Paranoid Personality Traits in a Panic Disorder Population: A Pilot Study

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To better understand the relationship between panic disorder and paranoid personality, panic disorder patients (N = 28) who were referred to an anxiety disorder clinic in a community mental health center were evaluated for paranoid personality traits on a standardized personality self-report instrument. Paranoid per-

sonality disorder was found in 54% of subjects. Paranoid subjects were found to have an earlier age of onset, longer duration of illness, and more psychopathology. Possible etiologies and implications for treatment of these findings are discussed.

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WHEN RESEARCHERS and clinicians think of panic disorders, they tend not to associate them with DSM-III or DSM-III-R paranoid personality disorder. Paranoia is often associated with schizophrenia or the schizophrenic-spectrum disorders and not with the anxiety disorders. However, there is some empirical data available on this subject. Mavissakalian and Hamann¹ used the Personality Diagnostic Ouestionnaire (PDQ) to measure personality in 161 psychiatric outpatients with panic and agoraphobia. They found that 29% of the paranoid criteria were endorsed by this population.* Thirty-eight subjects of the group endorsed paranoid criteria B "suspiciousness and mistrust." Although only 3% met the PDQ criteria for paranoid personality disorder, 9% met criteria for the near-neighbor personality disorder, schizotypal. Mauri et al.2 examined a group of 40 panic disorder patients using the Personality Disorder Examination. Five percent of those with panic disorder met the criteria for paranoid personality disorder, and an additional 5% met the criteria for the related disorder, schizotypal personality disorder. Reich and Noyes,3 in a Midwest study of personality in ill panic outpatients using the Structured Interview for DSM-III Personality Disorders and the PDQ, found approximately a 5.7% prevalence

of paranoid personality disorder using the Structured Interview for DSM-III Personality Disorders. Using the PDQ resulted in a 4.9% prevalence, although the near-neighbor disorder, schizotypal personality disorder, had a 34.1% prevalence on the PDQ. Reich et al.,4 reporting on a population of 475 anxiety patients drawn from multiple sites, using the PDQ, found DSM-III-R paranoid personality disorder to be panic without agoraphobia in 32% and panic and agoraphobia in 29%. (Due to the multiple sites that subjects were drawn from for this study, it may have high generalizability.) Blashfield et al.5 examined personality traits in panic disorder outpatients (N = 84) using the PDQ. The mean number of paranoid personality items endorsed for panic disorder was 3.8, and this was a higher number of items than for any other personality disorder. There is one report, by Friedman et al.,6 which examined 26 panic patients with the Structured Clinical Interview for DSM-III, that found no paranoid or schizotypal personality disorders.

From this review of the literature, the range of paranoid personality disorder in panic patients is from 0% to approximately 30%, with an average prevalence over the studies of about 11%. If the number with paranoid traits or the near-neighbor personality disorder, schizotypal, are included, the number of pathological personality traits in the schizoid personality cluster goes far higher.† This level of prevalence is of

^{*}Rather than describe each personality instrument in each study, we refer the reader to a previous review of the area. Please see Reich.⁸

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[†]There are different but interchangeable names that have been used to describe the DSM-III and DSM-III-R personality disorder groupings or clusters. The nomenclature preferred by John Gunderson (personal communication, September 1993) is the schizoid cluster, dramatic cluster, and anxious cluster. Their definitions (and alternate names) are as follows: schizoid cluster = cluster A = cluster 1 and consists of the paranoid, schizoid, and schizotypal personality disorders; dramatic cluster = cluster B = cluster 2 and

possible clinical and theoretical interest for several reasons. Despite the above-cited literature documenting the presence of some paranoid traits in panic patients, no one has specifically examined what the implications of this finding may be. No one has reported whether these findings are associated with increased symptoms or poorer functioning. It is of possible theoretical interest because if the finding is replicated, it raises the question of how such seemingly different disorders (panic disorder and paranoid personality disorder) come to be associated with each other. It is of clinical interest since it is quite likely that patients with paranoid personality traits may require different approaches to treatment than those without. Since the possibility that panic patients have paranoid personality traits is not among the first considerations a clinician would now entertain, writing about this topic may give clinicians valuable insights.

The goal of this report is to measure the prevalence of paranoid personality disorder in a new panic disorder population and to examine the clinical and demographic associations of the presence of paranoid personality disorder. Due to the scarceness of literature in this area and our relatively small sample size, this is both a pilot and exploratory study.

METHOD

Subjects

The sample consisted of 28 consecutive admissions to a university anxiety clinic situated in a community mental health center who met DSM-III-R criteria for panic disorder. Of these, 23 (82%) were agoraphobic. Nineteen (68%) had one or more lifetime comorbid diagnoses. Ten (36%) had major depression, six (21%) social phobia, three (11%) obsessive-compulsive disorder, and four (14%) alcohol or drug abuse disorders. (None of the alcohol or drug abuse disorders were current.) The subjects were a mean of 35.5 \pm 13 years old, and 19 subjects (68%) of the sample were female.

Assessment

Axis I diagnoses were determined by a semistructured clinical interview used at our clinic to diagnose axis I disorders. Upon entry to the clinic, all patients were

consists of the borderline, antisocial, narcissistic, and histrionic personality disorders; anxious cluster = cluster C = cluster 3 and consists of the avoidant, dependent, passive/aggressive, and compulsive personality disorders.

administered the Brief Symptom Inventory (BSI)⁷ to assess symptomatology and the PDQ to assess personality traits and disorders.⁸

The BSI is a 53-item, self-report symptom inventory. Each question is rated on a five-point scale. Specific scales analogous to those on the Hopkins Symptom Checklist-90 can be calculated from the raw scores. Scales on the BSI correlate at approximately the .80 level with scales on the Hopkins Symptom Checklist-90.7

Personality disorder pathology in this report was measured by the PDQ-R.^{9,10} The PDQ is a 152-item, self-administered, true/false self-report instrument measuring all 11 DSM-III-R personality disorders. A preliminary study with 2-month test-retest on the PDQ has calculated kappas of .53 for the schizoid cluster.⁸

The selection of the PDQ-R as a measure of personality disorder pathology has advantages and disadvantages. Testretest reliability and concurrent validity have been found adequate. 8.11-17 The self-report format makes data collection easier, and studies that have used it report some meaningful findings, such as the ability to predict poor outcome of the treatment of axis I disorders. 18 The major disadvantage is that as a self-report instrument, it does not yield a clinical diagnosis. This has been noted in a number of studies, 9.19.20 and the area has been recently reviewed by Perry, 21 who came to the same conclusion. One recent study argues with persuasive data that the PDQ-R is measuring personality traits, not disorders. 22 With the limitation that clinical diagnoses cannot be made from the PDQ-R, we view it as a valid measure of personality psychopathology.

Analysis

Since our interest was in paranoid personality disorder, the subjects were separated into those with and those without this disorder. (Further subdivisions were not made due to small sample size.) Comparisons between these groups were made on the variables of current age, age of onset, duration of symptoms, number of other personality disorders, and the BSI scales of general anxiety, phobic anxiety, interpersonal sensitivity, hostility, depression, and overall pathology. Variables were compared using two-sample t tests.

RESULTS

Our sample consisted of 28 patients who had a mean age of 35.3 ± 13 years. Their marital status was 28.6% married, 25% divorced or separated, 7.1% widowed, and 39.3% single. Educationally, 17.8% were college graduates, 67.9% were high school graduates, and 14.3% had less than a high school education. Sixty-four percent of the sample had DSM-III-R schizoid cluster personality disorder, 39% a dramatic cluster, and 64% an anxious cluster personality disorder. The five most frequent personality disorders were as follows: paranoid, 54%; avoidant, 46%; dependent, 36%; histrionic, 25%; and compulsive, 25%.

262 REICH AND BRAGINSKY

Fifteen subjects had paranoid personality disorder, and 13 did not. The key differences between the paranoid-disordered and nonparanoid-disordered groups were that the paranoid personality group had an earlier age of onset, 25 ± 6.7 years versus 34.2 ± 14 (t = 2.17, P = .04), a longer duration of illness, 8.3 ± 8.5 versus 2.8 ± 2.4 (t = 2.39, P = .03), and a higher mean number of personality disorders, 4.7 ± 2.5 versus 1.7 ± 1.4 (t = 3.83, P = .01). On the BSI measures, the paranoid group scored significantly higher on interpersonal sensitivity, $2.6 \pm$ 1.0 versus 1.2 ± 0.7 (t = 3.89, P = .001), hostility, 1.9 ± 0.9 versus $1.1 \pm .8$ (t = 2.55, P = .02), depression, $2.5 \pm .9$ versus 1.7 ± 1.0 (t = 2.13, P = .05), and total pathology, 2.5 \pm .7 versus $1.8 \pm .7$ (t = 2.61, P = .01). There were no differences in current age or, on the BSI, general anxiety or phobic anxiety.

DISCUSSION

The major findings of this report are that there is a high prevalence of PDQ-R paranoid personality disorder in our panic population. In addition, those with this disorder have an earlier onset and longer duration, and are more symptomatic (although not on the anxiety symptoms themselves).

Our findings are consistent with some earlier literature and inconsistent with other literature. One of the largest studies of its type⁴ found rates of approximately 30% for Paranoid personality disorder. This study probably has high generalizability not only due to its sample size (475) but to the subjects' being drawn from multiple sites. On the other hand, one report⁶ found no paranoid personality disorders at all. Most of the literature falls between these extremes. Clearly our current report shows the highest prevalence reported in the literature to date. The questions become "Why are these reports giving such diverse prevalences?"; "Why is the current population the highest so far reported?"; and "What is the meaning and implication of the association between some panic patients and paranoid personality disorder?"

We believe that the answers to the first two questions lie in three areas, personality measurement instrumentation, acuteness of the illness in the population studied, and the specific type

of population studied. It is now clear that DSM-III and DSM-III-R personality instruments do not often agree with each other.¹⁹⁻²¹ This is one possible explanation of the variance. Among the various instruments, it is possible that the PDO diagnoses more disorders than some of the others, and this may be one source of the difference. We do not claim that the PDQ is making clinical diagnoses; an interview personality instrument would have to be used for that. However, we do believe that the latest research indicates that the PDQ is measuring important personality variables.²² Next, it has been shown that there is a tendency for many personality instruments to score more personality disorders in the presence of an acutely ill population.^{23,24} It should be noted that the population studied in this report was acutely ill and that this may have also tended to increase the level of reported personality disorders. Finally, the population that subjects are drawn from can have an important effect on the findings. For example, panic patients drawn from a prison population would differ greatly from panic patients drawn from an outpatient private anxiety clinic. The population studied here was a community mental health population. Most of these patients had exhausted their insurance, savings, income, and social support system. In effect, we were a tertiary outpatient care system for patients who had nowhere else to go. Naturally, this population tended to be more severely disabled and to have more life stresses than most other populations. We believe that this also must have contributed to their higher prevalence of paranoid personality disorder.

Regardless of the exact prevalence, it is clear that some panic populations have a significant minority of patients with paranoid personality or paranoid traits. If the findings in this report generalize to other panic patients with paranoid personality traits or disorder, then it is clearly clinically significant for a number of patients. It is quite possible that these patients would require either more intensive or different treatment approaches.

Possible explanations of the findings include that anxiety patients have a relationship to the schizophrenic disorders or that these traits are secondary to the chronicity of the illness. We

found no evidence for any hallucinations, delusions, or other symptoms of psychosis in this population, nor did any produce a family history of schizophrenia. We believe it is more likely that the paranoid traits are secondary to chronic anxiety illness. There is a previous report that supports this position.²⁵ It gives several case examples of patients with normal premorbid personality traits and no family history of schizophrenia who develop paranoid traits after suffering years of chronic panic disorder. It would appear that an earlier onset, long duration, or both for panic disorders may predispose to a cognitive set consistent with the development of personality traits that appear paranoid, but which are not likely to be related to schizophre-

There is a possibility that, in effect, the measures of paranoid personality disorder found are merely proxy measures for severity of illness. We believe that this is a strong possibility, but one with interesting ramifications to be

examined—Why do some patients develop paranoid personality disorder while others do not? Are there other predisposing factors besides duration of panic disorder? How does the development of this secondary syndrome affect treatment response and optimal treatment approach? These are questions that will have to be answered in future studies.

These findings, although preliminary due to small sample size and use of self-report measures, have implications clinically and for future research. The prevalence of paranoia will need to be examined in the other anxiety disorders, as well as being compared with depression. Family studies of anxiety patients with paranoid traits will need to be performed, and the effects of paranoia on outcome of anxiety treatment will be important. Some of these studies will need to be conducted using interview personality instruments. Clinically paranoid traits in a panic disorder should raise the possibility of a more severe illness.

REFERENCES

- 1. Mavissakalian M, Hamann S. Correlates of DSM-III personality disorder in panic and agoraphobia. Compr Psychiatry 1988;29:535-544.
- 2. Mauri M, Saurno VM, Rossi A, Armani A, Zambotto S, Cassano GB, et al. Personality disorders associated with generalized anxiety, panic, and recurrent depressive disorders. J Pers Disord 1992;6:162-167.
- 3. Reich J, Noyes R. DSM-III personality disorders in unrecovered panic and depressed patients. J Anxiety Disord 1987;1:123-131.
- 4. Reich J, Perry JC, Shera D, Dyck I, Vasile R, Goissman RM, et al. Comparison of personality disorders in different anxiety disorder diagnoses: panic, agoraphobia, generalized anxiety, and social phobia. Presented at the Annual Meeting of the Anxiety Disorder Association of America; March 17-21, 1993; Charlotte, SC.
- 5. Blashfield R, Noyes R, Reich J. Personality disorder traits in generalized anxiety and panic disorder patients. Presented to the Psychosocial Research Group; April 9, 1993; McLean Hospital, Boston, MA.
- 6. Friedman CJ, Shear MK, Frances A. DSM-III personality in panic patients. J Pers Disord 1987;1:132-135.
- 7. Derogatis L, Spenser PM. Brief Symptom Inventory (BSI). Administration, Scoring and Procedures Manual. Baltimore, MD: Johns Hopkins University, 1975.
- 8. Reich J. Update on instruments to measure DSM-III and DSM-III-R personality disorders. J Nerv Ment Dis 1989;177:366-371.
- 9. Hyler SE, Skodol AE, Kellman HD, Oldham JM, Rosnick L. Validity of the Personality Diagnostic Questionnaire–Revised: comparison with two structured interviews. Am J Psychiatry 1990;147:1043-1048.

- 10. Hyler SE, Rieder RO. Personality Diagnostic Questionnaire Revised (PDQ). New York, NY: New York State Psychiatric Institute, 1987.
- 11. Reich J, Troughton E. Frequency of DSM-III personality disorders in patients with panic disorder: comparison with psychiatric and normal control subjects. Psychiatry Res 1988;26:89-100.
- 12. Reich J, Yates W, Ndguba M. Prevalence of DSM-III personality disorders in the community. Soc Psychiatry 1989:24:12-16.
- 13. Reich J, Noyes R, Troughton E. Dependent personality in panic patients with phobic avoidance. Am J Psychiatry 1987;144:323-327.
- 14. Reich J. A family history method for DSM-III anxiety and personality disorders. Psychiatry Res 1988;26:131-139.
- 15. Reich J. DSMIII personality disorders and family history of mental illness. J Nerv Ment Dis 1988;176:45-49.
- 16. Reich J. DSMIII personality disorders and the outcome of treated panic disorders. Am J Psychiatry 1988;145: 1149-1153.
- 17. Pfohl B, Coryell W, Zimmerman M, Stang D. Prognostic validity of self report and interview measures of personality disorder in depressed inpatients. J Clin Psychiatry 1987;48:468-472.
- 18. Reich JH, Green AI. Effect of personality disorders on outcome of treatment. J Nerv Ment Dis 1991;179:74-82.
- 19. Reich J, Noyes R, Troughton E. Comparison of instruments to measure DSM-III, Axis II. In: Millon T (ed): Proceedings of the Millon Clinical Multiaxial Conference, 1986. Minnetonka, MN: National Computer Systems, 1987: 223-235.
 - 20. Widiger TA, Freeman KG. Personality interview

REICH AND BRAGINSKY

- questions. II. Reliability and methodologic issues. Presented at the NIMH Workshop on Assessment of Personality Disorders; 1988 Nov 14; Bethesda, MD.
- 21. Perry JC. Problems and considerations in the valid assessment of personality disorders. Am J Psychiatry 1992; 149:1645-1653.
- 22. Hunt C, Andrews G. Measuring personality disorder: the use of self-report questionnaires. J Pers Disord 1992;6: 125-133
- 23. Reich J, Noyes R, Coryell W, O'Gorman T. The effect of state anxiety on personality measurement. Am J Psychiatry 1986;143:760-763.
- 24. Reich J, Noyes R, Hirschfeld RP, Coryell W, O'Gorman T. State effects on personality measures in depressed and panic patients. Am J Psychiatry 1987;144:181-187.
- 25. Neenan P, Felkner J, Reich J. Schizoid personality traits developing secondary to panic disorder. J Nerv Ment Dis 1986;174:483.

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