

NON-FEARFUL PANIC DISORDER: PANIC ATTACKS WITHOUT FEAR

BERNARD D. BEITMAN, IMAD BASHA, GREG FLAKER, LORI DE ROSEAR,
VASKAR MUKERJI and JOSEPH LAMBERTI

Departments of Psychiatry and Medicine, University of Missouri-Columbia, Health Sciences Center,
Columbia, MO 65201, U.S.A.

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Summary—Twelve of 38 cardiology patients with chest pain and current panic disorder reported that during their last major panic attack they did not experience intense fear, nor did they experience fear of dying, fear of loss of control or fear of going crazy. Using the DSM-III(R) criteria, they were diagnosed as non-fearful panic disorder (NFPD), and contrasted with the other 26 *S*s on several descriptive and self-report measures. The NFPD group reported significantly fewer phobias but was no different on reports of depression and several panic attack variables. The NFPD group scored lower on only three of 18 self-report scales. These results suggest that the DSM-III(R) defined NFPD *S*s resemble those who report the subjective experience of anxiety during their attacks.

INTRODUCTION

According to DSM-III (American Psychiatric Association, 1980), panic attacks are manifested by discrete periods of apprehension or fear and at least four of 12 symptoms. According to the proposed DSM-III(R) (American Psychiatric Association, 1985), panic attacks are characterized by discrete periods of intense discomfort or fear as well as at least four of 14 symptoms. The substitution of 'discomfort' for 'apprehension' appears to have widened the scope of the screen criterion by permitting the inclusion of patients who do not report the experience of intense subjective anxiety but rather focus on more amorphous dysphoria or on bodily complaints.

The term 'discomfort' has been defined by Webster's dictionary as (1) absence of comfort, uneasiness, inconvenience, hardship, distress; (2) anything causing this (Guralnik, 1980). *Therefore, by DSM-III(R) criteria, patients without fear can be diagnosed as having a panic disorder.* As part of a prevalence study of panic disorder in cardiology patients with either atypical or non-anginal chest pain, we noted that many of those fitting the DSM-III(R) 'discomfort' screen criterion also did not report either 'fear of dying' or 'fear of going crazy or doing something uncontrolled'. These latter two symptoms are psychological or cognitive as opposed to the other 12 symptoms which, except possibly for depersonalization or derealization, are somatic symptoms. We, therefore, constructed a subtype of DSM-III(R) panic disorder defined as presenting with discomfort only and without either (a) fear of dying or (b) fear of going crazy or doing something uncontrolled (See Table 1) but including at least four of the remaining 12 symptoms. Patients in this panic disorder subcategory would then fit the diagnosis of panic disorder without being required to report the experience of subjective fear.

We termed these patients 'Non-Fearful Panic Disorder' (NFPD) and hypothesized that they would have some characteristics different from the other panic disorder *S*s who reported subjective fear and that these characteristics might be revealed through differences in accompanying diagnoses (lifetime prevalence of depression and simple phobias) and in scores on self-report questionnaires for depression, anxiety, phobias, and other symptoms.

Subjects

Forty-three of 104 cardiology patients with either atypical or non-anginal chest pain were identified as having panic disorder (38 current, 5 past) as part of a prevalence study of panic disorder in cardiology patients. Typical angina was defined as substernal pressure, exertional and relieved by rest and/or nitroglycerin. Atypical angina was defined as having but two of these three features and non-anginal chest pain as having but one. These chest pain categories were selected

Table 1. Non-fearful panic disorder

A.	Discrete periods of intense discomfort without fear.
B.	Three attacks within a 3-week period.
C.	At least four of the following: sob, choking, palpitations, chest pain, sweating, faintness, dizziness, nausea, numbness, flushes, trembling, depersonalization (no fear of dying, of going crazy, of losing control).
D.	During at least some of the attacks, at least four of the 'C' symptoms occurred within 10 min of the beginning of the first 'C' symptom noticed in the attack.
E.	Not sustained by a known organic factor (e.g. amphetamine intoxication, caffeine intoxication, hyperthyroidism).

because they are correlated with relatively low probabilities of coronary artery disease compared to typical angina (Diamond, Forrester, Hirsch, Staniloff, Daniel, Berman and Swan, 1979; Diamond and Forrester, 1979) and because panic disorder was a possible cause of the chest pain (DaCosta, 1871; White and Jones, 1928; Wood, 1941; Mukerji, Beitman, Alpert, Hewett and Basha, 1987).

Subjects were referred by cardiologists from an outpatient university hospital cardiology clinic. The sociodemographic characteristics of the sample at the time of interview were as follows: (1) 33 women, 10 men; (2) aged 42.5 ± 18.5 yr (mean \pm S.D.); (3) 28 married, 2 separated, 4 divorced/annulled, 7 widowed, 2 never married. Thirteen had atypical angina, 29 had non-anginal pain and 1 reported experiencing one or the other type at different times. Six reported limited phobic avoidance; two reported extensive phobic avoidance. The 38 with current panic disorder formed the basis for further analysis since the interview omitted useful information about the past panic group (e.g. duration of disorder).

Structured psychiatric interview

The Structured Clinical Interview for DSM-III was developed by Spitzer and Williams (1981) to approximate standard psychiatric clinical interviewing while retaining sufficient structure to maintain inter-rater reliability. The SCID-UP (Spitzer and Williams, 1983) was specifically developed for the diagnosis of panic disorder, phobic avoidance (agoraphobia), social phobia, simple phobia and major depression. To receive a diagnosis of panic disorder *Ss* were required to meet revised DSM-III (American Psychiatric Association, 1985) criteria for panic disorder and to have had at least one panic attack per week for the past 3 weeks. Panic attack symptoms were elicited by asking in detail about the 'last bad' attack. The symptom list generated from this inquiry formed the paradigm against which other attacks were compared. If a *S* reported only 'discomfort' and denied intense fear and also denied fear of dying, going crazy or doing something uncontrolled, then he/she was placed in the NFPD category.

Interviews were performed by one of two fully trained clinical psychiatrists. Nine *Ss* were seen by both interviewers. There was 100% agreement in their ratings of panic disorder, social phobia, simple phobia, and major depression. After each interview, the interviewer presented his or her findings to the first author in order to prevent rater drift (Paul and Lentz, 1977).

Self-report questionnaires

Each participant was asked to complete the following questionnaires at the time of the interview: (1) the Zung Self-rating Anxiety Scale (SAS) (Zung, 1971), (2) the Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock and Erbaugh, 1961), (3) the Marks-Mathews Fear Questionnaire (Mark and Mathews, 1979), and (4) the Brief Symptom Inventory (BSI) (Derogatis and Melisaratos, 1983).

The SAS measures the current intensity of 20 anxiety symptoms scored on a 1-4 severity scale. The BDI measures current levels of 21 depressive symptoms on a 0-3 severity scale. The Fear Questionnaire yields scores on three categories of clinical phobias: agoraphobia, social phobia and blood-injury phobia. Each category is represented by five items rated on a 0-8 scale of severity. The BSI is a 53-item inventory reflecting nine primary symptom dimensions. In addition, it includes three global indices of distress.

The SAS offers an accepted measure of anxiety. Ten of its 20 items are symptoms of panic attacks. Because depression is commonly found in panic disorder patients (Breier, Charney and

Heninger, 1984), the BDI provided a useful measure of this symptom complex. Since agoraphobia is also commonly associated with panic disorder (DSM-III, American Psychiatric Association, 1980), the agoraphobia scale of the Fear Questionnaire could serve to further define the panic disorder group. The BSI provided scales of anxiety, depression, and phobic anxiety by which to test the reliability of the other scales as well as a scale for somatization, another symptom dimension commonly found in panic disorder patients (Noyes, Reich, Clancy and O'Gorman, 1986). The other BSI scales provided measures of the following dimensions: obsessive-compulsive, interpersonal sensitivity, hostility, paranoia, and psychoticism.

Statistical methods

To evaluate the relationship between the interview diagnosis of panic disorder and categorical variables (e.g. sex, marital status, other diagnoses) Chi-square tests were used. Continuous variables (e.g. mean group differences in age and the self-report questionnaire scores) were evaluated using two-tailed Student *t*-tests. Statistical Analysis System software was used for data analysis.

RESULTS

Twelve (32%) of the 38 current disorder *Ss* fit our criteria for non-fearful panic disorder (NFPD). This group was then compared with the 26 other *Ss* with current panic disorder.

Table 2 describes the demographic variables of the two groups. They did not differ significantly in regard to age ($t = 0.65$, d.f. = 16.2, $P < 0.52$), sex (Fisher's Exact test, $P < 1.00$), marital status (Fisher's Exact test, $P < 1.00$) or social class [$\chi^2(8) = 9.06$, $P < 0.34$] (Weiss, 1985).

Table 3 shows the comparison between the two groups on several descriptive and diagnostic variables. They did not differ in age of onset of panic disorder ($t = 1.01$, d.f. = 15.2, $P < 0.330$), duration of panic disorder ($t = 0.80$, d.f. = 30.5, $P < 0.432$), number of panic attacks in the week preceding the interview ($t = 0.42$, d.f. = 12.9, $P < 0.678$), or number of symptoms during the last major attack ($t = -1.39$, d.f. = 36.0, $P < 0.174$). They did not differ on presence of a current major depressive episode (Fisher's Exact test, $P < 1.0$) or at least one major depression during their lives (Fisher's Exact test $P < 0.161$). They differed significantly on reports of at least one simple phobia (Fisher's Exact test, $P < 0.038$). They differed marginally on reports of at least one past major depression (Fisher's Exact test, $P < 0.077$).

Table 2. Demographic variables of subjects with non-fearful panic disorder and the other subjects with panic disorder

	NFPD N = 12		Other panic disorder N = 26	
	N	%	N	%
Age (\pm S.D.)	47.3	24.0	42.3	16.8
Female	10	83	21	81
Married	7	58	16	62
Social class				
I, II, III, IV	2*	17	6†	23
V, VI, VII, VIII, IX	8	75	16	62

*2 not recorded.

†4 not recorded.

Table 3. Comparison between non-fearful panic disorder group and other panic disorder group on diagnostic variables

	NFPD N = 12		Other PD N = 26		P
	N	%	N	%	
Age of onset of panic disorder (yr \pm S.D.)	42.9	24.8	35.1	15.4	0.33*
Duration of panic disorder (yr \pm S.D.)	4.4	3.8	6.8	13.7	0.43*
Number of panic attacks in week preceding interview (\pm S.D.)	9.9	22.2	7.1	9.6	0.67*
Number of symptoms during last major attack (\pm S.D.)	7.2	2.4	8.3	2.5	0.17*
Current major depression	2	17	6	23	1.0†
At least one episode of past major depression	2	17	13	50	0.08†
Lifetime history of at least one major depression	3	25	14	54	0.16†
At least one simple phobia	0	0	8	31	0.04†

*Student's *t*-test.

†Fisher's Exact test.

Table 4. Comparison between Non-Fearful Panic Disorder group and other panic disorder group on self-report questionnaires

	NFPD N = 12		Other PD N = 26		P*
	Score ± S.D.		Score ± S.D.		
Beck Depression Inventory	10.7 ± 5.5		15.1 ± 12.0		0.13
Zung Self-rated Anxiety Scale	52.9 ± 10.6		52.2 ± 11.2		0.86
Fear Questionnaire					
Agoraphobia	8.7 ± 10.9		10.6 ± 9.3		0.58
Blood-injury	11.9 ± 9.5		12.8 ± 10.1		0.81
Social phobia	11.7 ± 7.1		14.2 ± 8.1		0.35
Total	32.2 ± 18.8		37.6 ± 23.0		0.49
Brief Symptom Inventory					
Somatization	1.82 ± 0.51		1.63 ± 0.64		0.36
Obsessive-compulsive	1.10 ± 0.77		1.12 ± 0.78		0.94
Interpersonal sensitivity	0.71 ± 0.41		1.17 ± 0.88		< 0.03
Depression	0.50 ± 0.44		1.01 ± 0.95		< 0.03
Anxiety	0.97 ± 0.65		1.13 ± 0.99		0.29
Hostility	0.73 ± 0.58		0.81 ± 0.71		0.75
Phobic anxiety	0.47 ± 0.60		0.87 ± 0.96		0.19
Paranoid ideation	0.98 ± 0.83		0.78 ± 0.64		0.41
Psychoticism	0.28 ± 0.43		0.73 ± 0.84		< 0.04
General severity index	0.87 ± 0.38		1.08 ± 0.69		0.24
Positive symptom distress index	1.80 ± 0.41		1.74 ± 0.52		0.72
Positive symptom total	25.8 ± 10.5		30.3 ± 12.6		0.30

*Student's *t*-test.

Table 5. Comparison of panic symptom frequency among subjects with non-fearful panic disorder and panic disorder

Panic symptom	NFPD N = 12		Other PD N = 26		P
	N	%	N	%	
Shortness of breath (dyspnea)	11	92	24	92	1.00
Choking or smothering sensations	4	33	9	35	1.00
Palpitations or accelerated heart rate (tachycardia)	11	92	21	81	0.64
Chest pain or discomfort	11	92	23	88	1.00
Sweating	5	42	14	54	0.73
Faintness	6	50	13	50	1.00
Dizziness, lightheadedness or unsteady feelings	10	83	19	73	0.69
Nausea or abdominal distress	5	42	14	54	0.73
Depersonalization or derealization	2	17	10	38	0.27
Numbness or tingling sensations (paresthesias)	5	42	13	50	0.73
Flushes (hot flashes) or chills	8	67	23	88	0.18
Trembling or shaking	8	67	15	58	0.73
Fear of dying	0	0	14	54	0.001
Fear of going crazy or doing something uncontrolled	0	0	5	19	0.16

Table 4 contains the means (\pm S.D.) on the self-report questionnaires. The two groups differed significantly on three BSI scales: interpersonal sensitivity ($t = -2.22$, d.f. = 36, $P < 0.033$), depression ($t = -2.27$, d.f. = 35.9, $P < 0.029$), and psychoticism ($t = -2.16$, d.f. = 35.5, $P < 0.037$).

Table 5 shows the frequency of each of the 14 panic symptoms during the last bad episode for each of the two groups. The two groups differed significantly only on 'fear of dying' (Fisher's Exact test, $P < 0.001$). They did not differ on 'fear of going crazy or doing something uncontrolled' (Fisher's Exact test, $P < 0.158$).

DISCUSSION

The results of this study suggest that [DSM-III(R) defined] panic disorder *Ss* who did not report the subjective experience of anxiety during their last major panic attack show few differences from those who do report the subjective experience of anxiety. Existing differences may deserve further attention.

The two groups did not differ on demographic variables or on age of onset or duration of panic disorder, number of panic attacks in the week preceding the interview or on number of symptoms during the last major attack. They did not differ on frequency of current major depression or on

reports of at least one major depression during their lifetimes. They differed marginally on reports of at least past major depression and significantly on reports of at least one simple phobia.

Of the 18 scales derived from the self-report questionnaires, the two groups differed significantly on three BSI scales: depression, interpersonal sensitivity and psychoticism. The depression scale finding is not confirmed by a significant difference on the BDI and therefore is questionable. The interpersonal sensitivity and psychoticism scale differences may possibly be attributed to the relative lack of psychological mindedness implied by the term non-fearful panic disorder.

The high percentage of NFPD patients, 12/38 (32%), has several possible explanations. (1) Our total sample included a large number of panic disorder uncomplicated Ss and a relatively small percentage with panic disorder and agoraphobia. Many anxiety disorder clinics report much higher percentage (40–90%) of patients with agoraphobia (Thyer, Himle, Curtis, Cameron and Nesse, 1985a; Breier *et al.*, 1984; Noyes *et al.*, 1986). These clinics may not have identified NFPD Ss because they may be more common among panic disorder uncomplicated patients. (2) These Ss came from a medical specialty clinic. Medical patients are more likely to somatize (Katon, Ries and Kleinman, 1983) and they may be less likely to report emotions. (3) The screening instrument the SCID-UP inquired into the 'last bad' attack under the assumption that the 'last bad' attack was representative. It may not have been. If the interview had been structured differently (perhaps to gauge how the attacks had changed over time), and a more inclusive picture of the symptom profile were gained, then the NFPD category might be constituted differently.

Starkman, Zelnik, Nesse and Cameron (1985) studied 17 patients with active pheochromocytomas, a disorder characterized by catecholamine-secreting tumors. Five reported that during their attacks they experienced a moderate or severe sense that something terrible might happen. Four reported a marked fear that they might die. One reported a sense that he might be going crazy. Ten of the 17 patients reported none of these symptoms. These 10 experienced attacks similar to those of the NFPD subjects. However, none of the 17 had sufficient frequency of attacks to meet DSM-III criteria for panic disorder. Although pheochromocytoma is quite rare, the symptom profile similarity to NFPD suggests that it may need to be considered as an alternative diagnosis.

Research efforts in drawing distinctions among and between the anxiety disorders have relied upon a number of variables by which to differentiate one category from another. These include: symptom profiles (e.g. Thyer *et al.*, 1985a; Cameron, Thyer, Nesse and Curtis, 1986; Barlow, Vermilyea, Blanchard, Vermilyea and DiNardo, 1985), associated disorders like depression (e.g. Breier *et al.*, 1984), neurochemical indices (e.g. Uhde, Boulenger, Roy-Byrne, Geraci, ViHone and Post, 1985), responses to pharmacological interventions including medications (e.g. Zitrin, Klein, Woerner and Ross, 1983; Liebowitz, Fyer, Gorman, Campers, Levin, Davies, Goetz and Klein, 1986) and challenge agents (e.g. Pitts and McClure, 1967; Shear, 1986), age of onset comparisons (e.g. Thyer, Parrish, Curtis, Nesse and Cameron, 1985b) and family studies (e.g. Crowe, 1985). These data suggest that there may be a panic disorder subtype which should be investigated by the multiple means available to draw distinctions among anxiety disorder categories. The preliminary findings reported here suggest that NFPD Ss may be indistinguishable from those who experience and report subjective fear during their panic attacks.

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