

Characteristics of Panic Disorder Patients Consulting an Emergency Department with Noncardiac Chest Pain

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ABSTRACT

Objective: The objective of this article is to describe the characteristics of patients with panic disorder from an emergency department by comparing them to patients with panic disorder from psychiatric settings on panic symptoms, psychiatric comorbidity, and psychological correlates of panic disorder.

Methods: Eighty-four consecutive patients consulting an emergency department with noncardiac chest pain and diagnosed as having panic disorder, and 126 patients with panic disorder seen in two specialized clinics for anxiety disorders, were assessed with validated clinical interview and questionnaires.

Results: Panic disorder patients recruited in the emergency department were older and reported fewer panic symptoms than their psychiatric settings counterparts. They also had less severe agoraphobic cognitions and less sensitivity to anxiety. The two samples displayed similar rates of psychiatric comorbidities and similar rates of suicidal ideation, with 24.3% to 31.3% of panic disorder patients overall having had thoughts of killing themselves.

Discussion: Panic disorder patients encountered in the emergency department tend to report physical, rather than psychological, symptoms of panic. This finding could explain the extremely low rates of panic disorder recognition in the emergency department.

Conclusion: Despite showing less severe panic symptoms, and sometimes no emotional or cognitive signs of fear at all, emergency department patients with panic disorder have elevated rates of psychiatric comorbidities and suicidal ideation and need adequate clinical attention.

FOCUS POINTS

- Male patients with panic disorder were more likely to be encountered in the emergency department of a general hospital than in clinics specialized in anxiety disorders.
- Patients with panic disorder from the emergency department displayed less numerous and severe panic symptoms, agoraphobic cognitions, and sensitivity to anxiety than patients with panic disorder from psychiatric settings.
- One-third of panic disorder patients from the emergency department had non-fear panic disorder, a condition characterized by the physical symptoms of panic but the absence of fear, whether of dying, losing control, or going crazy.
- Despite showing less severe symptoms, panic disorder patients from the emergency department had high rates of psychiatric comorbidity, particularly other anxiety disorders and major depressive disorder.
- In the emergency department sample, one panic disorder patient out of four had suicidal ideation within the past 7 days.

INTRODUCTION

Chest pain is one of the 13 symptoms that may occur during a panic attack. It is the symptom most likely to prompt consultation at an emergency department.¹ Accordingly, 17% to 32% of patients who consult an emergency department with chest pain have panic disorder.²⁻⁴ However, despite increasing knowledge about panic in the emergency room, panic disorder remains virtually unidentified.²

The discrepancy between the incidence of panic disorder in the emergency department and the emergency department professionals' failure to detect it raises important questions regarding the clinical profile of panic disorder patients consulting in the emergency department. These patients

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may present a different profile compared to panic disorder patients encountered in psychiatric settings. Exploratory data have suggested that panic disorder patients from the emergency department are older, are more likely to be male, have less severe panic symptoms, and have lower rates of agoraphobia than their psychiatric counterparts.⁵ Reports of clinical experiences also suggested that it is likely for people with panic disorder to initially present to their general practitioner or hospital emergency department with a focus on somatic symptoms and concerns.⁶ These preliminary findings need to be replicated.

Another concern is the proportion of patients in the emergency department that appear to have a subtype of panic disorder, referred to as non-fearful panic disorder (NFPD). This subtype is characterized by no report of either fear of dying or fear of going crazy or losing control during panic attacks.⁷ In the emergency department of a hospital specialized in cardiology, Fleet and colleagues⁸ found that 44% of panic disorder patients seeking treatment for chest pain could be categorized as having NFPD. Using the National Comorbidity Survey database, Chen and colleagues⁹ found that 30% of panic attacks occurred without fear of dying or going crazy. The prevalence of this variant of panic disorder in the emergency department of general hospitals is not known.

The principal objective of the present study is to compare panic disorder patients from the emergency department versus in psychiatric settings on panic symptoms, psychiatric comorbidity, and psychological correlates of panic disorder. Another objective is to identify the proportion of patients displaying NFPD in a sample of panic disorder patients consulting for chest pain in an emergency department of a general hospital.

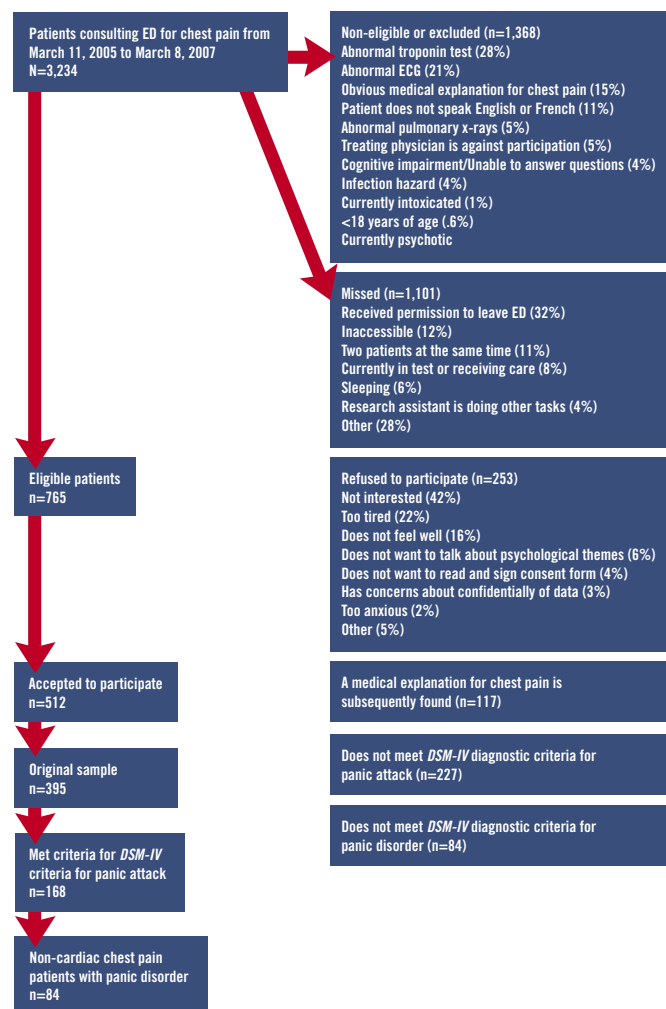
METHOD

Participants and Procedure

The emergency department sample consisted of “quasi” consecutive patients consulting an emergency department with non-cardiac chest pain. Although efforts were made to approach every patient admitted to the emergency department with a complaint of chest pain on weekdays from 8am to 4pm, several patients (1,101 out of 3,234; 34%) could not be reached for various reasons (as described in the Figure). Inclusion criteria for the study were: ≥ 18 years of age, French or English speaking, and consulted the emergency department for chest pain non-associated with chest trauma. Exclusion criteria were: presented results outside the normal ranges on the electrocardiogram or blood tests, suggesting coronary artery disease; and presented a clear medical cause for the chest pain (eg, pulmonary embolism). Patients

were assessed with self-report questionnaires and a clinical diagnostic interview conducted by a research assistant while they were in medical observation or waiting for tests results. Self-report questionnaires were completed on site or at home and returned to the research team with a prepaid envelope (if patients had insufficient time to complete the forms or if they were too tired). For the purpose of this study, the authors included data from participants meeting criteria for panic disorder based on the *Diagnostic and Statistical Manual of Mental Disorder*, Fourth Edition.¹⁰ Significant interference with at least one area of functioning was defined by a clinical score of ≥ 4 on the Anxiety Disorder Interview Schedule for *DSM-IV* (ADIS-IV; $n=84$).¹¹

FIGURE
RECRUITMENT FLOWCHART FOR THE NON CARDIAC CHEST PAIN PATIENTS WITH PANIC DISORDER (ED SAMPLE)



ED=emergency department; ECG=electrocardiogram; *DSM-IV*=*Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition.

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The psychiatric settings sample was composed of 126 patients recruited for a panic disorder treatment delivered in a specialized anxiety clinic through newspapers and referrals by healthcare professionals. This sample included patients referred by family physicians, general practitioners and psychiatrists working in a psychiatric hospital, and psychiatrists working in a specialized anxiety clinic, as well as self-referred patients. Inclusion criteria were: 18–65 years of age; diagnosis of panic disorder with agoraphobia, based on *DSM-IV* criteria, for at least 1 year; onset of panic disorder prior to 40 years of age; and had not participated in cognitive-behavioral therapy for panic disorder within the last year. The severity of the disorder for the psychiatric settings sample was moderate to severe, interfering significantly with at least one area of functioning, in accordance with a clinical score of ≥ 4 on the ADIS-IV, and a score of ≥ 3 on the Global Assessment of Severity Scale. Following a telephone screening interview, all eligible patients completed an assessment battery and underwent a psychological assessment conducted by a research assistant. Patients were assessed using a clinical interview, and self-report questionnaires were completed before receiving treatment.

Measures

The ADIS-IV

The ADIS-IV is a semi-structured interview assessing anxiety disorders according to *DSM-IV* criteria. It also includes a series of questions targeting mood, somatoform, and substance-related disorders. The ADIS-IV is widely used in research and clinical settings, and is considered a gold standard measure for the assessment of panic and other anxiety disorders.¹² The ADIS-IV was used in both samples to screen and assess the severity of panic disorder and comorbid psychiatric diagnoses. A French version of this instrument was used, but no information on its psychometric validation is currently available. In the psychiatric settings sample, participants were also administered the Global Assessment of Severity Scale (GASS).¹³ The GASS is a clinician-administered five-point scale assessing impairment caused by panic and agoraphobic symptoms within the occupational, social, and recreational spheres.

BDI-II

The Beck Depression Inventory, Second Edition (BDI-II),¹⁴ includes 21 items that assess symptoms of depression; for each item, four statements describe increasing levels of symptom intensity. The respondent chooses the statement that best reflects his or her state of the last 7 days. The BDI-II has been extensively validated, and good psychometric properties have been reported for the French version used in this study.¹⁵ Item #9 (suicidal ideation) was singled out to assess suicidal ideation.

The ACQ

The Agoraphobic Cognitions Questionnaire (ACQ)¹⁶ measures the presence of 14 catastrophic thoughts related to panic (eg, “I will have a heart attack”; “I am going to go crazy”). Each thought is rated on a scale from one (very rarely) to five (very often). The total score ranges from one to five, and is computed by averaging the scores on the 14 items. Higher scores indicate greater frequency catastrophic thoughts. The French translation of the ACQ has demonstrated good internal consistency ($\alpha=.75$) and temporal stability ($r=.71$).¹⁷

The ASI

Anxiety Sensitivity Index (ASI)¹⁸ is a 16-item self-report questionnaire that assesses the way that respondents react to anxious arousal (eg, “It is important to me not to appear nervous”; “Unusual body sensations scare me”; “It scares me when I am nervous”). Each item is rated on a scale from zero (very little) to four (very much). Total score is obtained by summing the scores from each item and ranges from 0–64, with higher scores indicating greater sensitivity to anxiety. Psychometric properties of the French translation¹⁷ are adequate (internal consistency: $\alpha=.87$; temporal stability: $r=.91$).

Data Analyses

A series of statistical analyses were performed to compare the emergency department and psychiatric settings samples. Mean differences on continuous variables (questionnaires scores) were assessed with independent t tests or Analysis of Variance (ANOVA) tests. Frequency differences on dichotomous variables (presence of symptoms and diagnoses) were evaluated with chi square analyses. Each analysis was tested with a .05 α -level. While no corrections were systematically conducted to adjust the α -level for multiple statistical tests, differences associated with a *P* value inferior to .05, .01, and .001 were distinctly reported. More importantly, effect sizes were computed each time a statistical test was associated with a *P* value $<.05$ in order to assess the strength of the association. Effect sizes of mean differences on continuous variables were evaluated using Cohen’s *d* (.2=small; .5=moderate; .8=large). Significant chi square analyses were followed by the calculation of Cramér’s *V*, a measure of the strength of the association between two categorical variables. A Cramér’s *V* between .20 and .25 reflects a moderate strength of association, and between .30 and .35, a strong one.

Results

The sociodemographic characteristics of the participants in the emergency department and psychiatric settings samples are presented in Table 1. Significant differences were observed between samples regarding age, proportion of women to men, and level of education achieved. The emergency department sample was nearly equally composed of men and women (47.6% women), while the psychiatric settings sample had a

greater proportion of women (77.0%). Patients from emergency department were, on average, 10 years older than patients from psychiatric settings (48.73 and 38.60 years old, respectively), and had a slightly higher level of education. To ensure that the age difference was not an artifact due to different selection criteria (18–65 years of age in the psychiatric settings sample versus ≥ 18 years of age in the emergency department sample), the comparison was repeated with participants >65 years of age ($n = 13$) removed from the emergency department sample. Participants in the emergency department sample were still significantly older than those from the psychiatric settings sample (44.48 vs. 38.60, respectively; $P < .001$).

Table 2 presents the frequency of *DSM-IV* panic attack symptoms reported by patients with panic disorder, ie, rated ≥ 4 on a zero-to-eight scale during the administration of the ADIS-IV, according to sample of origin. Eleven out of 13 symptoms were more frequently reported by psychiatric settings patients than by emergency department patients. Cramér's *V* values ranged from .14 (fear of dying) to .50 (fear of losing control or going crazy), indicating effect sizes of moderate to large magnitude for most differences (Table 2). Only paresthesia

was evenly encountered in both groups. Although participants from the emergency department sample consulted for chest pain, they may have reported not having it during panic attacks; thus, most (83.1%), but not every, panic disorder patients from the emergency department reported chest pain. On average, psychiatric settings patients reported three more symptoms during panic attacks than emergency department patients (9.21 vs. 6.61; Table 2).

Rates of psychiatric comorbidity among both samples are presented in Table 3. Agoraphobia was encountered in 32.1% of emergency department patients. The high prevalence of agoraphobia in the psychiatric settings sample (100%) only reflected the selection criteria used to recruit this sample. Rates of comorbid anxiety disorders were similar in both groups, with the exceptions of specific phobia and posttraumatic stress disorder (PTSD), which were more frequent among emergency department patients. Mood disorders, particularly major depressive disorder (MDD), were also more frequent among emergency department patients than among psychiatric settings patients (Table 3). Comorbid somatoform or substance-related disorders were rarely encountered in either group.

TABLE 1
SOCIODEMOGRAPHIC CHARACTERISTICS OF PANIC DISORDER PATIENTS FROM ED AND PS SAMPLES

	<i>ED</i>	<i>PS</i>	<i>t</i>	<i>Cohen's d</i>
Mean Age (SD)	48.73 (13.30)	38.60 (8.50)	6.186*	.95
Mean Age (with participants >65 years of age removed from the ED sample) (SD)	44.38 (9.04)	38.60 (8.50)	4.474*	.67
	<i>ED</i>	<i>PS</i>	χ^2	<i>Cramér's V</i>
Gender (% women)	47.6	77.0	19.164*	.30
Marital Status (%)				
Single	–	23.0	–	–
Married/Common-law Relationship	–	64.3	–	–
Separated/Divorced/Widowed	–	12.7	–	–
Living Situation (%)				
Lives alone	14.3	–	–	–
Lives with members of family (partner/children/parents)	77.4	–	–	–
Lives with other people (eg, roommate)	8.3	–	–	–
Children (% Yes)	77.4	75.9	.056	–
Completed Education Level (%)			9.307†	.21
Primary	14.3	15.9	–	–
Secondary	34.5	53.2	–	–
Collegial	29.8	19.0	–	–
University	21.4	11.9	–	–
Employment Status (%)			.413	–
Unemployed	38.1	36.0	–	–
Part Time	7.1	9.6	–	–
Full Time	54.8	54.4	–	–

* $P < .001$; † $P < .05$

ED=emergency department; PS=psychiatric settings.

Further differences emerged regarding psychological aspects related to panic disorder (Table 4). Emergency department patients had lower ACQ and ASI scores, indicating less severe agoraphobic cognitions and less sensitivity to anxiety. Corresponding effect sizes were large. To ensure that the difference in ACQ scores was not an artefact due to different selection criteria (only participants in the psychiatric settings sample had to suffer from agoraphobia to be included in the study), the comparison was repeated with participants without agoraphobia (n=57) removed from the emergency department sample. Participants remaining in the emergency department sample still reported significantly lower ACQ scores than those from the psychiatric settings sample (2.019 vs. 2.649, respectively; $P<.001$). Severity of depressive symptomatology and presence of suicidal ideation were similar in both groups. BDI mean scores indicated the presence of mild depressive symptoms in both groups. Between 24.6% and 31.3% of all panic disorder patients reported suicidal ideation.

The characteristics of panic disorder patients that could be categorized as having NFPD, ie, that reported no fear of dying or of losing control during panic attacks, are reported in Table 5. The proportion of NFPD patients in the emergency department sample (32.1%) was almost three times that observed in the psychiatric settings sample (11.9%). In order to assess differences between panic disorder and NFPD while partitioning out the variance attributable to the sample of origin (emergency department or psychiatric settings), three 2X2 ANOVAs were performed, on the ACQ score, the ASI scores, and the number of “non-fear” panic symptoms. Independent variables were “type of panic disorder (panic disorder or NFPD)” and “sample of origin (emergency department or psychiatric settings).” NFPD patients had lower ACQ and ASI scores, as well as fewer panic symptoms. Interactions were not statistically significant, except for the ACQ scores. Inspection of the means indicated that the difference between panic disorder and NFPD patients was more important in the psychiatric settings sample than in the emergency department sample.

TABLE 2
FREQUENCY OF PATIENTS WITH PANIC DISORDER REPORTING EACH OF THE 13 DSM-IV PANIC ATTACK SYMPTOMS (WITH EFFECT SIZES ASSOCIATED WITH SIGNIFICANT DIFFERENCES)

<i>Symptom</i>	<i>ED</i>	<i>PS</i>	<i>Statistical</i>	<i>Effect Sizes</i>
			<i>Significance</i>	
			X ²	Cramér's V
Palpitations, pounding heart, or accelerated heart rate (%)	60/83 (72.3)	114/118 (96.6)	24.786*	.35
Sweating (%)	30/83 (36.1)	87/114 (76.3)	32.137*	.40
Trembling or shaking (%)	40/84 (47.6)	95/113 (84.1)	29.685*	.39
Sensations of shortness of breath or smothering (%)	59/83 (71.1)	103/115 (89.6)	11.068†	.24
Feelings of choking (%)	31/83 (37.3)	67/99 (67.7)	16.709*	.30
Chest pain or discomfort (%)	69/83 (83.1)§	62/106 (58.5)	13.289*	.27
Nausea or abdominal distress (%)	36/83 (43.4)	62/107 (57.9)	3.973‡	.15
Feeling dizzy, unsteady, lightheaded, or faint (%)	47/83 (56.6)	100/115 (87.0)	23.190*	.34
Derealization or depersonalization (%)	19/84 (22.6)	77/110 (70.0)	42.774*	.47
Fear of losing control or going crazy (%)	21/83 (25.3)	85/113 (75.2)	48.019*	.50
Fear of dying (%)	47/83 (56.6)	76/108 (70.4)	3.867‡	.14
Paresthesias (%)	45/83 (54.2)	68/104 (65.4)	2.408	–
Chills or hot flushes (%)	46/83 (55.4)	100/118 (84.7)	21.081*	.32
			<i>t</i>	<i>Cohen's d</i>
Mean number of symptoms (SD)	6.61 (2.29)	9.21 (2.22)	-8.063*	1.16

* $P<.001$; † $P<.01$; ‡ $P<.05$.

§ The high prevalence of chest pain in the ED sample reflects the selection criteria used to recruit this sample and should not be interpreted as a representation of the prevalence of chest pain among panic disorder patients consulting ED in general. Although participants from the ED sample consulted for chest pain, they may have reported not having it during panic attacks; thus most, but not every, panic disorder patients from the ED sample reported it.

DSM-IV=Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition; ED=emergency department; PS=psychiatric settings.

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Discussion

The objective of this study was to compare panic disorder patients from emergency department and psychiatric settings on panic symptoms, psychiatric comorbidity, and psychological correlates of panic disorder. Panic disorder patients recruited in the emergency department were older, reported fewer panic symptoms, and had less severe agoraphobic cognitions and less sensitivity to anxiety than their psychiatric settings counterparts. The two samples displayed similar rates of psychiatric comorbidities, with the exceptions of MDD, specific phobia, and PTSD, which were more frequent among patients from the emergency department. Both samples reported alarmingly high rates of suicidal ideation.

Fleet and colleagues⁵ compared panic disorder patients from the emergency department of a hospital specialized in cardiology to a sample recruited in psychiatric settings, with results that were very similar to those of the present study. This study's findings were replicated regarding older age, low prevalence of agoraphobia in the emergency department, and the absence of difference in severity of depressive symptomatology and suicidal ideation. Adding to these findings, the authors observed that panic disorder patients from the emergency department reported fewer symptoms during their

attacks, and that NFPD was more frequently encountered in the emergency department.

The reasons for the differences between the clinical portrait of panic disorder patients from the emergency department and panic disorder patients from psychiatric settings are not known. Observed differences may reflect the chronicity of panic disorder symptoms. Onset of panic disorder in psychiatric settings patients occurred at least 1 year prior to the study, while symptoms were present for at least the past month for the emergency department sample. Moreover, one of the most frequently cited reasons for consulting an emergency department during a panic attack is that the panic symptoms are part of a first episode, or that a new or more intense symptom has appeared.¹ Panic disorder may develop progressively, with few symptoms during earlier panic attacks and increasing symptoms as the panic experience repeats itself over time. First episodes may lead patients to consult the emergency department because they believe their symptoms to be of organic origin. As they receive multiple negative results from medical exams and accumulate a history of impairment due to panic, patients with recurrent and aggravating panic attacks may be more likely to be directed toward mental health care. Early screening of these patients and referral to appropriate treatment could prevent

TABLE 3

FREQUENCY OF PATIENTS WITH PANIC DISORDER SUFFERING FROM A COMORBID PSYCHIATRIC DISORDER (WITH EFFECT SIZES ASSOCIATED WITH SIGNIFICANT DIFFERENCES)

<i>Diagnosis</i>	<i>ED</i>	<i>PS</i>	<i>Statistical</i>	<i>Effect Sizes</i>
			<i>Significance</i>	
			X ²	Cramér's V
Agoraphobia (%)	27/84 (32.1)	117/117 (100.0)*	–	–
Anxiety disorder (any) (%)	43/84 (51.2)	48/118 (40.7)	2.191	–
Generalized anxiety disorder (%)	29/84 (34.5)	33/119 (27.7)	1.071	–
Obsessive-compulsive disorder (%)	2/84 (2.4)	3/119 (2.5)	.004	–
Posttraumatic stress disorder (%)	6/84 (7.1)	2/119 (1.7)	3.881†	.14
Social phobia (%)	8/84 (9.5)	13/118 (11.0)	.117	–
Specific phobia (%)	22/84 (26.2)	9/119 (7.6)	13.205‡	.26
Mood disorder (any) (%)	19/84 (22.6)	8/119 (7.6)	10.790§	.23
Major depressive disorder (%)	16/84 (19.0)	6/119 (5.0)	9.996§	.22
Dysthymia (%)	2/84 (2.4)	0/119 (0.0)	–	–
Bipolar disorder/cyclothymia (%)	1/84 (1.2)	0/119 (0.0)	–	–
Hypochondria (%)	2/84 (2.4)	2/119 (1.7)	–	–
Somatization disorder (%)	0/87 (0.0)	0/119 (0.0)	–	–
Alcohol abuse/dependence (%)	6/83 (7.2)	0/119 (0.0)	–	–
Drug abuse/dependence (%)	4/83 (4.8)	0/110 (0.0)	–	–

* The high prevalence of agoraphobia in the PS sample reflects the selection criteria used to recruit this sample and should not be interpreted as a representation of the prevalence of agoraphobia among panic disorder patients consulting PS in general.

† $P < .05$; ‡ $P < .001$; § $P < .01$

ED=emergency department; PS=psychiatric settings.

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this progression of symptoms. However, the stigma attached to mental illness may prevent emergency department patients from disclosing emotional symptoms, rendering even more difficult for emergency department physicians to recognize the emotional disorder causing chest pain.

The inclusion of NFPD patients may be an additional explanation for the appearance of less severe symptoms of panic disorder in emergency department patients. NFPD patients displayed genuine panic attacks, without reporting

fear of dying or fear of going crazy or losing control. They also displayed less severe agoraphobic cognitions and less sensitivity to anxiety. Although these differences were observed in NFPD patients from psychiatric settings as well as from the emergency department, NFPD patients were nearly three times more likely to be encountered in the emergency department than in psychiatric settings. In fact, nearly one out of three (32.1%) panic disorder patients recruited in the emergency department could be categorized as having NFPD.

One implication of these findings is that, as a result of their less severe symptoms, infrequent manifestations of agoraphobia, less reported overall impairment, and a less “psychiatric” presentation, patients with panic disorder in the emergency room may not be adequately screened and offered appropriate therapeutic options. Indeed, recognition of panic disorder by healthcare providers has been associated with severity of fear experienced during the worse panic attack and overall symptom severity during the panic attack that led to consultation.¹⁹ Failure to recognize panic among chest pain patients is associated with serious consequences in terms of phobic avoidance, quality of life, and healthcare utilization.²⁰⁻²² The current results have indicated that these patients suffer from significant depressive comorbidity, to an even greater degree than psychiatric patients, and that they present an elevated level of depressive symptomatology and suicidal ideation, replicating findings observed in their counterparts from psychiatric settings.²¹⁻²³ In light of these data, it is essential that panic disorder be adequately identified and addressed and not merely considered as a residual category for noncardiac chest pain of unknown origin.

These findings are to be interpreted with caution as the study includes some methodological limitations. First, due to the dif-

TABLE 4
PSYCHOLOGICAL ASPECTS RELATED TO PANIC DISORDER

<i>Variable</i>	<i>ED</i>	<i>PS</i>	<i>Statistical</i>	<i>Effect Sizes</i>
			<i>Significance</i>	<i>Cohen's d</i>
			t	
BDI mean score (SD)	16.11 (11.03)	16.69 (9.14)	-.375	–
ACQ mean score (SD)	1.78 (.55)	2.66 (.57)	-9.691*	1.57
ASI mean score (SD)	25.15 (12.92)	34.64 (10.63)	-5.139*	0.83
			<i>X²</i>	<i>Cramér's V</i>
Suicidal ideation (BDI-II item #9 >0) (%)	15/61 (24.6)	35/112 (31.3)	.356	–

* *P* < .05

ED=emergency department; PS=psychiatric settings; BDI=Beck Depression Inventory; ACQ=Agoraphobic Cognitions Questionnaire; ASI=Anxiety Status Inventory.

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TABLE 5
CHARACTERISTICS OF NFPD PATIENTS IN ED AND PS SAMPLES

<i>Diagnosis</i>	<i>Emergency Department</i>		<i>Psychiatric Settings</i>		<i>Statistical</i>	<i>Effect Sizes</i>
	<i>NFPD</i>	<i>PD</i>	<i>NFPD</i>	<i>PD</i>		
Frequency (%)	26/81 (32.1)	55/81 (67.9)	14/118 (11.9)	104/114 (88.1)	<i>X²</i>	<i>Cramér's V</i>
Mean ACQ (SD)	1.730 (.627)	1.846 (.519)	2.148 (.451)	2.722 (.545)	Type of PD Type of PD x Sample	.248
Mean ASI (SD)	21.175 (13.395)	28.398 (11.746)	27.000 (9.092)	35.751 (10.482)	Type of PD Type of PD x Sample	.483 .320
Mean number of symptoms (SD) [§]	5.769 (1.773)	5.891 (2.225)	6.571 (1.604)	8.077 (1.783)	Type of PD Type of PD x Sample	.557 – .327 –

* *P* < .001; † *P* < .01; ‡ *P* < .05

§ For each participant, number of symptoms was summed without taking into account fear of dying and fear of losing control, in order to allow comparisons between PD and NFPD patients.

NFPD=non-fearful panic disorder; ED=emergency department; PS=psychiatric settings; PD=panic disorder; ACQ=Agoraphobic Cognitions Questionnaire; ASI=Anxiety Status Inventory.

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ferent settings, the selection criteria across both samples were not exactly the same. However, the authors performed statistical analyses on selected subsamples aiming to reduce the likeliness of rival explanations. Another limitation is that the emergency department sample did not include panic disorder patients that did not consult for chest pain (eg, patients consulting for hyperventilation, palpitations). As such, the observed differences may generalize only to panic disorder patients consulting the emergency department for chest pain. However, it has been observed that 91% of panic disorder patients presenting at an emergency department consult initially for chest pain.¹ Finally, panic disorder patients without agoraphobia were not originally included in the psychiatric settings sample. This certainly explains the difference in prevalence of agoraphobia between the two samples (100% in psychiatric settings and 32.1% in emergency department). These figures do not reflect the true prevalence of agoraphobia among panic disorder patients in psychiatric settings. However, the fact that <33% of patients with panic disorder recruited in the emergency department reported agoraphobia is noteworthy.

CONCLUSION

This study added to earlier findings in demonstrating that panic disorder encountered in the emergency department presents different clinical characteristics than panic disorder seen in psychiatric settings. Despite reporting fewer and less severe symptoms than their counterparts from psychiatric settings, panic disorder patients consulting the emergency department for noncardiac chest pain presented a wide array of distressing symptoms and psychiatric comorbidities that warrant clinical attention, including suicidal ideation. There is a need for valid and “user-friendly” instruments to help emergency department physicians and nurses, who are not extensively familiar with psychiatric nosologies and subtle diagnostic particularities, to rapidly and efficiently identify panic disorder. Panic disorder is a treatable disorder; the efficacy and efficiency of interventions for panic disorder, whether cognitive-behavioral,²⁴ pharmacologic,²⁵ or a combination of both strategies,²⁶ have been extensively demonstrated. Panic disorder patients could benefit from more sensitive panic disorder detection capacities in the

emergency department, as well as a stronger bridge between emergency department healthcare providers and the mental health professionals that possess the therapeutic tools to help panic disorder patients. *PP*

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