

Dangerous and severe personality disorder and in need of treatment

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Summary The Dangerous and Severe Personality Disorder Programme was born out of a populist law and order reaction, developed on false premises, but is now evolving into an exciting initiative for providing effective services to a group of offenders with mental illness who psychiatry, and the justice services, have so long ignored. Enthusiasm, flexibility and an evidence-based approach may yet lead to real progress towards the improved management of disturbed high-risk offenders, improving the psychological and social functioning of the offenders as well as delivering a safer community.

Declaration of interest None.

The Dangerous and Severe Personality Disorder (DSPD) Programme represents an enormous commitment of money and resources by the British Government to what is essentially a mental health initiative. The programme was born out of an ill-conceived attempt to hide the imposition of preventive detention and indefinite sentences behind the veneer of respectability provided by a mental health context (Eastman, 1999; Mullen, 1999). However, just as good intentions can pave the road to hell so cynical calculation can occasionally lead, if not to heaven, at least to progress for the good.

The DSPD Programme has come a long way from its murky beginnings. It now represents a genuine attempt to address the psychological and interpersonal difficulties of recidivist violent offenders in a manner which it is hoped will decrease the damage these people do to others and to themselves. This is a therapeutic experiment on a massive scale. A lot is riding on the outcomes, not just the credibility of those who advised and advocated for these programmes, but the credibility of mental health itself. One eminent academic at the York conference

made it quite clear that she considered that if the target was decreasing violent crime public money would have been far more effectively spent on improving services for those with the schizophrenic syndrome at high risk of offending. She is right, but that is now irrelevant. The DSPD juggernaut is on the move, and if it fails I doubt if there will be any further money for initiatives directed at offenders with mental illness for some considerable time. Conversely if it succeeds this may well improve the public and political stock of mental health considerably. The DSPD initiative is being watched by forensic mental health professionals, and by governments, around the world. Will it become the model or a warning?

How the DSPD units will be judged, at least by government, is obvious: a decrease in violent recidivism among those who are managed by these services. How large a decrease? For the money they are spending it will have to be substantial, but whether this amounts to expectations of 20, 50, 80 or even 100% is not yet clear (see Barrett & Byford, 2007, this issue). How will these services reach such targets? By correctly identifying individuals with DSPD and making them harmless people, with or without personality disorders or keeping them contained for so long that time and the deprecations of age render them pacific?

The York conference from which the papers in this special issue were drawn was to mark the official beginning of the DSPD initiative and so can hardly be expected to offer outcome data. If the enthusiasm and commitment of the clinicians at the conference from the various DSPD units were an indicator of future success, then that success is assured. But what do the papers presented here and the international experience augur for the future?

THE DSPD MODEL

The models which drive the DSPD initiative are still developing but are grounded in the

belief that specific pathologies of personality initiate and sustain criminal behaviours. The programmes assume that those with these psychopathologies can be reliably identified, that unless something changes these individuals will commit further serious crimes and that by treating their personality disorders the risks they present will be substantially decreased. The key construct is psychopathy.

The psychopathy at issue is a putative criminogenic mental disorder. There is discussion as to the best means for identifying such psychopathy and factors that might modify its manifestations (Cleckley, 1964; Hare, 1991, 1999). The advocates for the psychopathy concept present it as a modern scientific discovery whose existence and relevance is vouchsafed by nosological, epidemiological, neurophysiological, neurobiological and genetic research (Rhee & Waldman, 2002; Blair, 2003; see also Hodgins, 2007, and Viding *et al*, 2007, this issue). The unfortunate histories of previous attempts at medicalising crime (moral insanity, degeneration and conceptualisations which shared the name psychopathy) are presumed to be irrelevant (Lewis, 1974; Pick, 1989). Perhaps the only link between the failed systems of the past and today's 'psychopathic sciences' is the enthusiasm which greets each and every biological explanation of crime. The attractions of explaining criminal propensities in terms of individual pathology are multiple. If some disorder drives the behaviour then curing or suppressing the disorder stops the criminality. If crime is a malfunction at an individual level it reduces the need to seek explanations in social, cultural and familial influences, a search that might suggest that lawlessness is bred by inequality, disadvantage and oppression. The fact that biomedical explanations of crime are perennially appealing to the elite does not make them wrong. Genetic factors and the environment probably do contribute to some crime but the attributable risk or even the potential mechanisms of genetic influences are not so clear. The much heralded announcement of genetically mediated links between childhood disadvantage and adult criminality await more substantial attempts at refutation (Caspi *et al*, 2002). The occasional reports of brain abnormalities underlying murder and mayhem do not usually have the methodological sophistication to have justified their publication let alone the bother of refutation. However, substantial or silly, the continuing appearance of

studies supporting genetic and biomedical factors as contributory causes of crime promote confidence in the existence of some form of psychopathic disorder. The DSPD Programme does not stand or fall on whether there really is a genetically based disorder of psychopathy (which is fortunate), but currently benefits from the belief in such a ghost in the machine of crime.

ON BEING DANGEROUS

The DSPD Programme does depend on being able to correctly identify those who will, unless something is done, go on to commit serious crimes. In broad terms, predicting recidivism is easy enough. Reoffending is associated with being young, male, unpartnered, poorly educated with few work skills and the amount and versatility of prior criminality, having substance misuse problems, antisocial attitudes and a criminal peer group. The importance of psychopathy is that it may provide the missing ingredient which separates out those destined both to greater criminal persistence and to more violent predation. These are the ones who will not mature, not settle into abiding intimate relationships, not stop seeking sensation and novelty, not exchange empathy for callous indifference and above all not abandon their exploitative and predatory ways for more modest satisfactions. The psychopathy 'thermometer' which measures how much of this dangerous ingredient is present is the Psychopathy Checklist-Revised (PCL-R; Hare, 1991). This was not designed as a risk assessment tool but as a personality test. However, the PCL-R provides the core and legitimisation of many approaches to risk assessment, including the Historical/Clinical/Risk Management 20-item scale (HCR-20; Webster *et al*, 1997) and the Violent Offenders: Appraising and Managing Risk (VRAG; Quinsey *et al*, 2005). The VRAG is important because it was central to the early development of the DSPD initiative. It was even rumoured that specific VRAG scores were being considered for legally identifying individuals with a DSPD. If an individual's score on the VRAG is not a reliable guide to the extent of their dangerousness, and if the PCL-R does not identify that risk, there may be a problem.

The paper by Hart and colleagues (2007, this issue) on the accuracy of predictions of violence based on actuarial assessments is of immense importance. The

authors succeed where others have repeatedly failed (Mullen, 2000; Szmukler, 2001) in providing a clear, convincing and elegant demonstration of why you cannot simply move from group to individual risk evaluations. By the expedient of calculating the 95% confidence limits of group and individual estimates obtained from the VRAG and the Static-99 they expose a fatal flaw in the reasoning which underlies risk assessment. Their conclusions deserve to be in lights 'At the individual level, [the margins of error] were so high as to render risk estimates virtually meaningless'. All actuarial risk instruments can properly be used for is to identify the group into which the individual is placed by their scores. Even here Hart *et al* identify a problem. In the VRAG, for example, the claimed nine 'bins', as they are so unfortunately termed are not significantly different from each other with at best only three groupings being statistically distinct. It is important to realise that this devastating critique will apply equally to other actuarial risk assessment instruments that are used to predict any particular individual's likelihood of being violent in the future. This includes both the MacArthur Classification of Violence Risk (Monahan *et al*, 2005) and the so-called structured professional judgment instruments such as the HCR-20 (Webster *et al*, 1997). The caveat also applies to the PCL-R itself when you attempt to use it for prediction of risk. There is a word for assuming the characteristics you attribute to a group of people applies to each and every member, and that word is prejudice.

Does this mean that the whole literature on risk factors for criminal and violent behaviour and the multiple risk assessment instruments can now be consigned to the waste bin of history? Fortunately, or unfortunately according to your perspective, it does not. If you have a young man with a schizophrenic syndrome who misuses cannabis and alcohol, who is symptomatic, uncooperative with treatment, denying of illness, interpersonally callous and living a disorganised life in a high crime neighbourhood, then he is at risk of acting in an anti-social and violent manner. The risk will be reduced by moderating or removing the substance misuse, by improving symptom control, by stable accommodation in a low crime neighbourhood, by structuring his day with meaningful activity, and working on his attitudes towards others (Mullen, 2006). Whether this particular patient would ever have actually committed a

crime is a moot point. A reasonable expectation is that if your services manage effectively all such patients with these risk factors then the total level of criminal behaviour committed by the patients as a group will fall. In the DSPD context this implies that if you have a large enough group of individuals sharing established risk factors for recidivist offending, and if you reduce the prevalence of the risks factors in the group, then you will reduce the future offending by the group as a whole. The risk assessment instruments become guides to whether intervention is justified, and towards which risk factors to address your efforts.

The margins of error in every actual, or conceivable, risk assessment instrument are so wide at the individual level that their use in sentencing, or any form of detention, is unethical. Perhaps legislators and judges will now return to that time-honoured principle of English law that you are sentenced for the acts you have committed not the acts you might commit. Health practitioners are, however, habituated to acting on the basis of probability estimates for groups applied to specific individuals. The patient has a right-sided lower abdominal pain moving centrally, combined with anorexia, guarding and rebound tenderness. The probability based on case series of an inflamed appendix may be 50% but the surgeon will almost certainly advise 100% that the patient be taken to theatre. This situation does not raise ethical or practical problems because: (a) the group-based probability estimate is being used exclusively for the benefit of the patient; (b) the patient is in a position to reject the advice based on that estimate.

As soon as we move away from using group-based probability estimates for the individual's benefit and toward compulsion we are in ethical and practical difficulties.

At the York conference there was a troubling assumption that the primary or even sole purpose of the DSPD Programme was community safety. This would only begin to be defensible if each individual inducted into the programme could reliably be ascertained as at high risk of future serious violence. It is now hopefully clear this cannot be accomplished. This need not affect the DSPD initiative. What is not sufficiently emphasised is the high price these people with DSPD pay for their own limitations and deviance. This group have a high mortality rate comparable to that of people with schizophrenia or bipolar illness (Ruschena *et al*, 1998). As to

morbidity, the fact that they are in prison on long sentences is evidence enough. Without help many will continue to lay waste their own lives as well as the lives of those around them. Offering treatment is legitimate. Offering inducements to bring them into treatment is legitimate, given the potential advantages to the wider community. Respecting their refusal is essential, as is avoiding adding any punitive measures in response to such a refusal. If the inducements are sufficient then there will be enough recruits. Those inducements will in part depend on successful participation in the programmes and become part of the therapeutic culture of reward.

ON HAVING DSPD

The paper of Tyrer *et al* (2007, this issue) challenges the assumptions which underpin the dominant categorisations of personality disorder in DSM-IV (American Psychiatric Association, 1994) and ICD-10 (World Health Organization, 1992) as well as many of those which sustain the psychopathy concept. Further they question one of the fundamental tenets of personality theory, that traits, and disorders, are stable over time. Edward Gibbon (1969 edn) appears to have been right when he wrote that there is nothing so unlike the man of today than that man yesterday. Tyrer *et al* argue that even the notion of qualifying a description of personality disorder with the term serious is problematic. Their conclusions do, however, hold out scintilla of hope. The way forward is suggested to be a focus not on the rickety notions of disorder but on personality function conceptualised as both dimensional and inherently variable over time.

What then of the key construct of the DSPD Programme, namely psychopathy? The paper by Cooke *et al* (2007, this issue) is steeped in the arcane language and statistics of the PCL-R industry. The paper is, however, well worth the effort of reading for the jewels caught up in the complex skeins of data and argument. Cooke *et al* suggest that psychopathy as a construct has become conflated with its putative measure the PCL-R which 'forecloses on the possibility of examining the mapping of the theoretical construct (psychopathy) onto the empirical observations (PCL-R)'. The situation is, in fact, even more dire because thorough training is mandatory to employ the PCL-R. This training focuses on reliability, which amounts to ensuring

raters see what they are supposed to see, and see it in the same manner. Which would be fine if there were some external validation of both construct and instrument, but there is no such gold standard (see also Duggan *et al*, 2007, this issue). The whole psychopathy/PCL-R enterprise teeters on the edge of falling into the logical fallacy of the 'self-sealing argument' (Fogelin & Sinnott-Armstrong, 1991; Hacking, 1995).

Cooke and colleagues emphasise that in the DSPD Programme individuals are detained because of the assumption of a functional link between their personality disorder and the risk they pose. Thus if the measure and the construct of psychopathy are not distinct and the personality measure incorporates the behaviour it is supposed to be accounting for we have a double circularity. Wootton (1959) many years ago remarked on the potential circularity inherent in the concept of psychopathy. To paraphrase 'Why does he keep committing crimes? Because he is a psychopath. How do you know he's a psychopath? Because he keeps committing crimes'.

Cooke and colleagues have proposed an approach which might both rescue the concept of psychopathy and generate a more independent and productive approach to its recognition and quantification. In the advantages they claim for their approach they omitted what seems to me the most important. The clear separation of the underlying personality vulnerabilities in psychopathy, and potentially their hierarchical arrangements, should allow the development of more focused and effective therapeutic interventions. In the end the conceptual framework may totter and fall, the instruments may be found wanting, but what really matters is will the DSPD service both aid a distressed and disturbed group of offenders and deliver a safer community?

ON BEING TREATED

The York conference had a large number of presentations about treatment issues. They were characterised by offering theoretical structures around which treatment programmes could be developed. Most were sensible, plausible, promising and without adequate empirical evaluation. The paper by Wong *et al* (2007, this issue) is the only representative in this issue of what was a major thrust of the conference. Stephen Wong has extensive clinical

experience and advocates well structured and pragmatic approaches to assessment and management. He has been influential in the development of the DSPD therapeutic programmes, particularly in prison-based units. Dr Wong has also advised our service in Australia on programme development. Clinicians warm to his no nonsense practical approaches and to the framework used to organise the evaluation and interventions. Clinicians tend to feel his approaches will be effective. Our clinicians are now comfortable with the language of responsivity principles, of the theoretical models of change and of acronyms such as VRP (Violence Reduction Programme) and VRS (Violence Risk Scale). This generates confidence and optimism, both of which are invaluable, and a belief that such approaches work, but where is the empirical evidence for such efficacy.

Wong and colleagues promise that results of outcome evaluation support the stated objectives of the programme and in the discussion write of outcomes which are encouraging and substantial. The sketchy presentation of the methods and statistical approaches make evaluating such claims problematic. However, if we put such quibbles aside and take the claims at face value then encouraging might be a fair description of the reported results. You would not be rushing to introduce a new pharmacological agent on the basis of such outcome data, but neither would you be abandoning further trials.

In her presentation Sheilagh Hodgins used the evocative image of the psychopath as the fearless child grown up (see Hodgins, 2007 and Vizard *et al*, 2007, this issue): the defiant child who will not back down in response to intimidation and/or punishment but will walk through fire to reach their desired goal. Such children do not necessarily turn into villains, clearly some become heroes, some captains of industry and, hopefully, some psychiatrists. These are reward-driven people for whom anxiety, if it arises, is a hurdle to be ignored or jumped. They are not frightened of social exclusion and accept intimacy only on their terms. They crave battle and learn early that the bruises and breaks inflicted by physical and emotional blows heal quickly enough and are of no real account. What is of account is the joy of inflicting damage on your adversary. Influencing such people depends on offering them rewards they value and avoiding becoming embroiled in

their fights. Conversely, antisocial people who are anxious, suspicious and resentful can be controlled by intimidation and trapped into conformity by giving them something they fear losing. In clinical practice you rarely if ever see the psychopath totally untrammelled by guilt or anxiety, nor the anxious antisocial without elements of sensation-seeking and tendency for interpersonal exploitation. There may be enough truth in the stereotypes, however, to direct therapeutic strategies.

If the DSPD units continue to select those with marked psychopathic traits then the therapeutic context had better be reward driven. Threatening indefinite detention for failure to comply will be far less effective than offering early release for cooperation. Removing privileges will provoke defiance, offering valued rewards may motivate and produce progress. All contracts will be broken, but some freely given promises will be kept. Battles are inevitable, all that can be hoped is they are for the right causes. Recidivist offenders are in a rut where damaging reactions and rigid attitudes are repeatedly exhibited at inopportune moments. Greater flexibility and acquiring a larger repertoire of coping mechanisms and responses in the dedicated pursuit of personal goals is one route to decreased antisocial behaviour. In my experience it is easier to add to the behavioural and attitudinal repertoire of the individual with personality disorder than to inhibit or remove ingrained approaches. The changeability and plasticity of personality highlighted by Tyrer and colleagues is the basis for therapeutic hope. In the end, however, it is behaviour that matters not personality. The good news is that behaviour is easier to change than what we call personality. The even better news, if Aristotle was right, is that virtue is a habit to be acquired like any other skill by practice and repetition (Hutchinson, 1986; Aristotle, 1991 edn). Those who learn to behave well in the prosaic interactions of everyday life will become good people. Well, at least not as bad as they were.

ON ELSEWHERE

The fear of crime continues to preoccupy the citizens of the Western world. A recent Gallup poll found Americans were 'very concerned' about child molesters (66%), and violent crime (52%) with only 30% fretting about terrorism (Anonymous,

2006a). The American response has focused on incarcerating more and more people for longer and longer, and their imprisonment rate now tops 500 per 100 000 compared with 140 for England and Wales (Anonymous, 2006b). In addition some American states have dangerous offender and sexual predator statutes which allow indefinite detention in forensic psychiatric facilities at the end of the offender's prison sentence for 'treatment' (Heilbrun *et al*, 1999; Monahan, 2006). Thousands of men are being hospitalised under sexual predator laws, with only a handful ever returning to the community. The sexual predator laws have a superficial similarity to the DSPD initiative but lack even the semblance of an attempt to provide meaningful therapy and rehabilitation for those caught up in the system. Australia and New Zealand and have made tentative moves to follow this path (Sullivan *et al*, 2005). Detention in all these jurisdictions is legitimised by risk evaluations carried out by mental health professionals who rely on applying instruments such as the VRAG, Static-99 and PCL-R to individual offenders. Looked at in this context, the DSPD initiative is a beacon of rationality and potential progress.

CONCLUSIONS

The DSPD initiative was born out of the public outcry over the murderous attack on Mrs Russell and her daughters (Freedland, 2002). The early stages in the development of the DSPD Programme suggested a cynical misuse of mental health services to advance dubious public safety agenda. As the initiative has progressed the Home Office's commitment not just to public protection but to the provision of appropriate and effective services to improve mental health outcomes and enable positive progress for this group of offenders has become a reality. Despite its unfortunate beginnings the DSPD Programme now represents a novel and important initiative for improving mental health services to a group of people who are as disordered as they are dangerous, and as damaging to themselves as they are to others.

The DSPD programmes remain flexible and both the assessment and management approaches are in flux. This is fortunate, as the original assumptions driving the initiative have largely been left in ruins by the progress of our science. This special issue gives a clear picture of the problems

facing the DSPD programmes. What it fails to do is convey the enthusiasm and optimism of those involved in the York conference. To succeed the DSPD initiative will need to continue to alter its approaches in response to scientific progress and the results of the evaluations of its own practices. Above all it must remain self-critical and in constant evolution. Predicting the future of the DSPD initiative is a task as difficult and dubious as guessing whether any particular offender will reoffend. For the sake of those distressed high-risk people, and for the sake of the community to which they will return, I hope an effective DSPD service will emerge.

REFERENCES

- American Psychiatric Association (1994)** *Diagnostic and Statistical Manual of Mental Disorder* (4th edn) (DSM-IV). APA.
- Anonymous (2006a)** The JonBenet Ramsey Case: the greatest fear. *Economist*, **380**(8492), 28–29.
- Anonymous (2006b)** California's prisons: packing them in. *Economist*, **380**(8490), 31–32.
- Aristotle (1991 edn)** *The Nicomachean Ethics*. Dent.
- Barrett, B. & Byford, S. (2007)** Collecting service use data for economic evaluation in DSPD populations: Development of the Secure Facilities Service Use Schedule. *British Journal of Psychiatry*, **190** (suppl. 49), s75–s78.
- Blair, R. J. R. (2003)** Neurobiological basis of psychopathy. *British Journal of Psychiatry*, **182**, 5–7.
- Caspi, A., McClay, J., Moffitt, T., et al (2002)** Role of genotype in the cycle of violence in maltreated children. *Science*, **297**, 851–854.
- Cleckley, H. (1964)** *The Mask of Sanity*. Mosby.
- Cooke, D. J., Michie, C. & Skeem, J. (2007)** Understanding the structure of the Psychopathy Checklist Revised: An exploration of methodological confusion. *British Journal of Psychiatry*, **190** (suppl. 49), s39–s50.
- Duggan, C., Mason, L., Banerjee, P., et al (2007)** Value of standard personality assessments in informing clinical decision making in a medium secure unit. *British Journal of Psychiatry*, **190** (suppl. 49), s15–s19.
- Eastman, N. (1999)** Public health psychiatry or crime prevention? *BMJ*, **318**, 549–551.
- Fogelin, R. & Sinnott-Armstrong, W. (1991)** *Understanding Arguments: An Introduction to Informal Logic* (4th edn), pp. 123–126. Harcourt.
- Freedland, J. (2002)** Stop This Madness. *The Guardian*, 23 October.
- Gibbon, E. (1969 edn)** *Memoirs of My Life* (ed. G. A. Bonnard). Funk & Wagnalls.
- Hacking, I. (1995)** Measure. In *Rewriting the Soul*, pp. 96–112. Princeton University Press.
- Hare, R. D. (1991)** *The Hare Psychopathy Checklist – Revised*. Multi-Health Systems.
- Hare, R. D. (1999)** *Without Conscience: The Disturbing World of the Psychopaths Among Us*. Guilford.

Hart, S. D., Michie, C. & Cooke, D. J. (2007) Precision of actuarial risk assessment instruments. Evaluating the 'margins of error' of group v. individual predictions of violence. *British Journal of Psychiatry*, **190** (suppl. 49), s60–s65.

Heilbrun, K., Ogloff, J. R., & Picarello, K. (1999) Dangerous offender statutes in the United States and Canada: implications for risk assessment. *International Journal of Law and Psychiatry*, **22**, 393–415.

Hodgins, S. (2007) Persistent violent offending: what do we know? *British Journal of Psychiatry*, **190** (suppl. 49), s12–s14.

Hutchinson, D. S. (1986) *The Virtues of Aristotle*. Routledge & Kegan.

Lewis, A. (1974) Psychopathic personality; a most elusive category. *Psychological Medicine*, **2**, 133–140.

Monahan, J. (2006) A jurisprudence of risk assessment: forecasting harm among prisoners, predators, and patients. *Virginia Law Review*, **92**, 391–435.

Monahan, J., Steadman, H. S., Appelbaum, P. S., et al (2005) *Classification of Violence Risk*. Psychological Assessments Inc.

Mullen, P. E. (1999) Dangerous people with severe personality disorder. *BMJ*, **319**, 1146–1147.

Mullen, P. E. (2000) Dangerousness, risk and the prediction of probability. In *New Oxford Textbook of Psychiatry* (eds. M. G. Gelder, J. J. López-Ibor, N. C. Andreasen), pp. 2066–2078. Oxford University Press.

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Mullen, P. E. (2006) Schizophrenia and violence: from correlations to preventive strategies. *Advances in Psychiatric Treatment*, **12**, 239–248.

Pick, D. (1989) *Faces of Degeneration*. University of Cambridge.

Quinsey, V. L., Harris, G. T., Rice, M. E., et al (2005) *Violent Offenders: Appraising and Managing Risk* (2nd edn). American Psychological Association.

Rhee, S. H. & Waldman, I. D. (2002) Genetic and environmental influences on antisocial behaviour: a meta-analysis of twin and adoption studies. *Psychological Bulletin*, **128**, 490–529.

Ruschena, D., Mullen, P. E., Burgess, P., et al (1998) Sudden death in psychiatric patients. *British Journal of Psychiatry*, **172**, 331–336.

Sullivan, D. H., Mullen, P. E. & Pathé M. T. (2005) Legislation in Victoria on sexual offenders: issues for health professionals. *Medical Journal of Australia*, **183**, 318–320.

Szmukler, G. (2001) Violence risk prediction in practice. *British Journal of Psychiatry*, **178**, 84–85.

Tyrer, P., Coombs, N., Ibrahim, F., et al (2007) Critical developments in the assessment of personality

disorder. *British Journal of Psychiatry*, **190** (suppl. 49), s51–s59.

Viding, E., Frick, P. J. & Plomin, R. (2007) Aetiology of the relationship between callous-unemotional traits and conduct problems in childhood. *British Journal of Psychiatry*, **190** (suppl. 49), s33–s38.

Vizard, E., Hickey, N. & McCrory, E. (2007) Developmental trajectories associated with juvenile sexually abusive behaviour and emerging severe personality disorder in childhood: 3-year study. *British Journal of Psychiatry*, **190** (suppl. 49), s27–s32.

Webster, C. D., Douglas, K. S., Eaves, D., et al (1997) *HCR-20 Assessing Risk for Violence* (version 2). Simon Fraser University.

Wong, S. C. P., Gordon, A. & Gu, D. (2007) Assessment and Treatment of Violence Prone Forensic Clients: An Integrated Approach. *British Journal of Psychiatry*, **190** (suppl. 49), s66–s74.

Wootton, B. (1959) *Social Science and Social Pathology*. pp. 248–254. Allen & Unwin.

World Health Organization (1992) *The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines*. WHO.