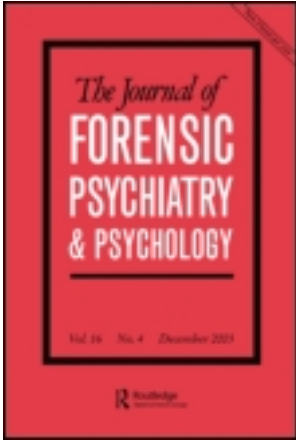


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Patients with personality disorders and intellectual disability – closer to personality disorders or intellectual disability? A three-way comparison

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Within secure intellectual disability services, the prevalence of personality disorders is around 50%. Few studies have systematically examined how patients with both intellectual disability and personality disorders (the ID-PD group) differ from either those with a intellectual disability alone (the ID group) or those with a personality disorder alone (the PD group). The study groups were drawn from a database of 1182 discharges from secure hospital services in the UK and were compared on a number of pre and post treatment variables. Findings suggest that within the secure hospital system, those with intellectual disability alone and personality disorder alone are strikingly distinct on most of the examined parameters. The ID-PD group had higher scores on the PCL:SV and the HCR-20 than both the ID group and the PD group. In terms of outcomes, this group appeared to follow a path closer to those with intellectual disability.

Keywords: personality disorder; intellectual dis*; learning dis*; forensic; medium secure unit

Introduction

The diagnosis of personality disorders in people with intellectual disabilities can be contentious (Alexander & Cooray, 2003; Flynn, Mathews, & Hollins, 2002; Naik, Gangadharan, & Alexander, 2002). While normal personality characteristics develop by adolescence in those with average ability, the developmental phase for personality characteristics may be longer among those with intellectual disability (Royal College of Psychiatrists, 2001). The diagnosis of personality disorders often requires subjective information about thoughts and emotions, which can be difficult to elicit in those with

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severe degrees of disability. Consequently, a particular pattern of behaving, thinking and feeling that may be diagnosed as a personality disorder in those with normal intellectual ability may well be described as a 'behavioural disorder' in those with more severe degrees of intellectual disability.

In addition, people with intellectual disability often have realistic dependency needs that may be confused with several of the criteria underpinning the diagnosis of certain personality disorders like dependent and anxious/avoidant (Reid & Ballinger, 1987). Likewise, autistic spectrum disorders (which are often present in those with intellectual disability) have several features that may be almost indistinguishable from schizoid, schizotypal or anankastic personality disorders. Other problems include the lack of valid, reliable instruments (Khan, Cowan, & Roy, 1997), differences between ICD-10 (World Health Organisation, 1992) and DSM-IV (American Psychiatric Association, 1994), confusion of definition and different personality theories (Goldberg, Gitta, & Puddephatt, 1995), and difficulty in distinguishing personality disorders from the late effects of childhood psychosis (Corbett, 1979). A fuller description of these difficulties and the consequent startling variation in prevalence figures have been highlighted earlier (Alexander & Cooray, 2003).

Notwithstanding these difficulties, the diagnosis of personality disorders in persons with intellectual disability is clinically relevant, because it may affect a person's acceptance into community placements (Reid & Ballinger, 1987), predict subsequent psychiatric disorders (Goldberg et al., 1995), determine the rate of referral to specialist services (Khan et al., 1997), and influence the mode of treatment (Hurley & Sovner, 1995; Mavromatis, 2000; Wilson, 2001). Due to the pragmatic difficulties in making this diagnosis in those with more severe degrees of disability, there is a general consensus that the diagnosis should, at present be limited to those within the mild and moderate ranges of disability (Lindsay, Dana, Dosen, Gabriel, & Young, 2005). In addition, there have been recommendations as to how this diagnosis may be made more reliably (Alexander & Cooray, 2003). Lindsay et al. (2006) took these recommendations into account and examined the reliability and validity of DSM-IV personality disorder criteria for offenders with ID in three forensic settings: a community forensic service, a medium/low security service, and a high security forensic ID service. Across the samples, the total prevalence of PD was 39.3%, with the most common diagnosis being antisocial personality disorder. It was also found that the increase in severity of PD (as indicated by PCL-R scores and/or the number of PD diagnoses) showed a strong orderly relationship with instruments predicting future sexual offences, a finding which has clear implications for the management of this group.

In forensic intellectual disability settings, patients tend to have levels of disability in the mild range and hence some of the aforementioned difficulties in diagnosing personality disorders are less evident. Recently published studies from such medium and low secure settings have focused

on those with emotionally unstable and dissocial personality disorders (Alexander et al., 2010, 2011) and the rate of these personality disorders is around 50% (Alexander et al., 2010; Alexander, Piachaud, Odebiyi, & Gangadharan, 2002; Lindsay et al., 2005). In an elegant study across three levels of therapeutic security, Hogue et al. (2006) showed how the context of sampling affects most relationships between intellectual disability and offending. In their study, 55% of those from high secure settings met ICD-10 criteria for personality disorder, as opposed to 10% in medium/low secure and 1% in the community setting.

Long-term outcome studies from these settings have indicated that a personality disorder diagnosis shows a positive association with reconviction rates (Alexander, Crouch, Halstead, & Piachaud, 2006; Torr, 2003). For a comprehensive review of the considerable progress made in this area, please see Morrissey and Hollin (2011).

The UK has a long history of specialised service provision for people with intellectual disability and mental health problems. Over recent years however, there has been an increasing emphasis on people with intellectual disabilities accessing 'mainstream' services – i.e., those set up for people with 'normal' intelligence (Department of Health [DH], 2009; National Institute for Health and Clinical Excellence [NICE], 2009). Presumably, this should apply to forensic services too.

While to date, there have been no three way comparisons, a recent cohort study (Alexander et al., 2010) compared two of these groups – those with a intellectual disability and personality disorder (the ID-PD group) and those who have intellectual disability (the ID group). The study, a service evaluation involving a selected population of 138 in-patients in a forensic unit for people with intellectual disability, found that both groups had high prevalence of co-morbidities. Although past histories of violence and institutional aggression were no different, compulsory detention under criminal sections and restriction orders were more common in the ID-PD group. There were no differences in treatment outcomes measured by institutional violence, duration of hospital stay or direction of care pathway. The study concluded that although about half of patients detained in secure units for offenders with intellectual disability have a personality disorder, there were more similarities than differences between this group, and others with only a diagnosis of intellectual disability. While good treatment outcomes supported the case for specialised secure treatment units for people with intellectual disability, the case for establishing a more specialised intellectual disability-personality disorder unit was less convincing.

From the point of view of either a practising clinician or a service planner, it is interesting to look at how a group of patients with personality disorder and intellectual disability compare with groups having either a intellectual disability alone or a personality disorder alone. If one were to demonstrate fundamental differences between the background histories,

co-morbidities and treatment outcomes of these three groups, then there would be a case for further specialised service provision.

This article describes a three-way comparison of patients with intellectual disability and a personality disorder (the ID-PD group), intellectual disability alone (the ID group) and a personality disorder alone (the PD group). The aim is to compare these three groups on a number of pre- and post-treatment variables, in order to establish whether the ID-PD group is more similar to the PD group or the ID group.

Method

Design

The study was a retrospective case-note analysis of patients discharged from four independent sector medium secure facilities in the UK. The study sample was drawn from a database of 1182 inpatients discharged from hospital between 1992 and 2001. All those included in the study were detained under the Mental Health Act during the period of their inpatient admission. The psychiatric diagnoses used in the study, including that of the personality disorder, were those made by a consultant psychiatrist upon admission using the International Classification of Diseases-10 (World Health Organization, 1992). The Historical Clinical Risk-20 (HCR-20; Webster, Douglas, Eaves, & Hart, 1997) and Hare Psychopathy Checklist: Screening Version (PCL:SV; Hart, Cox, & Hare, 1995) were completed blind to any outcome following discharge by research psychologists using file-based information that was available at the time of the patient's discharge from the unit. All background psychiatric and mental health reports on the patients were obtained, as were full criminal record history, admission and discharge psychiatric and psychological reports, social work and probation information, and nursing records. All patients had a minimum of two years follow-up. For more details see Gray, Fitzgerald, Taylor, Macculloch, and Snowden (2007).

Participants

From this database, all patients who satisfied inclusion criteria for the study groups were identified ($n = 362$) and information on the variables collected. The first group had both intellectual disability and a personality disorder (the ID-PD group, $n = 48$), the second had an intellectual disability, but no personality disorder (the ID group, $n = 97$) and the third had a personality disorder, but no intellectual disability (the PD group, $n = 217$).

Procedure

Ethical committee approval was obtained from the Ethical Committee of the School of Psychology, Cardiff University. Data were analysed using SPSS

version 16. Initially the overall differences between the three groups were examined. Categorical variables were compared using exact tests. Exact tests were used as the overall sample size is large and some outcomes are relatively rare in some groups (e.g. re-offence at one year). As a matter of consistency, therefore, we used exact tests for all categorical variables. Continuous variables were analysed using Analysis of Variance (ANOVA) for those normally distributed, and the Kruskal–Wallis test was used for the non-normally distributed. If no significant differences between the three groups were observed, no further analyses were performed. However, if an overall significant difference was found, the data was further investigated by comparing between each pair of groups – exact tests for the categorical variables, ANOVA post-hoc tests for the normally distributed continuous variables and the Mann–Whitney test for the non-normally distributed continuous variables. To counter the problem of these ‘multiple comparisons’ generating significance by chance, the p -values from the pairwise comparisons were given a Bonferroni adjustment. For this, the approach used was to adjust the p -values upwards and to interpret them as usual (i.e. $p < 0.05$) for significance. A number of the post-treatment variables were measured on a continuous scale, but some had almost all values of zero, and thus can’t really be regarded as continuous variables. These variables were split into categories, and treated as categorical for the purposes of analysis. The distributions of the continuous variables were assessed visually using histograms and normal plots rather than formal statistical methods, as recommended by Tabachnick and Fidell (2007), ‘if the sample is large, it is a good idea to look at the shape of the distribution instead of using formal inference tests’.

Results

Pre-treatment variables

The three groups were compared on the following categorical variables.

- Gender
- Family history of mental illness
- Type of Section: In this article, Sections 2 or 3 of the Mental Health Act are described as civil sections and Sections 35–38 and 47–48 are described as criminal sections.
- Restriction Order: Those subject to Section 41 and 49 of the Mental Health Act.
- Number of previous convictions: Divided into the following categories – None, 1, 2–5, 6–10 and more than 10.

Exact tests were used to compare between groups, and for those variables where a significant overall difference between groups was observed, pairwise

Table 1. Pre-treatment – categorical variables^a.

Variable	Category	ID & PD N (%)	ID (no PD) N (%)	PD (no ID) N (%)	p-Values	Pairwise comparisons
Gender	Male	32 (67%)	86 (89%)	142 (65%)	<.001	ID/PD vs. ID ID/PD vs. PD ID vs. PD $p = .009$ n.s $p < .001$
Family history of mental illness	Female	16 (33%)	11 (11%)	75 (35%)	.70	
	No Yes	25 (68%) 12 (32%)	46 (60%) 31 (40%)	110 (60%) 74 (40%)		
Type of section	Civil criminal	22 (46%) 26 (54%)	50 (53%) 45 (47%)	90 (42%) 122 (58%)	.25	
Restriction order	No Yes	40 (83%) 8 (17%)	79 (81%) 18 (19%)	148 (69%) 66 (31%)	.02	(No significant differences in pairwise comparison)
Number of previous convictions	None	13 (27%)	28 (29%)	41 (19%)	.001	ID/PD vs. ID ID/PD vs. PD ID vs. PD $p = .03$ $p = .003$
	1	2 (4%)	12 (12%)	17 (8%)		
	2–5 6–10 > 10	16 (33%) 5 (10%) 12 (25%)	23 (24%) 13 (13%) 21 (22%)	33 (16%) 25 (12%) 101 (47%)		

Note: ^aExact tests gave p-values representing the significance of the overall difference between the three groups. Where this was significant, exact tests were used for pairwise comparisons.

comparisons between groups were performed. A summary of the results is given in Table 1.

The results indicated a significant overall gender difference between groups. On pairwise comparisons, there was no difference between the ID-PD group and the PD groups, with both groups being over 30% female. However, both of these groups were significantly different from the ID group, where only 11% of subjects were female.

There were no differences between groups in terms of family history of mental illness. While there were no differences on the type of detaining section (civil or criminal), the groups showed overall differences in terms of the occurrence of a restriction order. On pairwise comparison however, there was no strong evidence of a difference between individual groups.

The results for the number of previous convictions indicated an overall difference between the three groups, and also specific differences between the PD group and each of the other two groups. The results showed that the PD group had a higher number of previous convictions, with almost 50% having over 10 convictions, compared to only a quarter in the other two groups.

The three groups were compared on the following continuous variables.

- Age at first referral to health services
- Age on admission
- Age at first conviction
- Number of previous admissions to hospital
- Number of previous offences
- Number of previous violent convictions
- PCL:SV and HCR-20 scores

The Kruskal–Wallis test was used to compare the non-normally distributed variables within the groups and the results are summarised in Table 2. The figures reported are the median values, together with the inter-quartile range (the interval containing the middle half of the data).

Table 3 details the normally distributed variables, where the figures presented are the mean and standard deviation in each group. ANOVA was used to compare the groups.

There were no significant differences between the three groups on the age at first referral to health services or the age of current admission.

Age at first conviction differed significantly between the three groups. On pair-wise comparison, there were no differences between the ID-PD and ID groups, but the PD group was significantly younger at first conviction than each of the two other groups.

The number of previous admissions, previous offences and violent convictions also significantly varied between the three groups. For all three variables the ID and PD groups were significantly different, with all

Table 2. Pre-treatment – continuous variables**.

Variable	ID & PD median (IQR)	ID (no PD) median (IQR)	PD (no ID) median (IQR)	Test statistic	p-Values	Pairwise comparisons
Age at first conviction	19 (16, 23)	19 (16, 22)	16 (14, 19)	$\chi^2 = 19.168$, d.f. = 2	< .001	ID/PD vs. ID ID/PD vs. PD ID vs. PD ID/PD vs. ID ID/PD vs. PD ID vs. PD ID/PD vs. ID ID/PD vs. PD ID vs. PD ID/PD vs. ID ID/PD vs. PD ID vs. PD ID/PD vs. ID ID/PD vs. PD ID vs. PD
Number of previous admissions	3 (1, 8)	2 (1, 4)	3 (1, 6)	$\chi^2 = 10.406$, d.f. = 2	.006	n.s. $p = .005$ $p < .001$ $p .01$ n.s. $p = .02$ n.s. n.s. $p < .001$ n.s. n.s. $p < .001$
Number of previous offences	4 (0, 11)	2 (0, 9)	9 (1, 26)	$\chi^2 = 18.945$, d.f. = 2	< .001	
Number of violent convictions	1 (0, 3)	1 (0, 1)	2 (0, 4)	$\chi^2 = 19.015$, d.f. = 2	< .001	
Age on admission	30 (24, 35)	25 (22, 33)	26 (22, 32)	$\chi^2 = 3.681$, d.f. = 2	0.16	

Note: **The Kruskal–Wallis test was used to compare between the groups. The Mann–Whitney test was used for pairwise comparisons.

Table 3. Pre-treatment – continuous variables***.

Variable	ID & PD mean (SD)	ID (no PD) mean (SD)	PD (no ID) mean (SD)	Test statistic	p-Values	Pairwise comparisons
PCL:SV Factor 1	5.5 (2.8)	3.7 (3.1)	4.8 (3.7)	F = 4.98, d.f. = 2	.008	ID/PD vs. ID ID/PD vs. PD ID vs. PD
PCL:SV Factor 2	5.0 (2.6)	4.4 (2.5)	5.4 (3.0)	F = 3.90, d.f. = 2	.02	ID/PD vs. ID ID/PD vs. PD ID vs. PD
PCL:SV Total	10.6 (4.6)	8.1 (4.7)	10.0 (5.4)	F = 5.44, d.f. = 2	.005	ID/PD vs. ID ID/PD vs. PD ID vs. PD
HCR-20 History	14.6 (2.9)	11.3 (2.7)	13.8 (3.7)	F = 22.47, d.f. = 2	<.001	ID/PD vs. ID ID/PD vs. PD ID vs. PD
HCR-20 Clinical	6.5 (2.1)	5.5 (2.0)	3.5 (2.3)	F = 50.04, d.f. = 2	<.001	ID/PD vs. ID ID/PD vs. PD ID vs. PD
HCR-20 Risk	4.9 (2.2)	3.7 (2.5)	5.0 (2.6)	F = 8.68, d.f. = 2	<.001	ID/PD vs. ID ID/PD vs. PD ID vs. PD
HCR-20 Total	26.0 (5.6)	20.4 (5.3)	22.2 (6.1)	F = 14.30, d.f. = 2	<.001	ID/PD vs. ID ID/PD vs. PD ID vs. PD

Note: ***ANOVA was used to compare the groups. ANOVA post-hoc tests were used for the pairwise comparisons.

outcomes being more prevalent in the PD group. For example, the ID had a median of two previous offences, compared to nine in the PD group. There were no specific differences between the ID-PD and PD group, and the ID-PD and ID groups differed only in terms of the number of previous admissions, which were less in the ID group than in the ID-PD group.

All three PCL:SV scores differed significantly between the three groups of patients. There were no specific differences between the ID-PD and PD groups, but the ID group was generally different to each of the other two groups, with lower values in this group. For example, the mean total score was 8.1 in the ID group, but 10 or over in the two other groups.

On the HCR-20, there was strong evidence of an overall difference between the three groups on the H, C, R and total scores. As with PCL:SV scores, the ID group was typically different to each of the two other groups.

Post-treatment variables

As people with intellectual disability are often not subject to the same legal processes as others (Alexander et al., 2006; Gray et al., 2007; Holland, Clare, & Mukhopadhyay, 2002), the results of this section need to be interpreted with caution. The three groups were compared on the following categorical variables.

- Post release convictions
- Re-offending at 1, 2 and 5 years
- Serious/Violent reoffending at two years (Violent offences included all those classified as violence against the person by the Home Office, as well as kidnap, criminal damage endangering life, robbery, rape and indecent assault).

Table 4 shows the analysis for the variables analysed on a categorical scale. Note that some outcomes relate to all patients, whilst other outcomes relate only to those who offended post-release. For the outcomes where there was a significant difference between the three groups, additional exact tests were performed to compare between pairs of groups. The Bonferroni adjusted *p*-values from these comparisons are provided.

The results show significant differences between the three groups regarding the total number of post-release convictions. As expected, there were specific differences between the ID and PD groups, but no differences between the ID-PD group and each of the other two groups. Convictions were highest in the PD group, and lowest in the ID group.

Results also indicated highly significant differences between the groups in terms of re-offences at one, two and five years, and a serious/violent conviction at two years. The results for all these outcomes followed the same pattern, with all outcomes being most prevalent in the PD group and least

Table 4. Treatment outcomes – categorical variables^a.

Variable	Category	ID & PD N (%)	ID (no PD) N (%)	PD (no ID) N (%)	p-Value	Pairwise comparisons
Number of post-release convictions	None	37 (77%)	83 (86%)	136 (63%)	< .001	ID/PD vs. ID
	1-5	8 (17%)	11 (11%)	41 (19%)		ID/PD vs. PD
	6+	3 (6%)	3 (3%)	40 (18%)		ID vs. PD
Re-offence at 1 year	No	43 (90%)	94 (97%)	180 (83%)	.001	ID/PD vs. ID
	Yes	5 (10%)	3 (3%)	37 (17%)		ID/PD vs. PD
Re-offence at 2 years	No	41 (85%)	90 (93%)	162 (75%)	< .001	ID vs. PD
	Yes	7 (15%)	7 (7%)	55 (25%)		ID/PD vs. ID
Re-offence at 5 years	No	24 (71%)	66 (86%)	96 (56%)	< .001	ID/PD vs. PD
	Yes	10 (29%)	11 (14%)	76 (44%)		ID vs. PD
Serious/violent re-offence at 2 years	No	37 (90%)	83 (97%)	136 (77%)	< .001	ID/PD vs. ID
	Yes	4 (10%)	3 (3%)	40 (23%)		ID/PD vs. PD

Note: ^aExact tests gave *p*-values representing the significance of the overall difference between the three groups. Where this was significant, exact tests were used for pairwise comparisons.

Table 5. Treatment outcomes – continuous variables (*).****.

Variable	ID & PD median (IQR)	ID (no PD) median (IQR)	PD (no ID) median (IQR)	Test statistic	p-Values	Pairwise comparisons
Length of stay	853 (433, 1228)	571 (224, 944)	240 (100, 683)	$\chi^2 = 38.736$, d.f. = 2	< .001	ID/PD vs. ID ID/PD vs. PD ID vs. PD ID/PD vs. ID ID/PD vs. PD ID vs. PD
Age on discharge	32 (26, 37)	28 (24, 35)	27 (24, 33)	$\chi^2 = 7.040$, d.f. = 2	.03	n.s. $p < .001$ $P < .001$ n.s. $P < .02$ n.s.
Time to reoffend	669 (271, 862)	771 (480, 1536)	426 (227, 924)	$\chi^2 = 3.216$, d.f. = 2	.20	

Note: (*) Only those who reoffended included in the analysis.

****The Kruskal–Wallis test was used to compare the variables within the groups. The Mann–Whitney test was used for pairwise comparisons.

prevalent in the ID group. However, there were no statistically significant differences between the ID-PD and PD groups, or between the ID-PD and ID groups.

The three groups were compared on the following continuous variables.

- Length of stay
- Age at discharge
- Time to reoffend (Time to offence was calculated as the difference between the discharge date and the time of the reconviction for the subsequent offence; the interval between offence and reconviction was often unknown).

The results for these non-normally distributed variables are summarised in Table 5. Where a significant overall difference between the three groups was observed, pairwise comparisons between groups were performed.

The length of stay varied significantly between the three groups, with this being greatest for the ID-PD group. There was strong evidence of a difference between the PD group and each of the other two groups. The length of stay was least in the PD group, with a median of 240 days, compared to 571 days in the ID group and 853 days in the ID-PD group. There was a significant overall difference for age on discharge. The ID-PD group was the oldest, with a median age of 32, and was significantly older than the PD group, which had a median of 27. There were no other significant differences between pairs of groups.

Discussion

This study aimed to establish the differences and similarities between three groups of in-patients within forensic hospital settings in the UK – those with an intellectual disability and a personality disorder, those with an intellectual disability alone and those with a personality disorder alone. To our knowledge, it is the first three way comparison of these three clinically distinct groups. A drawback of the study is its retrospective nature and reliance upon case-file data.

Pre- and post-treatment variables

The ID-PD group is rather closer to the ID group in terms of the number of previous convictions and the age at first conviction. It is clear that it is the PD group that not only gets convicted at a younger age but also obtains more convictions. In terms of the type of detention in hospital, particularly the use of criminal sections and restriction orders, the ID-PD group does not appear to be distinct from either the PD or the ID group. Although it has previously been speculated that the 'PD label' could perhaps result in a

higher proportion of the ID-PD group attracting a criminal section (Alexander et al., 2006, 2010), that does not seem to have been borne out in this sample.

Looking specifically at length of stay, the ID-PD group stays the longest, and is closer to the ID group. Both groups stay for significantly longer periods than those in the PD group.

In terms of future offending and convictions too, the ID-PD group follow a path distinct from the PD group, and appear closer to the ID group. However, these findings may need to be interpreted with caution. Our clinical intuition is that this may be due to those with intellectual disabilities (including those in the ID-PD group) being diverted away from the criminal justice system and hence not subject to the same legal processes as others (Alexander et al., 2006; Gray et al., 2007; Holland et al., 2002). It could also be suggested that those with intellectual disability are more difficult to place and subject to longer restrictions than other groups (Chester, 2010).

It was striking that when it came to scores on the HCR-20 and the PCL:SV, the ID-PD group outscored the PD group. These findings may be due to the presence of the dual diagnosis. In contrast to the two comparison groups, the ID-PD group has by definition more clinical issues which would be relevant to both the PCL:SV and the HCR-20. However, as noted by Morrissey (2003) and Morrissey, Mooney, Hogue, Lindsay, and Taylor (2007), whatever the aetiology of the feature, if the feature is present it is relevant to the psychopathy score and the associated risk. It is important to note that guidelines to assist with the scoring of the PCL-R/SV (Morrissey, 2007) and the HCR-20 (Boer, Frize, Pappas, Morrissey, & Lindsay, 2010) in offenders with intellectual disability have now been formulated. It is possible that if these guidelines had been available at the time of data collection, that may have had some impact on the scoring.

Implications for specialised service provision

The available research regarding the most effective mode of service provision for those with both intellectual disability and personality disorder is limited. The UK has a long history of specialised service provision for people with intellectual disability and mental health problems. Over recent years however, there has been an increasing emphasis on people with intellectual disabilities accessing ‘mainstream’ services – i.e. those set up for people with ‘normal’ intelligence (DH, 2009; NICE, 2009). This can create a difficult dynamic for offenders with intellectual disability, who often have mild levels of disability or IQ scores in the borderline ranges of intellectual functioning (Alexander et al., 2006; Torr, 2003). In community settings, the mental health needs of this group can often fall between the boundaries of ‘mainstream’ mental health and specialist intellectual disability services – as

they are too disabled for one and too disordered for the other. This can lead to boundary disputes between different health and social care teams.

In a recent service evaluation which compared an ID and ID-PD group within a forensic intellectual disability unit, the authors speculated on whether patients with intellectual disability and personality disorders would be better off in 'mainstream' personality disorder units (Alexander et al., 2010, 2011). It is suggested that although being admitted to such units may achieve the aim of equity of access, that achievement would be meaningless in the absence of equity of outcome. The article highlighted the need for offence specific and other therapies adapted for those with intellectual disadvantage and delivered by professionals who specialise in working with people with intellectual disabilities. The reasonably good outcomes reported from that study, as well as those from similar units elsewhere (Alexander et al., 2006; Reed, Russell, Xenitidis, & Murphy, 2004), underscored the advantage of this degree of specialisation.

By adding a third comparison group, i.e., those with personality disorders (the PD group) to the ID and ID-PD groups, this article gives more information on the differences and similarities between these patients. The comparison of these three groups would suggest that within the forensic hospital system, those with personality disorders alone and those with intellectual disability alone are strikingly different on most examined parameters. The group with both intellectual disability and personality disorders, while having scores higher than even the PD group on the PCL:SV and structured risk assessment instruments, nevertheless have a similar picture to those with intellectual disability on duration of hospital stay and treatment outcomes.

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