obtaining the usual psychiatric history, administered the Schedule for Affective Disorders and Schizophrenia–Lifetime Version (SADS–L; Endicott & Spitzer, 1979) or Structural Clinical Interview for DSM–IV Disorder (SCID–1; First *et al*, 1997) to determine the presence of important mental state (Axis I) disorders and the interview version of the International Personality Disorders (IPDE; Loranger *et al*, 1994) to document personality (Axis II) psychopathology. The psychologist assessed intellectual ability with the Wechsler Adult Intelligence Scale (3rd edn, revised) (WAIS–R; Wechsler *et al*, 1998) and psychopathy with the PCL–R (Hare, 1991). The nurses assessed risk with the Historical/Clinical/Risk Management 20-item scale (HCR–20; Webster *et al*, 1997), and motivation and manageability using prison records and interviewing staff. Each professional made an independent recommendation as to whether or not the individual ought to be admitted and the final decision was made by the full multidisciplinary team.

Treatment

The general principle underpinning the treatment approach was that these individuals offended because they lacked the necessary skills to do otherwise. Hence, any augmentation of their skills repertoire (e.g. improved problem-solving, social skills or better anger management) ought to lead to a reduction in their rate of re-offending. Treatment was based primarily on principles of cognitive–behavioural therapy informed by a therapeutic community approach modified for a secure setting. Specific provision was made to tackle criminogenic needs. Treatments were

generally provided in a group which was mostly nurse led. Individual work also took place if this was indicated. A battery of psychometric tests was completed at each care programme approach or case conference meeting (i.e. 3 months after admission and 6 months thereafter).

The programme accepted individuals for a maximum of 2 years, after which they were discharged either back to prison, hospital or the community. All participants volunteered for treatment and could choose to leave the unit and return to the host institution at any time during their admission. There was an expectation that they would engage actively with the treatment regime. The unit had a zero tolerance for physical violence, the use of illicit drugs or alcohol. All these rules were actively enforced so that any departures resulted in individuals being returned to their host institution (usually prison). Those discharged prematurely were usually offered a second opportunity to be readmitted after a period of reflection.

Follow-up

As outcome is one of the validating criteria of any classification process (Robins & Guze, 1970), we selected adherence to treatment and a reduction of re-offending after discharge as the main criteria to evaluate the assessment process. Thus, we assumed that those who were deemed to be suitable for the unit, following this complex battery of assessments, would be likely (a) to complete treatment and (b) to benefit from it. Hence, we examined the completion rate of treatment among those admitted and followed-up all those discharged from the service (whether they

had completed or not) annually for five years after discharge. The follow-up usually comprised a face-to-face interview that documented the mental health status over the previous 12 months, any criminal activity and completion of relevant psychometric tests. Permission for the follow-up study and for the use of routine clinical data for research purposes was obtained from the North Nottinghamshire Ethics Committee.

RESULTS

Comparison of those who were and were not accepted

There were 122 men referred to the service between its opening on 1 February 1999 and 30 September 2005 (the time of completion of this report). Of these, 33 met one or more of the exclusion criteria, 13 (38%) either had personality disorder or a history of psychosis or both, 11 (34%) were deemed to lack motivation and 5 (14%) had a low IQ. The remaining 89 were seen by the multidisciplinary team. These 89 men had a mean age of 27.9 years and suffered from multiple disadvantages. Their educational attainment was poor (only 18 (20%) had obtained at least one GCSE), they had high rates of sexual or physical abuse (65, 73%) often while in the care of social services) and were usually violent at their index offence (73, 82%). There was a high frequency of Axis 1 disorders with major depression (42, 47%), drug misuse (37, 42%) and alcohol dependency (26, 29%) being the most common diagnoses. On the IPDE (interview version), antisocial personality disorder was diagnosed in 57 (64%), borderline in 43 (48%), paranoid in 23 (26%) and avoidant personality

disorder in 19 (21%). Several different personality disorders were frequently diagnosed in a single individual, so that 37 (42%) satisfied the criteria for diffuse or complex personality disorder (Tyrer & Johnson, 1996). On the PCL-R, the mean total score was 19.7 (range 6–32), with scores of 6.7 (range 1–17) and 11.5 (range 2–15) on Factors 1 and 2 respectively. Most of those assessed were at high risk of future violence, with a mean HCR-20 score of 27.1 (s.d.=5.5).

Of the 89 men assessed by the multidisciplinary team, 60 were offered admission (67%) and 29 were declined admission (33%). Table 1 shows the characteristics of those who were and were not accepted for admission. Those with a high total PCL-R score (and especially a high score on the PCL-R Factor 1) and a high HCR-20 score were unlikely to be offered admission.

Adherence to treatment

Adherence to treatment was poor. Of the 44 patients who had been discharged from the unit by 30 September 2005, 29 (66%) left treatment prematurely, with only 15 (34%) of those discharged completing the treatment originally recommended by the multidisciplinary team. The reasons for this failure comprised: (a) 4 (9%) who were subsequently found to be inappropriate for treatment despite being deemed suitable at the initial assessment; (b) 3 (7%) who chose to leave despite clinical advice to the contrary; (c) 11 (25%) who disengaged from the programme; (d) 6 (14%) who showed violent behaviour; and (e) 5 (11%) who indulged in illicit drug taking. None of the original assessment variables was useful in identifying those who were likely to complete treatment. While on the unit, those in the treatment programmes showed a positive response as measured by self-report.

Follow-up

Only 1 of the 44 patients discharged refused to be followed-up after discharge and by September 2005 (5 years after the first discharge), 37 continued to be part of the follow-up process. By that stage, 6 (14%) had either withdrawn their consent for any further follow-up, could not be traced or had died (1 from a heroin overdose).

The rate of re-offending (primary outcome) at 5 years showed that of the 24 that

Table 1 Characteristics of those who were and were not accepted for admission.

Variable	Men offered admission (n=60)	Men not offered admission (n=29)	P
PCL-R: mean (range; s.d.)	18.7 (6–31; 5.9)	21.9 (9–32; 6.3)	0.03
Factor 1	5.7 (1–17; 2.9)	9.1 (1–16; 3.7)	<0.001
Factor 2	11.2 (2–20; 3.8)	11.9 (5–25; 4.0)	0.7
HCR-20: mean (range; s.d.)	26.4 (7–38; 5.6)	29 (18–36; 5.1)	0.07
WAIS-R: mean (range; s.d.)	88 (62–131; 13.3)	87.6 (69–126; 14.5)	0.54
Physical/sexual abuse, %	76.7	65.5	0.27
Schooling (at least GCSE), %	15	13.7	0.33

PCL-R, Psychopathy Checklist-Revised; HCR-20, Historical/Clinical/Risk Management 20-item scale; WAIS-R, Wechsler Adult Intelligence Scale (3rd edn, revised).

were alive and had lived at some time in the community (and hence were at risk of re-offending), 10 (42%) had not re-offended, 12 (50%) had re-offended to a similar or lesser degree compared with their index offence, and 2 (8%) had re-offended more seriously. Although there was roughly a similar number among those who did or did not re-offend who completed the programme, both men who re-offended more seriously were non-completers. Despite the relatively high rate of re-offending, there was evidence that at least to 1 year of follow-up (when we had the largest sample) the gains on social problem-solving on the self-report Social Problem-Solving Inventory (SPSI; D'Zurilla & Nezu, 1990) persisted.

DISCUSSION

We present some preliminary data on an in-patient service set up to treat men with a personality disorder and a history of offending. Although the results from our assessment will not surprise those who work with this group (i.e. that they had multiple disadvantages and a broad range of psychopathology), to our knowledge this is the first systematic description of a complete cohort referred for in-patient treatment using measures with scientific acceptability. Although there are major limitations, our main findings were that: (a) few of these measures helped to discriminate between those who were or were not admitted; (b) of those who were admitted, there was a considerable attrition (66%); and (c) although patients appeared to gain skills during the in-patient admission, some of which persisted during the follow-up, at least to 1 year, their impact on the rate of re-offending was modest.

Limitations

This is a prospective naturalistic descriptive study and hence is subject to the limitations of such a design. First, the continued collection of new data might result in these preliminary results changing in the future, particularly as the small size of this initial data-set makes it sensitive to changes in whatever data are subsequently entered. For instance, if a few more men were convicted of re-offending (or a few less), this would result in a major change in the proportions in the re-offending outcome category. Second, we are describing a clinical service that is likely to take account of regular feedback on its effectiveness and

change its practice accordingly. There was evidence that this indeed occurred: when the results of the early follow-up demonstrated that re-offending was a common outcome, a specific programme was introduced that focused on criminogenic needs to reduce such high rates of re-offending. However, a proper evaluation of the impact of this programme will take some further time.

Third, the absence of a control group makes interpretation of the data difficult. For instance, is our rate of re-offending (58%) in those with a personality disorder on discharge over a variable follow-up period either high or low? We simply do not know as comparable data from other studies are not available. However, we do know that 58.2% of prisoners released in 2001 (the period during which this study took place) were reconvicted of a standard list offence within 2 years (Home Office 2002), a rate that is equivalent to our findings. Fourth, although the assessment provided guidance as to who should or should not be admitted, such guidance was applied loosely, with a degree of clinical override, and not as would have been the case in a clinical trial.

Pre-admission assessment

Examination of the data in relation to admission shows that few of the measures separated the groups, apart from a high score on the PLC-R (especially a high score on Factor 1), which led to the individual being rejected. (This was not a surprise as a high score on the PLC-R was one of our exclusion criteria.) However, these comparisons of mean scores tell us very little about the decision-making process, as these measures were combined to provide a composite score which was used to decide whether or not to admit. Thus, it is impossible to tell from the data in Table 1 as to whether, and in what way, the multidisciplinary team was informed by the assessment process (with the exception of the PCL-R). This is because all of the data were fed into a complex decision-making process and, as this was not hierarchically designed, it is not possible to tell whether a low score on the WAIS-R was more important than a high score on the PCL-R in leading to someone being rejected. Hence, our failure to find differences in the individual assessment measures is neither an argument for abandoning or retaining a systematic assessment using these measures.

Post-admission

Two main points emerged when the patients were on the unit. The first was that there was an improvement in patients' skills acquisition and the second that there was considerable attrition. One criticism of the first finding was that skills acquisition was measured by self-report, and hence was likely to be inaccurate as patients would wish to portray themselves in the best possible light. We believe that this is unlikely for two reasons. First, all patients were volunteers and so were not being detained or released on the basis of their improvement (or the reverse). Hence, there was little incentive to portray themselves positively. (A possible exception was those serving life sentences or on restriction orders where a favourable report would be of benefit. However, this group comprised less than 10% of the sample.) Second, there was an observed improvement in patients' behaviour when they were on the unit and this paralleled the improvement in their self-report. In addition, the self-reported improvement on the social problem measure was enhanced further a year after discharge when those completing the form could not have achieved any further advantage by a positive response.

However, the rate of attrition from the service paints a less favourable picture: with two-thirds of the sample dropping out from treatment prematurely. Drop-outs from treatment are infrequently reported, with the exception of clinical trials where the drop-out from psychological treatments in those with personality disorder ranges between 30 and 70% (Garfield, 1986). As those who enter trials are often a self-selected sample in the community that are enthusiastic and thus more likely to engage, our drop-out rates are surprisingly concordant with those from trial data. Moreover, as the most robust predictors of an increased drop-out in those with personality disorder are low educational attainment (Berrigan & Garfield, 1981), young age and hostility (Smith *et al*, 1995), all of which were common in our sample of young antisocial offenders, our finding of a 50–66% non-completion rate (depending on the definition) is perhaps better than might be expected. None the less, it is disappointing. What is most troubling is that the failure to select those who are likely to complete treatment is, not only an inappropriate use of an expensive facility, but may be damaging as there are data

to suggest that non-completion of treatment predicts a less favourable course compared with no treatment (McMurrin & Theodosi, 2007).

Finally, the follow-up results were also disappointing as the re-offending rate was similar to that of those released directly from prison to the community (Home Office, 2002). This high rate of re-offending occurred despite our data showing – at least for the social problem-solving measure – that gains in treatment persisted during the first year of follow-up.

There are a number of reasons to explain this discrepancy. First, re-offending may either be weakly related or unrelated to the acquisition of skills. Many mental health programmes that treat offenders have been criticised in not focusing sufficiently on the core criminological issues that need to be addressed if future violence is to be reduced (Maden *et al*, 2004). Hence, one of the reasons for our lack of success might have been the initial injudicious selection of the treatment programme, and this has changed since the unit was formed. Second, the reason that the programme was unsuccessful might have been, not that it was inappropriately selected, rather that it was inappropriately applied. There are many reports indicating that programmes fail because of poor implementation rather than deficiencies in the programmes themselves (Hollin, 1995). Third, patient selection might have failed to identify those who would be likely to benefit from what was on offer. We recognise that there needs to be a more systematic assessment of the individual's motivation and if treatment resistance is strong little progress is likely to be made with programmes designed to change personality (Tyrer *et al*, 2003). Deciding which is the best explanation for these negative findings requires more careful investigation than was possible in this pilot project.

Implications

Clearly, one needs to be cautious in drawing too many definite conclusions from such a small sample. In addition, one might ask about their relevance to the DSPD Programme as this clearly has a very different remit. None the less, we believe that the findings of this study are relevant to the DSPD Programme for the following reasons. First, the DSPD Programme currently employs similar assessments to those used in this study as entry criteria to its service

(i.e. scores on the PCL-R and IPDE), albeit in a different direction. That is, that the selection process employed by the Personality Disorder Unit was predicated on criteria (i.e. being volunteers, having a low PCL-R score, absence of sadistic offending, etc.) so that those admitted ought to have had a favourable outcome – certainly compared with those admitted to the DSPD services. Hence the evidence that this treatment programme had little effect on the re-offending rates after release – even in this group chosen to optimise outcome – ought to cause some pause for thought.

Second, our finding that a relatively comprehensive examination had only a very modest impact – if any impact at all – on either adherence to treatment or its outcome is noteworthy. This must call into question the assessment process (that is being replicated within the DSPD Programme), as those selected for admission showed neither the expected adherence to treatment nor a significant benefit in primary outcome. These data provide additional ammunition for those who believe that our current conceptions of personality disorder that underpin the DSM-IV categorical system are fundamentally flawed (Malik & Beutler, 2002).

Third, although one could argue that this selection procedure and treatment implementation bear little resemblance to the DSPD Programme, many patients transferred from hospital DSPD services will pass through 'step-down' services such as our unit. Hence, our very modest reduction in re-offending after release, if replicated elsewhere, ought to be a cause for concern in the light of the high cost of these services.

Future directions

There is a general principle that offenders with active psychosis ought to be transferred to a mental health setting and treated, rather than remain in prison. The position for offenders with a personality disorder is less clear. Should they remain in custodial settings or be transferred to mental health settings for treatment? Those who argue for the former make the following points: (a) that those referred to mental health settings are so similar to other incarcerated inmates that whatever treatment is offered in the former (at considerably increased cost) ought to be offered to all prison inmates; (b) that programmes addressing criminogenic factors within prisons may be as (or even more) effective

in reducing re-offending than those provided in mental health settings. Hence, if a reduction in re-offending is the primary outcome, is it not more sensible to treat all people with personality disorders in custodial settings? There is also a concern that the medicalisation of personality disorder may be used as an excuse for antisocial behaviour and thereby encourage irresponsible individuals to take even less responsibility for their behaviour than they might otherwise do.

Although all of these arguments are plausible, what is clearly lacking at present are empirical studies. Although the DSPD Programme has many detractors, it has at least caused mental health professionals, service providers and other policy makers to place the connection between personality disorder and offending centre stage and thereby wrestle with several different questions that all of these groups have hitherto managed to avoid.

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