

A Prospective Study of Panic and Anxiety in Agoraphobia with Panic Disorder

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The features of panic and anxiety in the natural environment were studied by prospective self-monitoring in 39 patients with chronic agoraphobia and panic disorder. Panics overlapped greatly with anxiety episodes but were more intense. Panics occurred more often in public places than did anxiety episodes, but had otherwise similar symptom profile, time of occurrence, and antecedents. Most panics surged out of a pre-existing plateau of tonic anxiety which lasted most of the day. Spontaneous panics were less frequent than situational panics and occurred more often at home but were otherwise similar. These findings do not support the sharp distinction between panic and anxiety in DSM-III-R, not its emphasis on spontaneous panic in classifying anxiety disorders. Thoughts of dying and 'going crazy'/losing control accompanied only a minority of panic/anxiety episodes and seemed to be a product of intense panic rather than a cause.

The American Psychiatric Association (1987) in DSM-III-R established a category of 'panic disorder' with panic distinct from anxiety, but the evidence for this distinction remains inconclusive (Margraf *et al*, 1986; Marks, 1987; Aronson, 1987). In comparing panic disorder with generalised anxiety disorder (GAD), most contrasts of panic with anxiety used retrospective ratings, a method liable to distortions of recall (Margraf *et al*, 1987). Few phenomenological differences were found between the two disorders, except that patients with panic disorder had more somatic anxiety (Hoehn-Saric, 1981; Barlow *et al*, 1984; Anderson *et al*, 1984; Rapee, 1985; Borden & Turner, 1989) and more intense thoughts of illness, disaster, or danger (Hibbert, 1984; Rapee, 1985; Beck & Emery, 1985), all of which could reflect greater severity. Such differences may reflect the tendency for patients with severe anxiety to over-report symptoms (Barlow, 1988).

Most studies of panic and anxiety compare patients with panic disorder with those with GAD. This is a "weaker approach since patients with panic disorder also experience marked anticipatory or generalised anxiety" (Barlow, 1988, p. 94). Few studies have compared panic with anxiety within the same patients and in the natural environment. In two such studies (Freedman *et al*, 1985; Taylor *et al*, 1986) heart rate was fairly stable and lower during anticipatory anxiety than during panic. In a third such study (Margraf *et al*, 1987) anxiety and panic were similar with regard to heart rate and phenomenologically, and situational anxiety in normal controls was similar to anticipatory anxiety in patients.

The present study compares panic with anxiety in the natural environment in patients with panic

disorder plus agoraphobia. Data on panic and anxiety were collected using a prospective diary, a method that was useful in other prospective studies of panic (Freedman *et al*, 1985; Taylor *et al*, 1986; Margraf *et al*, 1987). Our study addresses some issues not examined previously.

(a) DSM-III-R describes panic as (i) a sudden and discrete period of intense anxiety, reaching (ii) a peak within ten minutes, usually lasting minutes or more rarely hours, and (iii) associated with four or more symptoms. We examined whether panics satisfied these criteria when prospectively monitored in the natural environment. Patients recorded not only panic surges but also anxiety levels *before* those episodes; this allowed study of their inter-relationship (e.g. the 'discreteness' of panics) without retrospective bias. This is important since antecedent events can be misinterpreted even just after a panic (Street *et al*, 1989). Intensity ratings of individual anxiety symptoms and data on situational context, time of occurrence, and associated events and cues allowed further comparisons of panic and anxiety.

(b) We used multivariate (discriminant-function) analyses to test for a categorical distinction. Previous studies often made univariate comparisons of panic and anxiety symptoms.

(c) DSM-III-R gives spontaneous/unexpected panics a central position in panic disorder and agoraphobia. Studies comparing spontaneous with situational panic have yielded conflicting results, with situational panic being reported as more severe or having more symptoms (Taylor *et al*, 1986; Margraf *et al*, 1987; Barlow, 1988), and unpredictable panic also being reported as more severe

(Rachman & Levitt, 1985), more often accompanied by dizziness (Barlow *et al*, 1985; Klein & Klein, 1989), more frequent fear of 'going crazy'/losing control (Barlow *et al*, 1985) and more intense palpitations and feelings of unreality (Norton *et al*, 1986). We tested whether spontaneous panic differed from situational panic in being uncued ('appearing out of the blue') and in other ways.

(d) We examined the antecedents of 'non-panic' anxiety in the patients' natural environment. Excessive or unrealistic worrying about family, money, work, and illness is said to be a central feature of GAD separating it from panic disorder, agoraphobia and other anxiety disorders (Barlow, 1988). Our design allowed a distinction between anticipatory anxiety cued by phobic situations and generalised anxiety related to other life situations. We could thus examine non-panic anxiety.

The term 'attack' in referring to panic is not used because it downplays tonic in favour of phasic events. Instead the term 'episode' is used.

Method

The study involved 39 patients referred to the Maudsley Hospital for an alprazolam/exposure trial. Subjects met DSM-III-R criteria for panic disorder with agoraphobic avoidance, were aged 18–65 years, off psychoactive medication for at least 15 days before inclusion in the study, and free from cardiovascular, renal, endocrine, or neurological diseases as determined by a medical history, physical examination and blood tests. Exclusion criteria were: history of past or present psychotic or bipolar affective illness, or of epilepsy, cyclothymic disorder or melancholia, and current obsessive-compulsive disorder.

Patients were interviewed using the Structured Clinical Interview for DSM-III, Upjohn Version (SCID-UP; Spitzer & Williams, 1983) by a clinician trained in its use. All patients had at least one panic per week for three weeks before entry to the trial.

We used modified 'event-sampling' (Margraf *et al*, 1987) to collect the data. Before treatment began, patients were asked to keep diaries on three days (not necessarily consecutive) that were typical of their life-style, daily events, and symptoms. Many patients routinely avoided situations that would give rise to symptoms, and so they were asked to select days when they did have panics. They were to start recording relevant information from the first moment they felt anxious or panicky onwards throughout the rest of the day. They were to draw a continuous profile of their anxiety *as it occurred* on a time/intensity chart, conveying: (a) duration of 'non-panic' and non-agoraphobic anxiety over 24 hours (tonic or phasic anxiety not cued by agoraphobic situations or by anticipation of entering them); (b) intensity (rated 0–8) and duration of tonic anxiety preceding and following panics; and (c) intensity and duration of panic. They also labelled the episode as 'anxiety' or 'panic', and indicated

the intensity of each symptom during the episode (0–8), whether they had expected the episode, place of occurrence and concurrent activity, and antecedent feelings, thoughts and environmental events thought to be triggers.

Beforehand the DSM-III-R definition of panic was discussed with the patients to enhance accurate reporting. Some patients did not volunteer the term 'panic' for symptoms that investigators would regard as panic while others used 'panic' loosely, in its lay sense (false negatives and positives, respectively). The discussion aimed to reduce such biases while allowing patients enough flexibility in distinguishing panic from anxiety to enable a comparison between their classification and that of DSM-III-R. The sudden and intense nature of panic and the crescendo-like escalation of its symptoms within ten minutes was emphasised, but they were not asked to disqualify any episode if it lasted more than ten minutes or had less than four symptoms.

The diary was piloted on several patients and revised twice before reaching its final form, which was then given to ten new patients to examine its validity. These patients were interviewed after they completed their diaries to verify the data. There was 80% agreement between the two sets of data.

Classification of episodes as situational/expected/predictable versus spontaneous/unexpected/unpredictable was based on diary data which indicated (a) whether the patient had expected the episode and (b) whether the episode was clearly linked to a situation (e.g. public places) that usually triggered similar episodes.

'Anxiety episodes' refer to phasic fluctuations in anxiety as opposed to uncued tonic or background anxiety. In most cases we could tell phasic (episodic) anxiety from tonic anxiety in the light of fluctuations in anxiety levels in the diary chart. The distinction was verified from further information in the diaries about symptoms, situational context and the antecedents of phasic anxiety. Some episodes could have been spontaneous fluctuations in tonic anxiety, the connection with the reported antecedents being spurious, but such errors in separating phasic from tonic anxiety would not affect our comparison of panic and 'non-panic' anxiety.

Data analysis

Several analyses examined how patients' labelling of their episodes corresponded to DSM-III-R criteria in terms of intensity, duration, and number of symptoms: (a) the distribution of episodes according to these criteria, (b) a multiple-regression analysis to examine these criteria's weights in predicting patients' distinction of panic from anxiety, (c) a discriminant function analysis to separate panic from anxiety episodes on symptom intensity scores, and (d) *t*-tests and χ^2 tests for other comparisons.

As patients usually reported more than one episode of panic or anxiety, those who reported more episodes than others could have skewed the results. To check whether this had occurred we separately analysed (a) all episodes reported by the patients, (b) a subsample selected by randomly including only one episode of anxiety and of panic per patient, and (c) a second subsample selected in the

same way. All three sets of results in comparing symptoms of panic and anxiety were similar, suggesting no skew had occurred when all episodes were pooled for analysis. Only results based on the entire sample are reported here.

Results

There were 32 women and 7 men. Mean age was 37 (s.d. 7) years, mean duration of illness 10 (s.d. 8.1) years. Mean score on the 17-item Hamilton Rating Scale for Depression (HRSD) was 14 (s.d. 5) and mean score on the Hamilton Rating Scale for Anxiety 20 (s.d. 6.5) (Hamilton, 1959, 1960). Mean agoraphobia, social phobia, and total scores on the Fear Questionnaire (Marks & Matthews, 1979) were 27 (s.d. 9), 18 (s.d. 9), and 60 (s.d. 19), respectively.

Of the 277 episodes patients reported over three non-consecutive days (within a mean of seven days), 117 (42%) were panic and 160 (58%) anxiety. The mean number of anxiety and panic episodes per patient was 4.0 (s.d. 2.6) and 3.6 (s.d. 2.1), respectively (range 1–12 for panic and 1–14 for anxiety). No patient accounted for more than 10% of the panic and 8% of the anxiety episodes.

Of the 117 panic episodes, 80% (94) were situational and 20% (23) were spontaneous. Of the 160 anxiety episodes, 47% (75) were situational and 35% (56) were unexpected/spontaneous. Only 18% (29) of anxiety episodes occurred when anticipating agoraphobic situations. The mean duration of panic and anxiety episodes was 27 (s.d. 36) and 55 (s.d. 69) minutes respectively.

Episodes labelled as panic by patients differed from anxiety episodes in being briefer (mean 27 v. 55 minutes), more intense (6.6 v. 4.6) and having more symptoms (4.2 v. 2.6) (all *P* values < 0.001). Of all episodes lasting less than 10 minutes 49% were labelled as anxiety. Only 44% of panic episodes lasted less than 10 minutes; 85% lasted less than 30 minutes. Episodes rated with an intensity of six or more and of four or more symptoms were more often labelled as panic than anxiety.

To match the patients' use of the term 'panic' with that based on three DSM-III-R criteria, all episodes were split into eight subgroups according to episode duration (< 10 v. > 10), intensity (1–5 (mild/moderate) v. 6–8 (severe)), and a number of symptoms (< 4 v. 4+) (Fig. 1; *n* = 248 owing to missing data on duration). Only 12% met all three DSM-III-R criteria for major panic while merely

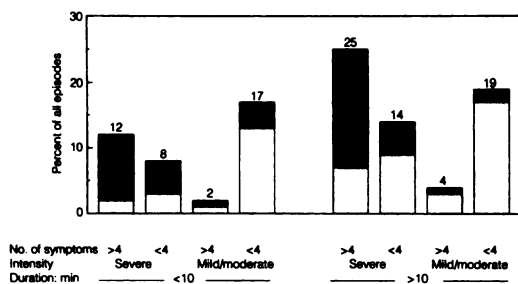


Fig. 1 Percentage of episodes shown by number of symptoms, intensity and duration (□ anxiety, ■ panic, as defined by patients).

8% met criteria for panic with limited (fewer than four) symptoms. These figures became even lower when patients' labels were taken into account. If intensity is ignored and episodes are classified according only to duration and number of symptoms, the percentage of episodes that were major panic rose to merely 14% and that of panics with limited symptoms to only 24%. Of all episodes, only 20% were termed 'panic' (major plus limited-symptom panics) by both DSM-III-R and patients. The DSM-III-R criteria for panic were not met by most episodes patients termed 'panic'. Most episodes with fewer than four symptoms (limited symptoms) were not called 'panic' by the patients.

A stepwise multiple-regression analysis examined the weights of intensity, duration, and number of symptoms in patients' labelling of the episodes. Entering the three variables into the equation separately, the variance explained by each in patients' labelling was: intensity ($\beta = 0.51$) 26%, number of symptoms ($\beta = 0.42$) 17%, duration ($\beta = 0.23$) 6%. When entered stepwise, the three variables together explained 34% of the total variance. Patients thus used intensity as the major criterion to label an episode as 'panic' rather than 'anxiety', but most of the variance remained unexplained.

The most common symptoms in both panic and anxiety episodes were dizziness/faintness, palpitations, and dyspnoea (Fig. 2). Symptoms occurring more often during panic were especially shaking/trembling (nearly three times more common during panic than anxiety episodes), palpitations, sweating, depersonalisation, dizziness/faintness, and (in a small minority – 13% v. 4%) fear of dying.

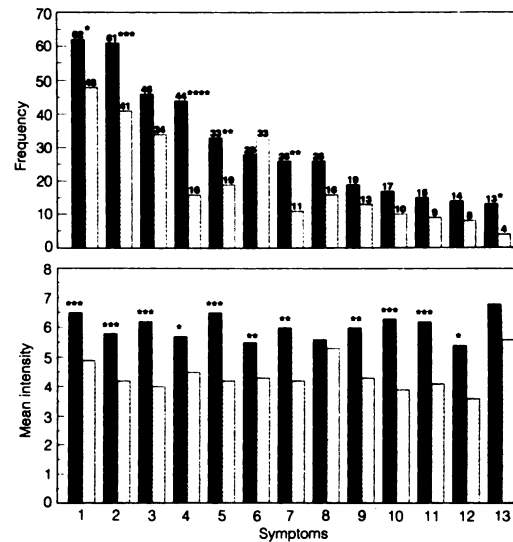


Fig. 2 A comparison of the frequency (% of all episodes) and intensity ratings (mean values only for those episodes in which the symptom was endorsed) for panic (■) and anxiety (□) (as defined by patients). 1, dizziness/faintness; 2, palpitations; 3, dyspnoea; 4, shaking/trembling; 5, sweating; 6, nausea/abdominal distress; 7, depersonalisation; 8, fear of 'going crazy'/losing control; 9, pain in chest; 10, choking/smothering; 11, flushes; 12, paraesthesia; 13, fear of dying. **P* < 0.05, ***P* < 0.01, ****P* < 0.001.

Symptoms intensities were often zero (symptom absent), yielding fairly low mean scores. To avoid a confound of frequency, mean symptom intensities were computed only for those episodes in which a particular symptom was endorsed. Panics, compared with anxiety episodes, had significantly more intense symptoms except for fear of 'going crazy'/losing control and fear of dying.

A stepwise discriminant-function analysis (Rao's method) tried to separate panic from anxiety episodes using symptom intensity scores as the independent variables. The discriminant-function coefficients of the symptoms confirmed the earlier results. The best discriminators were shaking/trembling (0.51), dizziness (0.40), sweating (0.39), depersonalisation (0.35), faintness (0.32), choking/smothering (0.29), flushes (0.21), and fear of 'going crazy'/losing control (0.20) (Eigenvalue=0.45, canonical correlation=0.56, Wilks' lambda=0.69, $\chi^2=96$, $P=0.0000$). Overall success in separating panic from anxiety episodes was 78%, a bit better than chance; 15% of the anxiety and 33% of the panic episodes were misclassified.

A second discriminant analysis including episode intensity, number of symptoms and duration hardly improved the discrimination; 17% of the anxiety and 25% of the panics were misclassified (overall 80% correct). This was despite the fact that using classification coefficients to classify the same cases from which the coefficients were derived yields overoptimistic results (Hand, 1983).

Patients reported a mean of 12.4 (s.d. 4.9) hours of anxiety per day excluding the duration of panics. Panics were preceded by a mean of 2.5 hours (147 minutes, s.d. 152) of mild to moderate tonic anxiety (mean intensity 2.7, s.d. 2.0) which persisted (mean intensity 2.6,

s.d. 1.8) for a mean of 3.5 hours (218 minutes, s.d. 199) after the panic had subsided.

The diaries revealed two patterns of relationship between surges of panic and tonic anxiety (Fig. 3). The first pattern was panic surging from a heightened plateau of tonic anxiety (Fig. 3a). This pattern was common, being found in 22 (69%) of the 32 patients who reported at least one panic. The second was 'blue-sky' panics, with minimal tonic anxiety (Fig. 3b). This pattern was rare, being reported by only four patients (13% of the 32). The remaining six patients (18%) showed tonic anxiety on some days and not on others.

Longer and more intense pre-panic baseline anxiety correlated with more intense panic ($r=0.26$, $P<0.01$, and $r=0.34$, $P<0.0001$, respectively), showing that anxiety worsened *before* episodes of panic and predicted their severity. The intensity of episodic anxiety and of panic correlated with the number of episode symptoms ($r=0.32$, $P<0.0001$ and $r=0.44$, $P<0.0001$, respectively). Panic intensity correlated most highly with tachycardia (0.50), shaking/trembling (0.35), sweating (0.35), dyspnoea (0.25), and nausea (0.25) (all P values <0.0001).

The panics occurred more often outside home in public places than anxiety episodes did (71% v. 48%, $P<0.001$). Episode features outside compared with those at home were largely similar, with a few exceptions. Anxiety episodes tended to last less long outside than at home (37 v. 71 minutes, $P<0.10$) and have less intense palpitations ($P<0.0001$). Similarly, panics outside compared with those inside home tended to be shorter (22 v. 39 minutes, $P<0.10$) and had less intense palpitations ($P<0.05$), and dyspnoea ($P<0.05$), but had more shaking/trembling ($P<0.05$). Whether outside or at home panic and anxiety episodes resembled one another in their intensity and number of symptoms.

Regarding time of occurrence, when the day was divided into three eight-hour segments, panic and anxiety episodes occurred at similar times with no difference in their distribution.

Situational panics did not differ significantly from spontaneous ones in intensity (6.5 v. 6.6), number of symptoms (4.2 v. 4.6), pre-episode anxiety level (2.9 v. 2.0) or duration (23 (s.d. 27) v. 44 (s.d. 61) minutes). Nor did they differ on rank order of symptom frequencies. However, spontaneous panics differed from situational ones only in having more intense dyspnoea ($P<0.001$) and choking/smothering ($P<0.05$). The latter difference disappeared when nocturnal panics were excluded. These could be chance findings given the small number of spontaneous episodes in our study.

Of 94 situational panics, 82 (87%) occurred outside the home compared with only 1 of 23 (4%) spontaneous panics ($P<0.0001$). Unlike their place of occurrence, however, their timing was similar. Both situational and spontaneous panics occurred most often between 8 a.m. and 4 p.m. and least between midnight and 8 a.m. ($P<0.0001$ and $P<0.05$, respectively), but the timing of the two types of episode did not significantly differ from each other.

The 23 spontaneous panics (20% of panics) occurred in only 13 of the 39 patients. Of the 160 anxiety episodes,

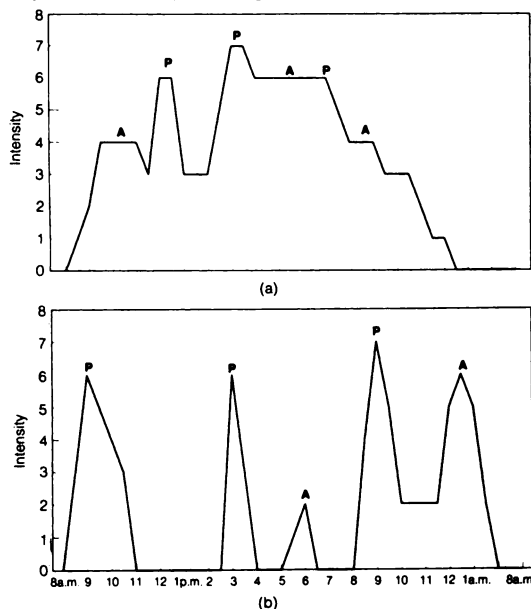


Fig. 3 Types of profiles of anxiety (A) and panic (P) during 24 hours. (a) Panic surges out of raised tonic anxiety (69% of patients); (b) 'blue sky' panic, with minimal tonic anxiety (13% of patients) (18% of patients had both types).

35% (56) were unexpected and occurred almost always at home. Patients identified antecedent cues for all 16 unexpected panics during waking hours and for 32 of the 56 anxiety episodes. One nocturnal panic was cued by nightmare. The cues for panic and anxiety episodes were similar. Many of these antecedent events would not be considered untoward by the average person. The cues for unexpected panic concerned worries about housework (5), panicking (1), builders (1), being attacked (1), security (1), having to look after neighbour's son (1), and events such as ringing of the telephone (4) and argument with a relative (2). The cues for unexpected episodes of anxiety concerned worries about housework (6) and health or money (3), and events such as ringing of the telephone (2), argument with a relative (2), receiving bad news (2), children making noise (2), rushing to get son ready for school (2), receiving bills (1), boyfriend coming home drunk (1), daughter's baby getting sick (1), no electricity at home (1), coming home to see daughter in bed (1), son creeping from behind (1), moving house (1), receiving questionnaires from hospital (1), and low mood (5); no events or thoughts were reported for 12 episodes.

Of the 16 spontaneous panics during waking hours, 62% (10) were preceded by a mean two hours of moderately intense tonic anxiety, so these panics did not appear 'out of the blue'.

Of the 85 anxiety episodes *at home* (53% of all anxiety episodes), 38% were related to 'excessive' worries about various life situations while 34% (18% of all anxiety episodes) occurred at home in anticipation of public situations (NS).

Discussion

In our patients, panics could be distinguished slightly from anxiety in being briefer, more intense, and having more symptoms. These three DSM-III-R criteria, however, explained only 34% of patients' distinction of panic from anxiety episodes. Duration was not a major distinguishing feature.

What else determined patients' labelling of episodes as panic? With hindsight, more of the unexplained variance in patients' classification might have been captured had we studied additional variables such as being alone or accompanied, availability of help, perceived possibility of escape from the situation, perceived visibility of symptoms, and fears of social embarrassment at the time the episodes occurred. In another study in our unit (Marks *et al.*, 1991), which included the present sample, panics were accompanied by fears of embarrassment in 90% of our patients and associated with symptoms, such as shaking/trembling and sweating, that they felt were visible and interfered with social behaviour. Consistent with this, in the present study episode intensity correlated strongly with shaking/trembling and sweating. These symptoms were among the best discriminators of

panic from anxiety. Furthermore, shaking/trembling occurred more often outside than at home, even though panics outside were no more intense than at home. This agrees with the correlation between embarrassment-related sensations and fears found in another prospective study (Street *et al.*, 1989).

Patients reported some acute, brief and intense episodes which they labelled as anxiety and some episodes as 'panic' that were milder and lasted over 10 minutes. These anxiety episodes also resembled panics in their symptom profiles, supporting the view that severe anxiety and panic can overlap (Tyrer, 1986). Is any sudden surge of intense anxiety by definition 'panic', regardless of how the patient labels it? This would be circular. To call an episode 'panic', 'the individual must report having a panic' (Barlow, 1988, p. 75). Patients' own appraisals of their emotional state as panic or otherwise may have important behavioural consequences (e.g. avoidance of the situation) and thus should have primacy in defining panic. Many of our patients insisted that every sudden surge of anxiety did not necessarily amount to panic. As noted, one factor in patients' distinction between panic and anxiety may have been whether the situation seemed to offer ease of escape without embarrassment or had help available. For example, a patient labelled an intense brief surge of symptoms as 'anxiety' during driving but as 'panic' only when stuck in a traffic jam or at the lights when she could be seen by other drivers.

Do the differences we found between patients' labels of panic and of anxiety episodes amount to a qualitative distinction? An affirmative conclusion here is difficult. Firstly, the overlap between panic and anxiety episodes was considerable. Secondly, episode severity as the most significant predictor of patients' label of 'panic' may account for the differences in symptoms between anxiety and panic. Severe anxiety may cause more symptoms such as shaking/trembling, sweating, tachycardia and dyspnoea to appear. Furthermore, in prospective recording anxiety and panic showed an impressive continuity. The intensity and duration of pre-panic baseline anxiety predicted panic intensity, a finding consistent with other reports (Liebowitz *et al.*, 1984; Shader & Greenblatt, 1984; Ehlers *et al.*, 1986; Roy-Byrne *et al.*, 1986; Bass *et al.*, 1989).

Our findings are not consistent with the reported differences between situational and spontaneous panics (Barlow *et al.*, 1985; Rachman & Levitt, 1985; Norton *et al.*, 1986; Taylor *et al.*, 1986; Margraf *et al.*, 1987; Barlow, 1988; Klein & Klein, 1989). This may be due to differences in the samples and method.

Over a mean of one week only 23 of 117 panic episodes (20%) reported by 13 of 39 patients were

spontaneous. Cues were absent in only six episodes (5%) of panic, all of which were nocturnal. Situational panic was thus far more common than spontaneous panic in our chronic agoraphobics. Even minor events (e.g. ringing of the telephone) could cause surges from pre-existing apprehension (tonic anxiety) into panic. Few spontaneous episodes of panic came completely 'out of the blue', consistent with the many stressful life events that precede panics (Street *et al*, 1989; Lelliott *et al*, 1989). Did patients attribute their anxiety *post hoc* to prior external events (Street *et al*, 1989)? While it is true that our patients searched for cues *after* their panic, preceding anxiety often lasting hours was recorded *before* the episodes.

Were these panics not spontaneous because they were cued by various situations? Some that seemed spontaneous on retrospective inquiry did not turn out to be so on prospective monitoring. Our results are like those of another prospective study (Street *et al*, 1989) which found expected/cued panic to be far the most frequent kind of panic (68%), followed by cued/unexpected (18%) panics, uncued/unexpected panics (12%), and only one expected/uncued panic.

Some reject the term 'cue' on the basis that one cannot reliably judge if a panic was triggered by thinking (Klein & Klein, 1989). If anticipatory anxiety can be cued by thinking, why not panic? The difficulty in eliciting the cues for some panics may be due to subtle variations in aspects of the stimulus situation that Heraclitus pointed to 2500 years ago. A supermarket is not the 'same' supermarket every time: there are differences in heat, light, crowdedness, length of queues, perception of accessibility of help, and one's mood. It may thus be appropriate to look for a variable 'cue complex' in both the external and internal environment of the patient.

Some view panic as an upward spiralling of anxiety due to catastrophic misinterpretation of bodily sensations (Clark, 1986; Clark *et al*, 1988; Ehlers *et al*, 1988). In our patients, fears of dying or 'going crazy'/losing control occurred during anxiety episodes as well as panic, at similar intensity. Anxiety did not spiral into panic each time bodily symptoms occurred. Fear of dying was absent during many panics even when palpitations, dyspnoea, choking/smothering, faintness, or chest pain were present. That these symptoms may have triggered other catastrophic thoughts not measured in our study is unlikely since another study (based in part on the same patients) (Marks *et al*, 1991) using detailed cognitions questionnaires found that only fear of dying was highly specific to these symptoms.

Fear of dying was more likely to be present when all cardiorespiratory symptoms and faintness occurred *together*. Catastrophic thoughts thus seemed to be a product rather than a cause of intense panic.

Fears of physical and psychological disaster are said to be common in panic patients (Chambless *et al*, 1984; Hibbert, 1984; Rapee, 1985; Beck & Emery, 1985; McNally & Lorenz, 1987; Foa, 1988), yet fears of dying and of 'going crazy'/losing control were reported by only 16% and 39% respectively of our 39 patients. These figures are far lower than the 90% found in two retrospective studies (Barlow, 1988; Ley, 1985). Retrospective methods may yield exaggerated reports of these symptoms (Margraf *et al*, 1987). The link between catastrophic cognitions and panic was also found to be weaker than expected in two other studies (Rachman *et al*, 1987; Street *et al*, 1989).

Although agoraphobic distress typically occurs in certain public places (Marks, 1987), agoraphobics also develop discomfort even at home and have much tonic anxiety (Marks, 1969). Our present study confirms this yet again: 31% of all episodes occurred at home, in non-agoraphobic situations. Anxiety in agoraphobics is thus not focused solely on agoraphobic cues, as has long been known (Marks, 1969, 1987). Although avoiding or escaping from public places reduced panic/anxiety, being in the 'safe' environment of home did not guarantee complete freedom from it.

Of anxiety episodes at home, 38% were related to various non-phobic life situations while 34% were cued by anticipation of agoraphobic situations. The former seemed to be 'excessive' worries concerning family, money, health, and housework. These worries were like those said to be characteristic of GAD (Barlow, 1988). This finding is in line with those suggesting an overlap between panic disorder and GAD (Barlow, 1988).

It is unclear how much tonic anxiety is primary and how much secondary to agoraphobia. Some of this anxiety may reflect the fact that agoraphobics cannot totally avoid public situations without incurring severe social handicap; they repeatedly try to re-enter public places only to retreat quickly in panic before habituation can ensue, and repeated agoraphobic panics may increase tonic anxiety. In contrast to those with agoraphobia, those with specific phobias can usually avoid their phobic situations without incurring much social restriction and so have less general anxiety.

Our findings apply only to patients with panic disorder plus agoraphobia. The phenomenology of anxiety and panic may be different in panic disorder without agoraphobia or during the very early stages of agoraphobic illness. Our results, however, apply

to the majority of patients with panic disorder who seek treatment, since most of them also have agoraphobia.

Since the diaries were not always kept on consecutive days, we may have missed information on the nature of anxiety symptoms and their relationship with daily events during the interim periods.

Finally, different patients contributed different numbers of episodes to the sample. Any skewing due to non-independent data, however, is unlikely to alter the results drastically, since no patient accounted for more than 10% of the panic and 8% of the anxiety episodes. The differences between panic and anxiety were even weaker in analyses based on one episode per patient, a finding which does not invalidate our conclusion.

In conclusion, our prospective study found that compared with anxiety episodes, panics were rather more intense and brief and associated with more symptoms, but these features did not reliably distinguish between the two phenomena. Panic arose from a base of high tonic anxiety for much of the day whose source was unclear. The importance of tonic and phasic anxiety in panic is neglected in DSM-III-R; panic is only the tip of the phenomenological iceberg. Also neglected by DSM-III-R is the fact that most panics are related to real or anticipated agoraphobic situations. The fact that in three-quarters of panic/anxiety episodes there is no fear of dying or of 'going crazy'/losing control suggests that these thoughts do not play a major role in aetiology.

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