
Forensic psychiatry for people with learning disability

S. Halstead

The forensic psychiatry of learning disability is a subspeciality which exists on the 'borderlines' between other areas. It takes in information from forensic psychiatry, learning disability, child and adolescent psychiatry, psychology, genetics and pharmacology to name but a few.

Presented here are some of the important developments in the field in recent years.

Epidemiology

The traditional debate about the association between mental deficiency and crime requires gross simplifications of the concepts of mental disorder and of criminal behaviour. However, a focus on serious interpersonal offences and property offences, including arson, is a reasonable starting point. It would be pointless to include offences which required a high degree of sophistication or ability.

There have, however, been some good recent studies of specific groups. There is evidence that for people with learning disability, who are receiving services, the incidence of offending is low. Lyall *et al* (in press) found that 2% of 358 adults with learning disability, living in residential homes or attending day services, had contact with the police in 1992. On the other hand, they found that there was a marked tendency to tolerate and to under-report offences.

Harris (1993) has reported the prevalence of aggressive behaviour in a health district. He also included those placed outside the district because of their behaviour. The overall prevalence of aggressive behaviour among people with learning difficulties was 17.6%. The lowest rate was

identified among day facilities (9.7%) and the highest in hospitals (38.2%). The prevalence in schools for children with severe learning difficulties was 12.6%. In the aggressive sample, men outnumbered women by about 2:1, however this difference vanished in hospitals and schools. In a thoughtful discussion, the following points were emphasised. Account must be taken of the degree of aggression, indeed in this study the risks of serious injury were found to be 'very low'. Physical aggression may not be the most distressing or disturbing aspect of the individual's behaviour. Age was found to be significant 'since changes occur over the lifespan'. People who frequently engaged in physically aggressive behaviour towards others were found to be younger and less able.

The association between behavioural disturbance and intellectual level has been reviewed by Holland & Murphy (1990) and the published data were found to be difficult to interpret. They make the key point, however, from the forensic point of view, that 'people with mild learning difficulties will differ also in the quality of challenging behaviour they show. They are more likely than those with severe disabilities to engage in violent behaviour involving planning (e.g. secreting a weapon) or requiring quite complex skills (e.g. purchasing and using matches for fire-setting)'.

In general, it is difficult to obtain a census of incidents which would have been considered to be an offence if they had been carried out by a person without the label of learning disability. Conversely, certain behaviours, particularly those related to drug consumption and sex, may be considered offensive in the learning disabled while being culturally sanctioned in the normal population.

Genetics

Genetics has contributed greatly to the understanding of severe learning disability. However, since the forensic psychiatry of learning disability is mainly concerned with patients with mild or borderline disability genetics has so far had less impact. That may change.

Göstason *et al* (1991) carried out chromosome analyses on 52 mildly retarded adults and a control group. Chromosomal aberrations were found in 19.2% of the mentally retarded and in 1.9% of the controls. This study did not use direct DNA probes as the work was done in 1987. The detected abnormalities included trisomy 21, fragile X, sex chromosome aberrations and balanced translocations. With more modern techniques the yield could be higher.

Kurtz *et al* (1994) measured urinary amino acids in 58 clients of a multistate provider. Though the paper is not clear on the selection criteria or the level of retardation and there is no control group, the finding of abnormalities in five (8%) is high. All those who screened positive had pervasive developmental disorder or features of organicity, namely seizures or cerebral palsy. Interestingly, one patient also had a chromosome disorder, female

mosaic Turner syndrome. The evidence does not yet support routine urine screening.

Brunner *et al* (1993), have, for the first time, identified a genetic abnormality occurring in males with mild or borderline mental retardation and which is associated with serious antisocial behaviour including aggression, arson, attempted rape, exhibitionism and attempted suicide. Analysis of 24-hour urine samples indicated markedly disturbed monoamine metabolism. The syndrome is associated with a complete and selective deficiency of enzymatic activity of monoamine oxidase A (MAOA). In each of five affected males, a point mutation was identified at Xp11-21, in the eighth exon of the MAOA structural gene, which changes a glutamine to a termination codon. No formal psychiatric diagnosis is reported for the affected men, however a detailed pedigree for the family had been prepared by a relative 30 years previously. Carefully taken family histories may indicate testing the urine for MAO breakdown products or may suggest other mutations. Since only one pedigree has been reported which expresses the phenotype, the possibility remains that the association is one of chance rather than causation.

Criminal justice system

Police interviews

Gudjonsson *et al* (1993) and Lyall *et al* (1995) have drawn attention to the frequency with which people with borderline or low normal intelligence are interviewed by the police. Their learning difficulties may not be obvious, even to trained professionals. The ability to read and write may mask the real level of disability. The police tend to be good at picking up moderate or severe learning disability. It is the marginal cases which may be missed.

Prison studies

Coid (1988), in a retrospective study of 362 mentally abnormal men remanded to Winchester Prison for psychiatric reports, found that approximately 10% were mentally handicapped. He further noted that 'those with mental handicaps [among others] were the most likely to be rejected [by the NHS]...posed the least threat to the community...yet were more likely to be sentenced to imprisonment'.

Box 1. Key points

- Offending and conviction are more prevalent in mild and borderline learning disability
- Offending behaviour is often labelled 'challenging' and decriminalised
- Sex offenders may have been victims in their turn
- 'Dual diagnosis' is frequent in clinical samples of learning disabled offenders
- Patients of learning disability secure units may need prolonged periods of stay
- The criminal justice system may be unfriendly to people with learning disability as victims, witnesses or offenders
- Offenders with learning disability are frequently excluded from services
- Prompt preventive interventions may be effective
- The concept of autism is relevant in assessing dangerousness in forensic learning disability

Among sentenced prisoners, Gunn *et al* (1991) found only 0.4% with mental retardation although formal IQ testing was not attempted.

There are a number of formal studies of remand and sentenced prisoners underway which have not yet reported, however, the early indications are that there are fewer prisoners with learning disability than initially expected.

Advocacy

Recently, attention has been paid to the needs of people with learning disability who have to participate in the criminal justice system as witnesses, defendants or victims. In an innovative attempt to make the system more comprehensible, Hollins *et al* (1994) have produced *Going to Court*, a picture story of a young woman going to court to give evidence. There is no text and the book is intended to be used as an aid in explaining what to expect in court.

Specific psychopathology

Dual diagnosis

The concept of 'dual diagnosis' has been introduced to describe people with learning disability who also suffer from other psychiatric disorders. Bernal & Hollins (1995) have reviewed this area. All the studies surveyed in this paper show that forensic learning disability populations include a variety of comorbid diagnoses. The autistic spectrum disorders, however, as a particular concern of learning disability psychiatry, merit separate consideration.

Autism and Asperger's syndrome

Asperger's syndrome is now a recognised diagnosis under the ICD-10 (WHO, 1992). The disorder is characterised by the same kind of qualitative abnormalities of reciprocal social interaction that typify autism, together with a restricted, stereotyped, repetitive repertoire of interests and activities. According to the ICD-10 criteria, there should be no general delay or retardation in language or in cognitive development and 'significant language retardation would rule out the diagnosis'. The disorder should be manifest within the first five years of life. There is no requirement for the patient to have a demonstrable deficit in 'theory of mind' (Happé, 1994).

Social skills and appreciation of the point of view of others is poor. There is no attempt to engage

another person in conversation, rather the patient will deliver a pedantic, long-winded monologue. There is no capacity to show interest in another person, beyond the need to satisfy the patient's immediate needs. It has been suggested that the characteristic tendency to focus on isolated themes or 'parts' of objects or people results from an unconscious attempt to limit, or come to grips with, a bewilderingly complex world which appears, to the patient, not to follow any rules.

Although the ICD-10 criteria appear to exclude patients with learning disability, there has been at least one recent report suggesting that the diagnosis can be made in mild or moderate learning disability if the linguistic level is adequate (Cooper *et al*, 1993).

The syndrome has been detected among special hospital patients (Scragg & Shah, 1994). All six patients reported had neurological or neuropsychological abnormalities and were of normal intelligence. The authors remind us that mental illness can coexist with Asperger's syndrome.

The two features which are arguably of greatest significance for forensic psychiatry are the absence of 'theory of mind' and the possible coexistence of mental illness. An inability to perceive the thoughts or feelings of others will markedly affect the assessment of dangerousness. The presence of added mental illness raises the possibility of effective treatment.

Secure hospital care

Hospital orders for mental subnormality reached a peak in the mid-1960s. The highest number of unrestricted hospital orders, 444, was made in 1966 and that year 59 restricted hospital orders were also handed down. The annual rate then started to fall dramatically and the corresponding figures for mental impairment in 1985 were 39 unrestricted orders and 9 restricted orders. During this period, the numbers of hospital orders, both restricted and unrestricted, for mental illness and psychopathic disorder remained relatively static.

These figures would seem to suggest that there is no great need for secure beds for patients with learning disability. However, during this period, beds in the traditional mental handicap hospitals have also been withdrawn and reliance has been placed on local specialist and generic services. Some recent studies have addressed the role and effectiveness of the learning disability secure units.

Most learning disability secure hospitals serve a population that has mild learning disability, is mostly male (5-6:1) and with an age range

predominantly in the third and fourth decades. Hoare & O'Brien (1991) have raised the objection that 'only people with at least a moderate degree of mental handicap should be treated in such specialist mental handicap facilities' and they continue 'but most worrying is the continued inappropriate use of mental handicap psychiatry facilities by people of mild and borderline intelligence...'. As demonstrated by the reports cited below, however, this is the direction in which secure learning disability services are developing.

Day (1988) reported an in-patient treatment programme for male offender patients based in an eight bed unit. The treatment package comprised skills training, a token-economy incentive scheme, counselling and supportive psychotherapy, and medication. Information for 20 patients between 1974 and 1982 was presented. The average age was 21.4 years (range 16–36) and the average IQ was 64.6 (range 58–61). Nearly a third had evidence of brain damage, a quarter had been referred to child guidance and a further 30% had suffered frank psychiatric illness. Half had endured severe psychosocial deprivation during childhood. Most were detained under a hospital order. Convictions included serious sexual offences, property offences, violence and arson. Eighty-five per cent made some response to treatment and at the end of follow-up (average 3.3 years) 65% were well, or reasonably well adjusted with offenders against the person showing a better outcome than property offenders. The reconviction rate was 55% during follow-up.

In a review of 92 patients admitted to two mental handicap hospitals under a hospital order, Kearns & O'Connor (1988) noted that nearly half the sample had normal or borderline levels of intelligence and they concluded that this 'suggests that factors other than intelligence testing are considered in their classification as mentally handicapped' and that 'social functioning...was an important element in this appraisal'. This IQ distribution has been replicated in most studies of forensic learning disability populations showing a majority with mild or borderline levels of IQ and very few moderately or severely learning disabled.

Smith (1988) has described what remains to this day a unique arrangement for a secure learning disability service. The Leander Clinic is sited in the grounds of the former Langdon Hospital, Dawlish, Devon, alongside a regional secure unit for normal intelligence forensic patients, the Butler Clinic. Although the Leander Clinic is an open unit, it can transfer patients to the regional secure unit as need demands. This symbiotic relationship may help to reduce the detention of patients in conditions of excessive security which is seen in

other secure learning disability services. In a more recent report on the service, Johnson *et al* (1993) note a decreased frequency of use of the Mental Health Act and no recent admissions from special hospital. They postulate that this could be due to catching people earlier in their 'career'. However, they also report that around 40% of patients 'failed to settle and stayed only briefly'. They consider that this group 'included some of the most disturbed offenders who could not be contained in an open facility, and yet were unsuitable for treatment in the regional secure unit. They seem to have slipped through the provision net completely'.

The medium secure service at the Eric Shepherd Unit, Watford, has been described by Isweran & Bardsley (1987) and Isweran & Brener (1990). The components of the treatment programme are: a structured environment, psychiatric assessment and treatment, psychological treatment and psychotherapeutic interventions, occupational and social skills training, adult education and a therapeutic community approach. There is a strong emphasis on staff training and team cohesion. This has resulted in the virtual abolition of seclusion, once a frequent practice.

The Eric Shepherd Unit has recently reported a follow-up study of 36 patients who had completed at least a year in the treatment programme (Halstead *et al*, 1995a). Patients were followed up for a maximum of five years. Thirty-two patients were traced, 15 of whom had reached or exceeded the fifth year. One third had an IQ above 70 and half had a psychotic diagnosis. Most had improved with treatment. The most striking finding was that, although one third had engaged in some offending behaviour during the follow-up period, only one person was reconvicted (cf. Day (1988), 55% reconvicted). High levels of community support were available after discharge and those from special hospital, prison, those who were mentally ill or who had a low IQ were found to do particularly well.

Both Clarke *et al* (1992) and Halstead & Cassidy (1993) traced all the detained patients with mental impairment and severe mental impairment from a health region. Both studies found the following:

- (a) Over a quarter of detained patients with learning disability were in special hospital.
- (b) None of the severely mentally impaired special hospital patients had been convicted of an offence.
- (c) The severely mentally impaired had all been transferred from mental handicap hospitals as a result of behaviour disorder.
- (d) Patients tended to be detained in excessively secure conditions a long way from home

because of the lack of appropriate local facilities.

Halstead & Cassidy, in addition, estimated the number of patients from the region who were subject to 'informal' or *de facto* detention, outside the Mental Health Act, on locked wards, and concluded that the number was about the same, or slightly greater, than those formally detained.

Maden *et al* (1993) and Halstead *et al* (1995b) again concluded that the majority of mentally impaired patients in special hospital were detained in conditions of excessive security, though a small group, less than a third, properly met the criteria for high security care. The explanation, according to Courtney *et al* (1992), is that 'patients with a learning disability were unable to transfer from a special hospital to a lower level of security'.

In a local, semi-secure service, based in the Prudhoe Hospital, Newcastle, Mayor *et al* (1990) found that the most frequent origin of admission, one quarter, was the parental home or independent accommodation. Although up to a third of patients were accepted on an informal basis, they reported that 'there has been little evidence of need for provision with greater security'. One person out of 42 admitted to the unit had needed referral to special hospital. The authors may have been the first to formulate the basis of learning disability secure facilities:

'[Previous reports] commented on the difficulty in justifying prolonged treatment of some patients when the link between successful psychological change and a reduced risk of dangerous behaviour is uncertain. Nevertheless....many individuals require in-patient treatment lasting for considerably more than two years.'

Two years is the estimated maximum stay in a regional secure unit for general forensic patients. Learning disability secure units should, in general, have a much longer term commitment to habilitation and treatment.

The Mental Impairment Evaluation and Treatment Service (MIETS) of the Bethlem Royal Hospital, however, provides assessment and treatment for up to 18 months (Clare & Murphy, 1993). It is a unique service which aims 'to assist local services to settle clients back into the community, whenever possible, and to ensure that the local services are able to meet the client's needs'. The service judges its success in terms of improvements in the client's functioning and challenging behaviour. The authors also stress the importance of the client's preferences and the degree of restrictiveness of the living environment. They note that it is difficult to weigh one variable against another and therefore to assess the overall success of the assessment and treatment programme.

Reviewing a regional medium secure learning disability service, Cumella & Sansom (1994) concluded that '[one facility with 12 beds] does function as a medium-secure unit, but only two of its patients...[need] this degree of security'. They concluded that 'this anomaly results from the lack of local mental impairment services throughout the region, which makes it difficult to discharge patients...It is recommended that priority be given to the development of local mental impairment services rather than new medium-secure assessment units'. This echoes, in some ways, the point of view expressed by Hoare & O'Brien, quoted above. However beneficial such a policy might be, it would lead to a concentration of medium and high security mental impairment services on fewer, larger, and more remote sites.

Secure services for adolescents with learning disability are rare. Kent & Bird (1994) have reviewed the outcome of the service at the Geoffrey Hawkins Unit, St Andrew's Hospital. They report 20 young people, 14 male and six female, aged between 17 and 34 at follow-up, who had been discharged for at least five months. The length of stay on the unit had been between two and 66 months. All patients had participated in a behaviour modification programme. They found that 18 had improved during treatment and for eight this was maintained after discharge. On the other hand, eight had deteriorated slightly and four markedly at follow-up. Re-emergence of challenging behaviour accounted for deterioration yet adaptive skills were maintained. They found that the good outcome group tended to be younger on admission, had lower ratings of adaptive skills and high ratings of challenging behaviour, plus a shorter treatment period. It is encouraging that improvement was maintained in this group.

Violence in hospital

There is surprisingly little written about this important topic. Shah (1992) analysed the characteristics of all the patients admitted to a high-dependency mental handicap ward over a 21 month period. It was found that violent patients were significantly younger and were more likely to have an abnormal EEG than non-violent patients. Meningococcal meningitis was frequently found as the aetiology of the mental handicap in the violent group. Strikingly, four patients accounted for 74% of the incidents and two of these four patients suffered sudden, unexpected deaths. The author notes that violent patients are often assaulted

themselves in retribution and this might contribute to morbidity and mortality.

Shah's population was all male, but, in a similar study, Linaker (1994) controlled for sex between the two groups. Although females form a small fraction, usually less than 20%, of forensic learning disability patients, it is not clear that they are any less violent than their more numerous male counterparts.

Khan *et al* (1993) have examined the phenomenon of the 'new long-stay' patient in the mental handicap hospital. They found that disturbed behaviour, including violence, destructiveness and self-injury was an important factor accounting for continuing hospital stay.

Community care

Buckley & Bigelow (1992) described an innovative solution to the problems presented by 'multi-problem, service-resistant individuals' who 'consume extraordinary amounts of human services at great cost'. The Multi-Service Network in Vancouver pulls together mental health, alcohol/drug treatment, corrections, forensic, and social and housing agencies to provide more effective services at less cost. The theory of action has two parts: inter-agency communication and external controls which create structure in service provision. The authors claim that costs have been cut as a result of this initiative.

Forensic learning disability practice quickly reveals the phenomenon of the person who fits on so many borderlines that no service is willing to take them on. Services view each other with suspicion or else collude to avoid joint working. Theoretically, the various paper initiatives in the UK, particularly the Care Programme Approach and Care Management, give ample opportunity for joint service working. However, financial incentives still encourage excluding difficult cases from community care and placing them in hospital. Community services do not earn more resources by taking on many challenging clients and managing them well. There is no legal right to a service, even one advertised in the local Community Care Plan.

Illustrative case history

'Janet' is 32 and married to a man 20 years older than her. They live in a modest terraced house. Janet attacks women in the street whom she accuses of having sexual relations with her husband. She also writes threatening

letters to female neighbours for the same reason. She has been charged with an offence as a result of one of these letters. Her husband reports that he cannot meet her excessive sexual demands. Janet runs away occasionally, presents herself as homeless, or drinks and has casual sex in the park.

She has a borderline level of IQ and a history of delayed milestones, disturbed behaviour since childhood, and special education. Janet was buggered at the age of 11 and violently raped at 15. She spent most of the 1980s in prison on a variety of minor charges. Janet has recently carried out one serious domestic arson for which she was not charged.

Janet's father was 'simple' and drowned himself within five weeks of her birth. There was a strong history of learning disability and neurological disorder in his family.

Janet has a son of 11 (by another older man) who has started to show learning difficulties. The son is cared for by Janet's mother.

Janet has had at least 13 psychiatric reports in as many years. Each has quoted the preceding reports as corroborating evidence that Janet is untreatable. She has never received psychiatric support or treatment in the community. No psychiatrist has ever interviewed a first degree relative.

Janet has a probation officer who acts as a 'guardian angel'. The probation officer has failed repeatedly to obtain psychiatric input. Janet denies her behaviour when interviewed and has been found not to be suffering from mental illness. The general psychiatrist refuses to consider genetic testing.

Both general psychiatry and learning disability psychiatry maintain that she is the responsibility of the other. As a result of a forensic psychiatric report, the magistrates have asked local services to reconsider.

'Janet' fits on so many borderlines that it is easy for psychiatric and social services to exclude her as not quite suitable. Probation and prison fill the gap. With a history of special schooling and the early onset of offending, it may be possible for forensic learning disability services to target such people early enough to make a therapeutic impact.

Specific offences

Bernal & Hollins (1995) note that people with learning disability sent to hospital by the courts may not be typical of offenders with learning disability and that arson and sexual offences may be therefore over-represented in hospital populations. It is, moreover, popularly believed that people with learning disability are more likely to commit sexual and incendiary offences than the general population. The evidence, such as it is, is reviewed here.

Sex offences

The frequency of sexual offending in people with learning disability compared with their peers of normal intelligence remains elusive. However, there have been recent studies of specific groups: adult clinic referrals (Day, 1994), adolescent clinic referrals (Gilby *et al*, 1989), special hospital patients (Murrey *et al*, 1992), and criminal defendants (Hawk *et al*, 1993). Using more than 4000 routinely filed returns by assessing psychiatrists in Virginia, Hawk *et al* (1993) found that 'the rate of sex offence charges was nearly twice as high among mentally retarded defendants as among defendants who were not retarded'. Moreover, these individuals constituted 'more than one-fourth of mentally retarded defendants evaluated' and '13% of all sex offenders in the sample'. They did not find any difference in the type of sex offence alleged and there was no tendency towards offences against children. They noted a tendency for 'persons charged with a sex crime [to be] referred for evaluation'. This may introduce some distortion into the figures.

In special hospital patients, Murrey *et al* (1992) found that 'mentally handicapped offender victims were primarily males and females under the age of 16', with a higher frequency of offences against boys. Day (1994), in his sample of 47 referrals, however, taking into account all incidents and not just convictions, found that 'two-thirds of heterosexual victims were adults, unlike other studies where the majority of victims are under 16 years of age', but all but one homosexual incidents were with children under 16.

Day was able to identify two distinct groups of sex offenders. He found that those who committed *only* sex offences had a low incidence of psychopathology and brain damage. They were shy and immature and tended to commit minor offences repeatedly due to 'poor adaptive behaviour skills, sexual naïvety and social ineptness'. On the other hand, there was also a group who had committed other offences and who were 'markedly more damaged individuals', and whose sex offending was part of a wider tapestry of offending and other antisocial behaviour. This group had a higher frequency of brain damage and sociopathic features.

Day was also able to confirm previous findings that sexual offences among people with learning disability tended to be less frequently serious and more often nuisance in nature, but to show low specificity for age and sex of victims and offence type among recidivists in contrast to non-handicapped recidivists.

Gilby *et al* (1989) have drawn attention to the important phenomenon of sexual offending among adolescents, both learning disabled and of normal intelligence. They quote evidence that in the USA and Canada, between 20% and 50% of sexual offences can be attributed to adolescent offenders. Furthermore, '50% of adult sex offenders report their first sexual offense as having occurred during adolescence, and...sexual offenses increase 50-fold as the offender moves...to adulthood'. In common with other studies, they found that the majority of offenders were male and they quote evidence to support a high frequency of physical and sexual abuse in their histories, although they were not able to support this from their own findings.

Assessment

Demetral (1994) has reported a novel method of describing an individual's degree of social integration and 'nurturing environmental contacts' called the eco-map (Fig. 1). It is proposed that the multiple problems of sex offenders with mental retardation can be caused, maintained or ameliorated by relations with external 'transactional fields'. The map is drawn with the client at initial assessment and at intervals throughout treatment. The author finds that the use of coloured lines and diagrammatic links makes the concepts understandable to clients with poor verbal ability.

Treatments

Psychotherapeutic and educational treatments. Charman & Clare (1992) have described an education group for male sexual offenders with

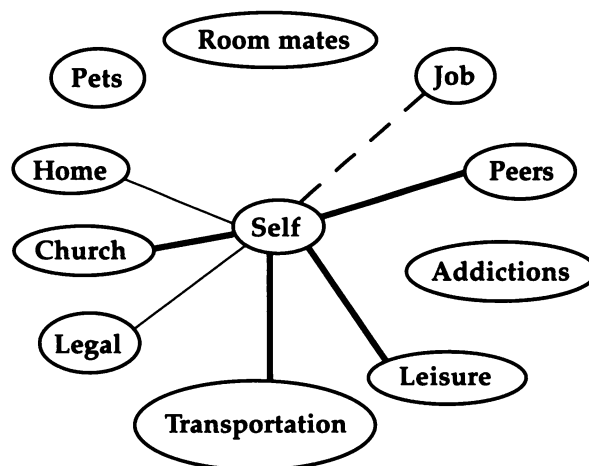


Fig. 1. A simple eco-map. ———, Strong, positive or important relationship; - - - -, stressful, causes tension or conflict; — — —, no relationship, but would like one.

mild learning disability. Six twice weekly sessions of an hour were organised by a trainee and a qualified clinical psychologist. The content was structured and complemented other therapeutic sessions. The authors found that there was difficulty judging the age of males and females in photographic material and poor understanding of social rules. Participants were also inept at 'reading' the meaning of social behaviour depicted in video sequences.

The authors were not able to assess behavioural change as a result of the sessions; however, they found that men were able to discuss sensitive and potentially embarrassing issues with their peers and to acknowledge their sexual difficulties.

Swanson & Garwick (1990) have reported an open ended, weekly group therapy programme for men with an IQ between 55 and 85. The therapy is guided by a clear philosophy based on honest reporting of behaviour, taking responsibility, appraising intellectual strengths and weaknesses, coordination of services, training of clients and carers, and teaching of positive skills. Fifteen men took part in the program with 7-10 attending at any one time. Outcome was assessed using individual goals and recidivism. There was overall improvement in attainment of goals, but the recidivism rate was 40% in the period of study (2.5 years). This is reported to be similar to outcome for a group for non-retarded offenders.

Antiliberidinals. Clarke (1989) and Cooper (1995) have reviewed the use of antiliberidinal drugs in learning disability.

There are no adequate double blind placebo controlled studies of these compounds in men with learning disability. On theoretical grounds, cyproterone acetate is the treatment of choice because it competitively blocks the receptor binding of dihydrotestosterone. The main evidence

for its efficacy comes from individual case reports drawn from hospital samples. Effectiveness in a variety of aberrant sexual behaviours has been described but treatment is usually reserved for aggressive hypersexual repeat offenders. Behavioural complications include worsening of self-harm and paradoxical sexual arousal. Compliance with treatment depends upon consent and motivation. The treatment effect may develop gradually and an adequate trial period of 4 months is recommended. Cyproterone acetate causes a reduction in gonadotrophin and testosterone levels and an increase in serum prolactin. Though the relation between circulating testosterone levels and sexual aggression is complex, there is a suggestion that cyproterone acetate may lead to a reduction in subjective arousal and in the intensity of daytime fantasy and this may help some men to control their aggressive sexual urges.

Side-effects of cyproterone acetate include reversible oligospermia and infertility, gynecomastia, galactorrhoea and benign breast nodules. There may be changes in liver, bone marrow and adrenocortical function. Carbohydrate metabolism may be affected. Contraindications include age less than 18, thromboembolic disease and severe chronic depressive illness.

Myers (1991) has concluded that antiliberidinal medication is the most successful management of paraphilias because a patient gains greater capacity for self-control. Unfortunately, the evidence is slender in any direction.

Arson

Published work on arson perpetrated by people with learning disability is rare. Clinically, however, the problem is frequently encountered in forensic services. Halstead *et al* (1995a) reported that a

Table 1. Antiliberidinal drugs used in learning disability

Name	Mode of action	Licence (UK)	Comment
Cyproterone acetate	Reduced production of testosterone and competitive antagonist of testosterone receptors	Acne, malignancy and hypersexuality	Only compound with specific antiandrogenic action
Medroxy-progesterone acetate	Reduced production and accelerated catabolism of testosterone	'Depo-Provera': contraception, endometriosis and malignancy	Interferes with the synthesis of testosterone but has no antiandrogenic action
Goserilin acetate	LHRH analogue	Malignancy and endometriosis	This does not require a second opinion under section 57 of the MHA (1983)
Benperidol	Dopamine antagonist of butyrophenone class	Antisocial sexual behaviour	Not widely regarded as effective

quarter of 32 discharges from a medium secure unit for learning disability had entered it with an index conviction for arson.

Stewart (1993) compared 28 incarcerated female arsonists with the same number of women matched only for age and length of stay in prison. She found that 47% of the arsonists had an IQ below 80 compared to 21% in the comparison group. However, depression, schizophrenia, substance abuse, psychopathic disorder, suicidal behaviour and adverse childhood environment were frequent in both groups.

Rix (1994), in a series of 153 arsonists personally referred to him, found that those who had some educational or learning difficulties made up a quarter of the total.

Clare *et al* (1992) have presented a single case report of the successful treatment of fire-setting in a young man with a mild learning disability and facial disfigurement. They describe a comprehensive package of treatment, including facial surgery, social skills and assertiveness training, alternative coping strategies, and 'assisted' covert sensitisation.

The findings reported here suggest that treatment for the fire-setting behaviour should be seen in the context of holistic treatment for multiple and complex problems.

Conclusions

In the past, the offender with mild learning disability and dual diagnosis may have been quietly admitted to a mental handicap hospital under a hospital order. This is no longer possible and community services find themselves grappling with the needs of this small but significant patient population.

The development of forensic learning disability as a psychiatric specialism will permit the necessary research into epidemiology, aetiology, prevention and treatment on which appropriate services can be based.

References

- Bernal, J. & Hollins, S. (1995) Psychiatric illness and learning disability: a dual diagnosis. *Advances in Psychiatric Treatment*, 1, 138–145.
- Brunner, H. G., Nelen, M., Breakefield, X. O., *et al* (1993) Abnormal behaviour associated with a point mutation in the structural gene for monoamine oxidase A. *Science*, 262, 578–580.
- Buckley, R. & Bigelow, D. A. (1992) The Multi-Service Network: reaching the unserved multi-problem individual. *Community Mental Health Journal*, 28, 43–50.
- Charman, T. & Clare, I. (1992) Education about the laws and social rules relating to sexual behaviour. *Mental Handicap*, 20, 74–80.
- Clare, I. C. H., Murphy, G. H., Cox, D., *et al* (1992) Assessment and treatment of fire-setting: a single-case investigation using a cognitive-behavioural model. *Criminal Behaviour and Mental Health*, 2, 253–268.
- & — (1993) M.I.E.T.S. (Mental Impairment Evaluation and Treatment Service): a service option for people with mild mental handicaps and challenging behaviour and/or psychiatric problems. III: Follow-up of the first six clients to be discharged. *Mental Handicap Research*, 6, 70–91.
- Clarke, D. J. (1989) Antilipidinal drugs and mental retardation: a review. *Medicine, Science and Law*, 29, 136–146.
- , Beasley, J., Corbett, J. A., *et al* (1992) Mental impairment in the West Midlands. *Medicine, Science and Law*, 32, 225–232.
- Coid, J. W. (1988) Mentally abnormal prisoners on remand: I – rejected or accepted by the NHS? *British Medical Journal*, 296, 1779–1782.
- Cooper, A. J. (1995) Review of the role of two antilipidinal drugs in the treatment of sex offenders with mental retardation. *Mental Retardation*, 33, 42–48.
- Cooper, S.-A., Mohamed, W. N. & Collacott, R. A. (1993) Possible Asperger's syndrome in a mentally handicapped transvestite offender. *Journal of Intellectual Disability Research*, 37, 189–194.
- Courtney, P., O'Grady, J. & Cunnane, J. (1992) The provision of secure psychiatric services in Leeds; paper ii. A survey of unmet need. *Health Trends*, 24, 52–53.
- Cumella, S. & Sansom, D. (1994) A regional mental impairment service. *Mental Handicap Research*, 7, 257–272.
- Day, K. (1988) A hospital-based treatment programme for male mentally handicapped offenders. *British Journal of Psychiatry*, 153, 635–644.
- (1994) Male mentally handicapped sex offenders. *British Journal of Psychiatry*, 165, 630–639.
- Demetral, G. D. (1994) Diagrammatic assessment of ecological integration of sex offenders with mental retardation in community residential facilities. *Mental Retardation*, 32, 141–145.
- Gilby, G., Wolf, L. & Goldberg, B. (1989) Mentally retarded adolescent sex offenders. A survey and pilot study. *Canadian Journal of Psychiatry*, 34, 542–548.
- Göstason, R., Wahlström, J., Johannisson, T., *et al* (1991) Chromosomal aberrations in the mildly mentally retarded. *Journal of Mental Deficiency Research*, 35, 240–246.
- Gudjonsson, G., Clare, I., Rutter, S., *et al* (1993) *Persons at Risk during Interviews in Police Custody: the Identification of Vulnerabilities*. The Royal Commission on Criminal Justice. London: HMSO.
- Gunn, J., Maden, A. & Swinton, M. (1991) Treatment needs of prisoners with psychiatric disorders. *British Medical Journal*, 303, 338–341.
- Halstead, S. M. & Cassidy, L. (1993) *Assessment of Need for Services for Mentally Disordered Offenders and Others with Similar Needs in South West Thames Regional Health Authority: Learning Disability (Mental Handicap)*. London: St George's Hospital Medical School.
- , Cahill, A., Fernando, L., *et al* (1995a) *Eric Shepherd Unit discharges: what happens to them?* Paper presented at the Royal College of Psychiatrists Mental Handicap Section Spring Conference.
- , Smith, C. & Baker, R. (1995b) *Secure provision for the mentally handicapped offender: needs assessment of special hospitals*. Paper presented at the Royal College of Psychiatrists Annual Meeting.
- Happé, F. G. E. (1994) An advanced test of theory of mind: understanding of story characters' thoughts and feelings by able autistic, mentally handicapped, and normal children. *Journal of Autism and Developmental Disorders*, 24, 129–154.
- Harris, P. (1993) The nature and extent of aggressive behaviour amongst people with learning difficulties (mental handicap) in a single health district. *Journal of Intellectual Disability Research*, 37, 221–242.
- Hawk, G. L., Rosenfeld, B. D. & Warren, J. I. (1993) Prevalence of sexual offenses among mentally retarded criminal defendants. *Hospital and Community Psychiatry*, 44, 784–786.

- Hoare, S. & O'Brien, G. (1991) The impact of the Mental Health (Amendment) Act 1983 on admissions to an interim regional secure unit for mentally handicapped offenders. *Psychiatric Bulletin*, 15, 548–550.
- Holland, T. & Murphy, G. (1990) Behavioural and psychiatric disorder in adults with mild learning difficulties. *International Review of Psychiatry*, 2, 117–136.
- Hollins, S., Sinason, V., Boniface, J., et al (1994) *Going to Court*. London: Sovereign Series, St George's Hospital Medical School Library in association with VOICE (UK).
- Isweran, M. S. & Bardsley, E. M. (1987) Secure services for mentally impaired patients. *Bulletin of the Royal College of Psychiatrists*, 11, 52–54.
- & Brener, N. (1990) Psychiatric disorders in mentally retarded patients and their treatment in a medium secure unit. In *Treatment of Mental Illness and Behavioural Disorders in the Mentally Retarded* (eds A. Dosen, A. Van Gennep, G. J. Zwanikken), pp. 429–436. Leiden: Logon Press.
- Johnson, C., Smith, J., Stainer, G., et al (1993) Mildly mentally handicapped offenders: an alternative to custody. *Psychiatric Bulletin*, 17, 199–201.
- Kearns, A. & O'Connor, A. (1988) The mentally handicapped criminal offender: a 10-year study of two hospitals. *British Journal of Psychiatry*, 152, 848–851.
- Kent, A. & Bird, J. (1994) A follow up study of a behavioural program for young people with learning disabilities and challenging behaviour. *Behavioural Interventions*, 9, 157–167.
- Khan, A. M., Cumella, S., Krishnan, V., et al (1993) New long stay patients at a mental handicap hospital. *Mental Handicap Research*, 6, 165–173.
- Kurtz, B. K., Finucane, B., Hyland, K., et al (1994) Detection of metabolic disorders among selectively screened people with idiopathic mental retardation. *Mental Retardation*, 32, 328–333.
- Linaker, O. M. (1994) Assaultiveness among institutionalised adults with mental retardation. *British Journal of Psychiatry*, 164, 62–68.
- Lyall, I., Holland, A.J. & Styles, P. (1995) Incidence of persons with a learning disability detained in police custody. A needs assessment for service development. *Medicine, Science and Law*, 35, 61–71
- , — & Collins, S. (in press) Offending by adults with learning disabilities and the attitudes of staff to offending behaviour: implications for service development. *Journal of Intellectual Disability Research*.
- Maden, A., Curle, C., Meux, C., et al (1993) The treatment and security needs of patients in special hospitals. *Criminal Behaviour and Mental Health*, 3, 290–306.
- Mayor, J., Bhat, M., Firth, H., et al (1990) Facilities for mentally impaired patients: three years experience of a semi-secure unit. *Psychiatric Bulletin*, 14, 333–335.
- Myers, B. A. (1991) Treatment of sexual offenses by persons with developmental disabilities. *American Journal on Mental Retardation*, 95, 563–569.
- Murrey, G. J., Briggs, D. & Davis, C. (1992) Psychopathic disorder, mentally ill, and mentally handicapped sex offenders: a comparative study. *Medicine, Science and Law*, 32, 331–336.
- Rix, K. J. B. (1994) A psychiatric study of adult arsonists. *Medicine, Science and Law*, 34, 21–34.
- Scragg, P & Shah, A. (1994) Prevalence of Asperger's syndrome in a secure hospital. *British Journal of Psychiatry*, 165, 679–682.
- Shah, A. K. (1992) Violence and death and associated factors on a mental handicap ward. *Journal of Intellectual Disability Research*, 36, 229–239.
- Smith, J. (1988) An open forensic unit for the borderline mentally impaired offender. *Bulletin of the Royal College of Psychiatrists*, 12, 13–15.
- Stewart, L. (1993) Profile of female fire setters: implications for treatment. *British Journal of Psychiatry*, 163, 248–256.
- Swanson, C. K. & Garwick, G. B. (1990) Treatment for low-functioning sex offenders: group therapy and interagency coordination. *Mental Retardation*, 28, 155–161.
- World Health Organization (1992) *The International Classification of Mental and Behavioural Disorders (ICD-10)*. Clinical descriptions and diagnostic guidelines. Geneva: WHO.

Multiple choice questions

- 1 Asperger's syndrome:
 - a can occur with other diagnoses
 - b Is common in the profoundly learning disabled
 - c Is associated with preoccupations and stereotyped interests
- 2 Genetics:
 - a Testing is only helpful with severe and profound learning disability
 - b Genetic abnormalities account for the majority of people with mild learning disability
 - c Chromosome testing is of no value in the mildly learning disabled
- 3 Treatment:
 - a Short-term, intensive in-patient treatment is recommended for offenders with learning disability
 - b Preventive work is probably of little value as the number of hospital orders is rising from year to year
 - c Cyproterone is the treatment of choice for the majority of male sex offenders with learning disability because they will not be able to understand anything else
 - d Understanding the patient's capacity to interpret the world is helpful in assessing dangerousness
- 4 Criminal justice system:
 - a A majority of male inmates, referred for psychiatric reports, have some degree of learning disability
 - b All studies of remand prisoners agree that people with learning disability who would previously have been hospitalised are now being sent to prison
 - c The procedure of going to court as a witness, victim or suspect is so straightforward and easy to understand that people with learning disability need little help understanding it
 - d The police are very good at picking up moderate and severe learning disability in suspects but tend to miss mild or borderline cases

MCQ answers

1	2	3	4
a T	a F	a F	a F
b F	b F	b F	b F
c T	c F	c F	c F
	d T	d T	