

Personality disorder: a new global perspective

PETER TYRER^{1,2}, ROGER MULDER^{1,3}, MIKE CRAWFORD^{1,2}, GILES NEWTON-HOWES⁴, ERIK SIMONSEN^{1,5}, DAVID NDETEI⁶, NESTOR KOLDOBSKY⁷, ANDREA FOSSATI⁸, JOSEPH MBATIA⁹, BARBARA BARRETT¹⁰

¹WPA Section on Personality Disorders; ²Department of Psychological Medicine, Imperial College, London; ³Department of Psychological Medicine, University of Otago, Christchurch, New Zealand; ⁴Hawkes Bay District Health Board, New Zealand; ⁵Institute of Personality Theory and Psychopathology (IPTP), Roskilde, Denmark; ⁶University of Nairobi, Kenya; ⁷National University, La Plata, Argentina; ⁸San Raffaele Hospital, Milan, Italy; ⁹Ministry of Health, Dar es Salaam, Tanzania; ¹⁰Centre for Economics of Mental Health, London

Personality disorder is now being accepted as an important condition in mainstream psychiatry across the world. Although it often remains unrecognized in ordinary practice, research studies have shown it is common, creates considerable morbidity, is associated with high costs to services and to society, and interferes, usually negatively, with progress in the treatment of other mental disorders. We now have evidence that personality disorder, as currently classified, affects around 6% of the world population, and the differences between countries show no consistent variation. We are also getting increasing evidence that some treatments, mainly psychological, are of value in this group of disorders. What is now needed is a new classification that is of greater value to clinicians, and the WPA Section on Personality Disorders is currently undertaking this task.

Key words: Personality disorder, classification, treatment, comorbidity, epidemiology

(*World Psychiatry* 2010;9:56-60)

In the last 50 years, personality disorder has achieved a level of understanding and, indeed, respectability that now allows it to be considered as an equal partner with other mental disorders. Before the 1960s, personality disorder, with the possible exception of the antisocial group, was considered an unreliable and imprecise diagnosis with little or no clinical value. Since then, however, and particularly since the introduction of DSM-III in 1980, there has been increasing recognition that personality disorder, despite many imperfections in its classification, can be described and rated reliably. Personality disorder has been shown to have an important influence on the outcome of other mental disorders when present as a comorbid condition, and it may benefit from specific treatment. This article discusses these findings from a global perspective, as this has particular relevance to low-income countries in which personality disorder has until recently been seldom studied.

EPIDEMIOLOGY

Although national morbidity studies of mental illness have now become more frequent in developed countries, they do not often record personality disorder. One of the main reasons for this is the difficulty in conducting assessments of personality disorder, especially with lay interviewers. As a consequence, there are only a handful of such studies of the literature (1-3). However, with the increasing use of short screening assessments for personality disorder (4,5), it is possible to conduct such assessments with lay interviewers and provide valuable data.

Three major studies of the epidemiology of personality disorder have now been published in the last five years. The results are summarized in Table 1. By far the largest of these studies was conducted across 10 different countries, including six low- or middle-income countries. This study is par-

Table 1 Study methods and prevalence of personality disorder from recently published epidemiological studies

Author, year (ref.)	Country	Method	Prevalence (%)	Screening instrument
Huang et al, 2009 (6)	Western Europe (WE), Colombia (C), Lebanon (L), Mexico (M), Nigeria (N), People's Republic of China (PRC), South Africa (SA), United States (US)	Household surveys Multiple imputation used to predict personality disorder scores using a three part simulation procedure. Rates of personality disorder calculated as means of multiple imputation prevalence estimates (n=21,162)	WE: 2.4 C: 7.9 L: 6.2 M: 6.1 N: 2.7 PRC: 4.1 SA: 6.8 US: 7.6	33-item screening questions from the International Personality Disorder Examination (IPDE)
Coid et al, 2006 (5)	England, Wales, Scotland	Survey of a stratified sample of 15,000 households (n=628)	4.4	Screening questionnaire of SCID-II
Grant et al, 2004 (7)	United States of America	Random sample (National Epidemiologic Survey on Alcohol and Related Conditions) (n=43,093)	14.8	Alcohol Use Disorder and Associated Disabilities Interview Schedule, DSM-IV Version

ticularly significant because it demonstrates that personality disorders are no less prevalent outside Europe, North America and Australia, where all previous data have been collected. The study is also important because it shows that problems in social functioning among people with personality disorder are clinically significant, even when the impact of other comorbid mental health problems has been controlled for (6).

HOW COMORBID PERSONALITY DISORDER INFLUENCES OTHER MENTAL DISORDERS

As the identification of personality pathology has become increasingly robust, it has become possible to turn our attention to how this group of disorders affect other mental disorders, such as affective and psychotic disorders, more commonly identified and treated within mental health settings. Although the community prevalence of personality disorder appears to range from 3 to 10%, it is, as would be expected, much higher in secondary care settings (8,9). As such, it would be expected to impact on psychopathology, outcome and service provision. The research undertaken to date, although limited in a similar fashion to the epidemiological data, would broadly support this view.

The best studied association is between depressive disorders and personality status. More than 60 studies have looked at the correlation between personality disorder and depression and, when combined using a meta-analytic approach, they confirm that people with a personality disorder are approximately twice as likely not to recover from a depressive episode as those with no personality disorder (unpublished data). This data is very similar to initial findings of poorer outcome in depression when personality pathology is present (10). Studies do not make it clear whether this poorer outcome is due to the lack of treatments directed at the personality pathology or if personality disorder acts as a diathesis in these conditions (11).

The findings in psychotic mental illness are far less clear. This field of research is less well developed and even the prevalence of personality pathology ranges from 4.5 to 100%. This huge variation appears to be related to the country of the study, the care provided and the tools used to measure personality (12). It is not clear that personality measures in psychosis are reliable (13). Outcomes in this group are also poorly studied (14), although there are peripheral indicators that personality disorder in this group often shows itself in terms of violence (15), crime (16), and hospital readmission (17).

Other research has examined the interactions of personality pathology and major mental illness within community and secondary care settings. This also supports the probability of poorer outcomes in personality disordered patients who are, by and large, treated for affective and psychotic disorders. Two-year outcomes in an Australian cohort showed the personality facet of neuroticism to be one of the

few correlates predictive of poor outcome in those with mental illnesses (18). Cross-sectional data has also suggested personality disorder, particularly its severity, to be associated with both higher social needs and greater social dysfunction in patients in a secondary care setting in England (19).

Studies such as these suggest that personality dysfunction has a negative effect on function and outcome, but remains relatively undertreated. Why is this? The answer to this question is potentially multifaceted, although clinicians' attitudes toward this difficult to manage group are important. For more than two decades, there has been the suggestion that mental health clinicians do not like patients with personality disorders (20), and recent evidence suggests that clinicians perceive patients with personality disorders as more difficult, despite the objective evidence failing to support such a view (21). These attitudes may adversely affect delivery of health care provision and as such make it more difficult for patients with personality disorder and comorbid mental disorders to access and receive appropriate management for either disorder.

It therefore appears that people with personality disorder and comorbid personality disorder have poorer outcomes, function less well in society and are stigmatized by clinicians in secondary services, reducing the odds they will receive optimum care. This is a combination which is potentially expensive when considering the delivery of health and social care services.

COST OF PERSONALITY DISORDER

As part of a recent report on the economic burden of mental health problems in England, the King's Fund estimated the health and social care service costs of all people with personality disorder who are in contact with their general practitioners at £704 million per year (22). When productivity losses were included, the cost rose to £7.9 billion per year. Soeteman et al (23) used a similar approach to calculate the cost of personality disorder by using data from health and social care contacts for people attending specialist personality disorder services. They calculated the total burden of personality disorder in the Netherlands to be £11,126 per patient.

These studies can be considered a useful starting point, but they do not provide an estimate of the total economic burden of personality disorder, because both of them used information on people who were in contact with services. Whilst service attenders provide useful opportunistic samples for research purposes, they are not representative of the personality disorder population as a whole. Indeed, we know that many of those with personality disorder are unknown to services (24), reject treatment rather than seek it (25), or are in contact with services but have a different primary diagnosis (26). Thus, to date, the true cost of personality disorder remains unknown, but it is certainly substantial, falling to many service providing sectors (health, social ser-

vices, criminal justice) as well as to the economy more widely (inability to work and premature death).

EVIDENCE OF TREATMENT EFFECTIVENESS

Most of the research conducted into the treatment of personality disorder has focused on those with borderline personality disorder. Systematic reviews of previously published randomized trials have concluded that too few studies have been conducted to draw clear conclusions about the treatment of this form of personality disorder, but they have highlighted the limited, if any, impact of pharmacological treatments and the promising, if still unclear, benefits of complex psychosocial interventions such as dialectical behaviour therapy (27,28).

The treatment of people with borderline personality disorder has also been reviewed as part of the development of national guidelines. Following the publication of the American Psychiatric Association's guidelines in 2001 (29), the National Institute for Clinical Excellence in England (NICE) published new treatment guidelines for borderline and antisocial personality disorder (30,31). The evidence base led to three main conclusions: a) psychotropic drugs are of no proven value in the long term in these personality disorders, and their adverse effects normally preclude their use except for short periods and in crisis; b) if other treatments (mainly psychological) are to be given, they need to be administered using a structured team approach for borderline personality disorder and using cognitive therapeutic approaches (particularly group management) in antisocial personality disorder; c) in antisocial personality disorder, interventions that reward are better than those that punish.

Information on which to base treatment discussions for people with other forms of personality disorder is even more scant. Recent trials by Svartberg et al (32) and Emmelkamp et al (33) are noteworthy because they examined the impact of psychological treatments among people with cluster C personality disorders. Findings from these two trials disagree, with Emmelkamp et al demonstrating greater improvement among those offered 20 sessions of cognitive therapy compared to psychodynamic psychotherapy, while Svartberg et al found similar treatment outcomes among those receiving these two interventions.

For other forms of personality disorder in which the patients are treatment resisting (Type R) (i.e., they do not want their personalities to change), as opposed to treatment seeking (Type S) (25), it may be better to try and adapt the environment to the personality and this can be done systematically in the form of nidotherapy (34,35). This has received support in a recent randomized trial (36).

Most of the putative successful treatments for personality disorder are time consuming and resource intensive, and need to be buttressed by a good theoretical base and therapeutic commitment. These conclusions match those of an expert panel on the management of people with personality

disorder (37), which also suggested that there is no "quick fix" in the treatment of these disorders, and that in most countries the resources are not likely to be available to treat them in this way.

While research for treatment of personality disorder that goes beyond the previous focus on borderline personality disorder is to be welcomed, findings from other studies show that in clinical practice people offered treatment usually meet diagnostic criteria for several categories of personality disorders (38,39). Such findings add weight to the case for re-classifying personality disorder to ensure that the system used has clinical utility.

NEED FOR A NEW CLASSIFICATION

If we accept the epidemiological figures, 3-10% of the adult inhabitants in the countries of the world have a personality disorder. However, only a minority of these (probably one in 20) has a severe personality disorder (40) and it is the people in this group who cause the most disruption to services and to society.

For the most severe personality disorders, the existing classification is unhelpful. It takes no account of severity and it generates the frequent comorbidity of several personality disorders across different clusters (41), as well as the frequent use of the term "personality disorder not otherwise specified", which, when often used more than any specific personality category, is a mark of dissatisfaction with the existing classification (42).

The WPA Section on Personality Disorders is currently examining new ways of classifying personality disorder in ICD-11. As well as making suggestions over the classification of severity discussed above, the Section is considering revising the descriptions of the major personality disorder groupings. These would be fewer, overlap less and, we hope, possess greater clinical utility.

There is surprising consistency over the number and descriptions of the main dimensions of personality disorder in studies carried out with both psychiatric patients and normal populations. Three or four dimensions are uniformly reported (43-46), in addition to the well-known five-factor model (47) that has been suggested for the core descriptions of DSM-V personality disorders (48).

The first dimension is an externalizing potentially aggressive and hostile factor that incorporates borderline, antisocial, narcissistic, histrionic (cluster B in DSM-IV) and often paranoid personality disorder traits. Some studies report a separation of a factor incorporating callousness, lack of remorse and criminal behaviour (psychopathy), while others find a single broad factor. The second dimension is generally an internalizing factor consisting of neurotic, inhibited and avoidant, incorporating anxious, behaviour. This was once called asthenia, but is now best summarized as avoidant and dependent personality disorder traits (part of cluster C) in DSM-IV. The third dimension comprises schizoid symp-

toms: introversion and social indifference, aloofness and restricted expression of affect. In some studies these characteristics overlap with eccentric and odd behaviour and/or paranoid personality disorder symptoms, and an additional factor, peculiarity, has been suggested to make up a six-factor model (49). The fourth factor comprises obsessiveness, compulsivity and perfectionism and, although these are currently part of the cluster C grouping, the empirical data suggests they can be separated. In some studies this forms part of the internalizing factor, but most investigations report that obsessive compulsive personality disorder symptoms split off as a coherent and relatively independent set of behaviours.

While there is currently little evidence to support the validity of these factors, they almost certainly provide a better description of the range of personality abnormality than the current classifications. They can also be adapted to a developmental perspective that will allow personality disturbance to be identified long before the current cut-off age of 18 that is intrinsic to both DSM-IV and ICD-10 (50). Their importance will rest on whether they provide a more useful framework for organizing and explaining the complexity of clinical experience in personality disorders as well as predicting outcome and guiding decisions about treatment (51). A new classification that does not improve clinical utility will be a failed classification.

There seems little to lose. A recent survey reported that three quarters of personality disorder experts thought the current DSM-IV system should be replaced (42). Using four (or possibly more) overlapping factors seems preferable to continuing to act as though the ten current personality disorders are separate, when they have repeatedly been found not to be.

The next step will be to derive better structured clinical interviews that address these factors well, and this should generate competent research which can explore whether knowledge about aetiology, prognosis and treatment is enhanced by using the new classification.

The DSM-IV polythetic diagnoses describe poorly specified psychopathology and so it is natural that they fail to identify criteria that could correspond to the “core features” of each personality disorder diagnosis. The lack of clearly identified core features and a “vote-counting” approach to personality disorder diagnosis (i.e., list the number of symptoms that were met by a given subject, see if it is greater than a usually arbitrary cut-off value, and then make the diagnosis) prevented clinicians from making differential diagnoses within the axis II classification. The legacy is a diagnostic system that dissatisfies both the researcher and the clinician, being neither simple, accurate or useful. Thus, although it has promoted a huge, but widely scattered, amount of research on the aetiology, psychopathology, course and treatment of personality disorders, there are now good reasons to consider the DSM-IV approach completely out of date.

The WPA Section on Personality Disorders is currently considering revising the descriptions of the major personal-

ity disorder groupings in a way that not only makes good clinical sense but also enables separation from other disorders with which they are frequently confused, such as attention-deficit/hyperactivity disorder (ADHD) (52). It will not be an easy task, and in reaching our conclusions we hope to have empirical evidence from as many field trials as possible, not just in highly developed countries, as a robust classification should travel well (53), and to use these data rather than relying on the uncertain support of consensus committee opinion, as previous classifications have unfortunately been forced to do.

References

1. Torgersen S, Kringlen E, Cramer V. The prevalence of personality disorders in a community sample. *Arch Gen Psychiatry* 2001; 58:590-6.
2. Cohen BJ, Nestadt G, Samuels JF et al. Personality disorder in later life: a community study. *Br J Psychiatry* 1994;165:493-9.
3. Coid J, Yang M, Tyrer P et al. Prevalence and correlates of personality disorder among adults aged 16 to 74 in Great Britain. *Br J Psychiatry* 2006;188:423-31.
4. Langbehn DR, Pfohl BM, Reynolds S et al. The Iowa personality disorder screen: development and preliminary validation of a brief screening interview. *J Person Dis* 1999;13:75-89.
5. Moran P, Leese M, Lee T et al. Standardised Assessment of Personality - Abbreviated Scale (SAPAS): preliminary validation of a brief screen for personality disorder. *Br J Psychiatry* 2003;183:228-32.
6. Huang Y, Kotov R, de Girolamo G et al. DSM-IV personality disorders in the WHO World Mental Health Surveys. *Br J Psychiatry* 2009;195:46-53.
7. Grant BF, Hasin DS, Stinson FS et al. Prevalence, correlates, and disability of personality disorders in the United States: results from the national epidemiologic survey on alcohol and related conditions. *J Clin Psychiatry* 2004;65:948-58.
8. Newton-Howes G, Tyrer P, Anagnostakis K et al. The prevalence of personality disorder, its comorbidity with mental state disorders, and its clinical significance in community mental health teams. *Soc Psychiatry Psychiatr Epidemiol* (in press).
9. Cutting J, Cowen PJ, Mann AH et al. Personality and psychosis: use of the Standardised Assessment of Personality. *Acta Psychiatr Scand* 1986;73:87-92.
10. Newton-Howes G, Tyrer P, Johnson T. Personality disorder and the outcome of depression: a meta-analysis of published studies. *Br J Psychiatry* 2006;188:13-20.
11. Tyrer P. Personality diatheses: a superior explanation than disorder. *Psychol Med* 2007;37:1521-5.
12. Newton-Howes G, Tyrer P, Yang M et al. The prevalence of personality disorder in schizophrenia: rates and explanatory modelling. *Psychol Med* 2008;37:1-8.
13. Docherty J, Fiester S, Shea T. Syndrome diagnosis and personality disorders. In: Frances AJ, Hales RE (eds). *American Psychiatric Association annual review*, Vol. 5. New York: American Psychiatric Press, 1986:315-55.
14. Newton-Howes G, Tyrer P, Moore A et al. Personality disorder and outcome in schizophrenia: a negative systematic review. *Person Ment Health* 2007;1:22-6.
15. Moran P, Walsh E, Tyrer P et al. Impact of co-morbid personality disorder on violence in psychosis – report from the UK700 trial. *Br J Psychiatry* 2003;182:129-34.
16. Moran P, Hodgins S. The correlation of comorbid antisocial personality disorder in schizophrenia. *Schizophr Bull* 2004;30:791-801.

17. Tyrer P, Manley C, VanHorn E et al. Personality abnormality and its influence on outcome of intensive and standard case management: a randomised controlled trial. *Eur Psychiatry* 2000;15(Suppl 1):7-10.
18. Beard J, Heathcote K, Brooks R et al. Predictors of mental disorders and their outcomes in a community based cohort, *Soc Psychiatry Psychiatr Epidemiol* 2007;42:623-30.
19. Newton-Howes G, Tyrer P, Weaver T. Social function of patients with personality disorder in secondary care. *Psychiatr Serv* 2008; 59:1033-7.
20. Lewis G, Appleby L. Personality disorder: the patients psychiatrists dislike. *Br J Psychiatry* 1988;153:44-9.
21. Newton-Howes G, Weaver T, Tyrer P. Attitudes of staff towards patients with personality disorder in community health teams. *Aust N Z J Psychiatry* 2008;42:572-7.
22. McCrone P, Dhanasiri S, Patel A et al. Paying the price: the cost of mental health care in England to 2026. London: King's Fund, 2008.
23. Soeteman DI, Hakkaart-van Roijen L, Verheul R et al. The economic burden of personality disorders in mental health care. *J Clin Psychiatry* 2008;69:259-65.
24. National Institute of Mental Health in England. Personality disorder: no longer a diagnosis of exclusion. Leeds: National Institute of Mental Health in England, 2003.
25. Tyrer P, Mitchard S, Methuen C et al. Treatment-rejecting and treatment-seeking personality disorders: Type R and Type S. *J Person Disord* 2003;17:265-70.
26. Ranger M, Methuen C, Rutter D et al. Prevalence of personality disorder in the caseload of an inner city assertive outreach team. *Psychiatr Bull* 2004;28:441-3.
27. Binks CA, Fenton M, McCarthy L et al. Psychological therapies for people with borderline personality disorder. *Cochrane Database of Systematic Reviews*, Issue 1, 2005.
28. Binks C, Fenton M, McCarthy L et al. Pharmacological interventions for people with borderline personality disorder. *Cochrane Database of Systematic Reviews*, Issue 1, 2006.
29. American Psychiatric Association. Practice guideline for the treatment of patients with borderline personality disorder. *Am J Psychiatry* 2001;158(Suppl.).
30. National Institute of Health and Clinical Excellence. Borderline personality disorder: treatment and management. London: National Institute of Health and Clinical Excellence, 2009.
31. National Institute of Health and Clinical Excellence. Antisocial personality disorder: treatment, management and prevention. London: National Institute of Health and Clinical Excellence, 2009.
32. Svartberg M, Stiles TC, Seltzer MH. Randomized, controlled trial of the effectiveness of short-term dynamic psychotherapy and cognitive therapy for cluster C personality disorders. *Am J Psychiatry* 2004;161:810-7.
33. Emmelkamp PM, Benner A, Kuipers A et al. Comparison of brief dynamic and cognitive-behavioural therapies in avoidant personality disorder. *Br J Psychiatry* 2006;189:60-4.
34. Tyrer P, Sensky T, Mitchard S. The principles of nidotherapy in the treatment of persistent mental and personality disorders. *Psychother Psychosom* 2003;72:350-6.
35. Tyrer P, Kramo K. Nidotherapy in practice. *J Ment Health* 2007; 16:117-31.
36. Ranger M, Tyrer P, Milošeska K et al. Cost-effectiveness of nidotherapy for comorbid personality disorder and severe mental illness: randomized controlled trial. *Epidemiol Psichiatria Soc* 2009; 18:128-36.
37. Crawford MJ, Price K, Rutter D et al. Dedicated community-based services for adults with personality disorder: Delphi study. *Br J Psychiatry* 2008;193:342-3.
38. Giesen-Bloo J, van Dyck R, Spinhoven P et al. Outpatient psychotherapy for borderline personality disorder: randomized trial of schema-focused therapy vs. transference-focused psychotherapy. *Arch Gen Psychiatry* 2006;63:649-58.
39. Abbass A, Sheldon A, Gyra J et al. Intensive short-term dynamic psychotherapy for DSM-IV personality disorders: a randomized controlled trial. *J Nerv Ment Dis* 2008;196:211-6.
40. Tyrer P. Personality disorder and public mental health. *Clin Med* 2008;8:423-7.
41. Bowden Jones O, Iqbal MZ, Tyrer P et al. Prevalence of personality disorder in alcohol and drug services and associated co-morbidity. *Addiction* 2004;99:1306-14.
42. Bernstein DP, Iscan C, Maser J et al. Opinions of personality disorder experts regarding the DSM-IV personality disorders classification system. *J Person Disord* 2007;21:536-51.
43. Tyrer P, Alexander J. Classification of personality disorder. *Br J Psychiatry* 1979;135:163-7.
44. Livesley WJ. A systematic approach to the delineation of personality disorders. *Am J Psychiatry* 1987;144:772-7.
45. Mulder RT, Joyce PR. Temperament and the structure of personality disorder symptoms. *Psychol Med* 1997;27:99-106.
46. Fossati A, Maffei C, Bagnato M et al. Patterns of covariation of DSM-IV personality disorders in a mixed psychiatric sample. *Compr Psychiatry* 2000;41:206-15.
47. Costa PT, McCrae RR. Personality disorders and the five-factor model of personality. *J Person Disord* 1990;4:362-71.
48. Widiger TA, Mullins-Sweatt SN. Five-factor model of personality disorder: a proposal for DSM-V. *Ann Rev Clin Psychol* 2009;5:197-220.
49. Watson D, Clark LA, Chmielewski M. Structures of personality and their relevance to psychopathology: II. Further articulation of a comprehensive unified trait structure. *J Person* 2008;76:1545-86.
50. Tackett JL, Balsis S, Oltmanns TF et al. A unifying perspective on personality pathology across the life span: developmental considerations for the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders. *Dev Psychopathol* 2009;21:687-713.
51. Kendell R, Jablensky A. Distinguishing between the validity and utility of psychiatric diagnoses. *Am J Psychiatry* 2003;160:4-12.
52. Philipsen A, Limberger MF, Lieb K et al. Attention-deficit hyperactivity disorder as a potentially aggravating factor in borderline personality disorder. *Br J Psychiatry* 2008;192:118-23.
53. Thuo J, Ndeti DM, Maru H et al. The prevalence of personality disorders in a Kenyan inpatient sample. *J Person Disord* 2008;22: 217-20.