

Where Do Panic Attack Sufferers Seek Care?

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Background. Although 40% of people with panic attacks never seek care for their attacks, those who do may use medical settings or mental health settings, or both. The purpose of this study was to examine where people seek care for their panic attacks within and outside the health care system, and to determine what variables predict the choice of a given site.

Methods. The Panic Attack Care-Seeking Threshold (PACT) study is a community-based survey of 97 subjects meeting the *Diagnostic and Statistical Manual of Mental Disorders*, Third Edition, Revised (DSM-III-R) criteria for panic attacks. A structured interview was used to collect information about panic attacks, family characteristics, psychiatric comorbidity, health care access and utilization, illness attitudes and behaviors, quality of life, and symptom perceptions.

Results. Forty-nine percent of the subjects seeking care for panic attacks presented to medical settings, whereas

26% of subjects used mental health settings. The family physician's office was the most frequent site of presentation (35%), followed by a hospital emergency department (32%). Only 13% of subjects sought care from a site outside the health care system. Variables predicting presentation to specific health care sites varied. Subject demographics, panic characteristics, and symptom perceptions were generally significant factors in care-seeking. Illness behaviors, readiness for sick role, health locus of control, and family measures failed to predict the seeking of care specific to any particular site.

Conclusions. When subjects with panic attacks seek care, they most commonly present to a general or family physician's office or a hospital emergency department.

Key words. Panic disorder; delivery of health care; health care utilization; family practice; primary health care; emergency medical services; emergency service; hospital; care-seeking. (*J Fam Pract* 1995; 40:237-243)

Panic attacks are common among the general population and can be interpreted as either medical or psychological events by those experiencing them.^{1,2} Even when attacks occur less frequently than required for the diagnosis of panic disorder (four times in 4 weeks),³ they are associated with disabling complications: depression,⁴ suicide,⁵ substance abuse,⁶ and agoraphobia.⁴ Although about 40% of people who experience panic attacks never seek health care for this problem,^{7,8} when they do seek care, it may be from medical settings or mental health settings, or both. Panic sufferers also may seek care from sources outside the conventional health care system, such as from the clergy or a folk healer.

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The National Institute of Mental Health (NIMH) recently implemented the Panic Disorder Education Program to inform the public about panic disorder, to encourage panic sufferers to seek treatment, and to educate health care providers about the disorder.⁹ This campaign may substantially increase the frequency with which people seek care for panic attacks as well as improve physician recognition of the presenting symptoms of panic disorder. A better understanding of where people seek care for their panic attacks is important to the anticipation of the current and future demand for services and the preparation of providers working in relevant settings to accurately recognize and effectively treat this problem.

Most of the information concerning how people who have panic attacks use the health care system comes from studies that ask about seeking care for broad reasons, ie, for "emotional problems" or for "any reason."^{10,11} Little is known about where people seek care specifically for panic symptoms. Even less is known about factors that

might influence the choice of sites within the health care system. Such factors might include symptom type and severity of attacks, perceptions and interpretations of symptoms, attitudes about illness, coexisting mental disorders, family functioning, access to health care, and demographic characteristics. An understanding of the characteristics that predict the specific sites from which panic sufferers seek care can help us understand the process of choosing a care site. Delineating the factors that influence the decision about where to seek care also can improve the ability of providers in specific settings to recognize patients who present to them with panic attacks.

The purpose of this study was to examine where people seek care for their panic attacks within and outside the health care system, and to determine the number of different sites used and the factors predicting a particular choice among the various sites. The data used were collected in the Panic Attack Care-Seeking Threshold (PACT) study,⁷ which investigated determinants of care-seeking behavior among a community-based sample of adults who had experienced panic attacks.

Methods

The PACT study was conducted in San Antonio, Texas, from August 1989 to April 1990. The sampling procedure has been described in detail previously.¹² Households from 18 census tracts were selected at intervals of eight beginning from a randomly selected intersection. Within each household, an adult ≥ 18 years old was randomly selected by the Kish method¹³ and screened for panic attacks using the Structured Clinical Interview of the DSM-III.¹⁴

Individuals who met the criteria for any occurrence of panic attacks (spontaneous attacks with at least four panic-related symptoms peaking within 10 minutes of onset) completed an in-depth structured interview that was conducted by using the following instruments: the Structured Clinical Interview of the DSM-III (sections on major depressive episode, substance abuse, obsessive-compulsive disorder, simple phobia, social phobia, and generalized anxiety disorder)¹⁴; Acute Panic Inventory (modified)¹⁵; Symptom Checklist-90¹⁶; Quality of Life Questionnaire*¹⁷; Health Care Access and Utilization Questionnaire*¹⁸; Symptom Perception Scales (modified)¹⁷; Illness Behavior Questionnaire¹⁸; Illness Attitude Scales¹⁹; Readiness for Sick Role Index²⁰; Health Locus of

Control²¹; Ways of Coping Checklist²²; Appraisal Dimensions Scale²³; Cuellar Acculturation Scale²⁴; Family Inventory of Life Events and Changes²⁵; Family Adaptability and Cohesion Evaluation Scales²⁶; and Duke Social Support and Stress Scale.²⁷

The interview instruments identified where and how often subjects presented for care. Additional instruments assessed potential factors in the person's decision-making process, including symptom perceptions, quality of life, psychiatric comorbidity, personality, panic characteristics, and access to care.

Symptom severity was measured on a scale based on the Acute Panic Inventory. Total attack severity was the summation of the individual symptom severity.¹⁵ Individuals' perceptions of the significance of each symptom were rated on a 0- to 7-point scale. Twelve panic-related symptoms (eg, chest pain) and 12 randomly selected nonpanic symptoms (eg, sore throat) were rated in five areas: the degree to which the symptom (1) needs treatment, (2) is life-threatening, (3) is considered severe, (4) is embarrassing, and (5) interferes with functioning.¹⁷ The nonpanic symptoms were included to assess subjects' perception of symptoms in general, in addition to their perceptions of the panic-related symptoms. The responses concerning these 12 nonpanic symptom perceptions were combined and analyzed to reflect subjects' general symptom perceptions.

Subjects were considered to have sought care from the health care system if they reported seeking care for their panic attacks from either medical settings (hospital emergency department, minor emergency center, medical clinic, physician's office, or ambulance) or mental health settings (psychiatrist, psychologist, social worker, therapist, or mental health clinic). It was also determined whether subjects had sought care from sources outside the conventional health care system, including the use of a telephone help line, chiropractor, folk healer, or clergy.

Statistical analysis required a significance level of .05. Based on a medium effect size, the statistical power was 68% to 84%, depending upon the test used. Univariate analyses by chi-square and *t* test identified variables that were significant in the choice of specific care sites. These significant variables were then included in stepwise logistic regressions modeling predictors for seeking care for the purpose of identifying independent predictors.

Results

Of the 1683 persons contacted, 1266 (75%) agreed to be screened. Panic attacks occurred in 119 (9%); 97 (82%) agreed to the in-depth interview.

*The Quality of Life Questionnaire and the Health Care Access and Utilization Questionnaire were developed for the Panic Attack Care-Seeking Threshold study, reported on in 1993.

Table 1. Sites Selected by Patients Seeking Treatment for Panic Attack

Treatment Site	% of Patients Presenting at Any Time (N=97)	% of Patients Presenting for Episode of Initial Contact (n=53*)
Medical health care settings	49	85
Emergency department	32	43
Minor emergency center	11	7
Clinic	9	7
Physicians's office		
General/family physician	35	35
General internist	3	6
Cardiologist	9	6
Otolaryngologist	3	6
Ambulance	19	15
Mental health care settings	26	35
Psychiatrist	24	22
Psychologist	10	13
Social worker	5	4
Mental health clinic	11	7
Alternative care settings	13	19
Telephone help line	10	6
Clergy	8	7
Folk healer/ <i>curandero</i>	8	7
Chiropractor	6	6

NOTE: Subjects may have presented to >1 site so percentages may not total 100.

*Only the 57 patients who presented to at least one site were included. Four of these subjects did not respond to this question.

Demographically, the sample consisted of 56% Hispanics, 30% non-Hispanic whites, and 14% blacks. Seventy-eight percent of the sample were women, and 65% were of lower socioeconomic status or Hollingshead class V.²⁸ The mean age of the sample was 39.8 ± 14.5 years. Forty-three percent had panic attacks frequently enough to meet DSM III-R criteria for panic disorder.³

Only 59% of subjects had ever sought care from the health care system for their panic attacks. Table 1 presents the frequency with which subjects sought care from specific health care sites. Medical settings were used more frequently than were mental health settings (49% and 26%, respectively). Fewer subjects (13%) had sought care from sources outside the conventional health care system. The most frequently used site was the office of a family or general physician (35%), followed by a hospital emergency department (32%). Twenty-four percent of subjects had sought care for their panic attacks from a psychiatrist. Only 8% of subjects had sought care from a folk healer, and only 8% had consulted a member of the clergy.

Of the 57 subjects who sought care from the health care system, 33 (58%) subjects had used only one site, 11 (19%) had sought care from two sites, 6 (11%) had used three sites, and 7 (12%) had used more than three sites, one of whom had sought care from 14 sites.

Subjects often sought help from more than one site

when seeking care for the first time; however, a majority (58%) of those who sought care used only one site during the episode of initial contact. When more than one site was used, it is unclear whether subjects had been referred to a second site or had self-referred.

Those who sought care from the health care system were more likely to present initially to a medical setting than to a mental health setting (85% and 35%, respectively). Among those who sought care, the initial site was most frequently a hospital emergency department (43%), followed by a general or family physician's office (35%). However, 22% of subjects presented to a psychiatrist's office.

Table 2 presents the results of logistic regressions predicting patient selection of specific health care sites. Being male, being alcohol dependent, perceiving that fear needs treatment, and having to get someone to drive predicted seeking care at an emergency department. Five variables predicted the seeking of care at a family or general physician's office, including the presence of chest pain during attacks, the perception that dyspnea needs treatment, the belief that the panic symptoms are not temporary, and the need to take time off from work because of panic. The belief that panic was self-caused was inversely related to the seeking of care from a general or family physician. Subjects from higher social classes and those concerned about pain were more likely to present to a cardiologist's office. Severity of the worst panic attack was the sole predictor of ambulance use.

Subjects with severe chest pain during panic attacks and those with greater treatment experience were more likely to use the office of a psychiatrist. Being male, blaming others as a coping strategy, and having someone else drive predicted seeking care at a psychologist's office. The perception that choking interfered with function, and having palpitations during panic attacks were inversely related to consulting a psychologist.

Two variables predicted the use of sources outside the conventional health care system. Phobic avoidance (relative risk [RR]=1.5, $P \leq .005$) and a coping strategy of blaming others (RR=1.5, $P \leq .05$) predicted the use of such sources. Health care access and utilization, readiness for sick role, and family characteristics did not predict presentation to any site.

Discussion

The present study is one of only two studies that have assessed where people in the community seek care for panic attacks. Previous studies that investigated health care utilization of persons with panic attacks, including the NIH Epidemiologic Catchment Area (ECA) study,

Table 2. Relative Risk of Patients (N=97) Seeking Care from Specific Health Care Sites

Variables	Patient Presentation Site					
	Emergency Department	Ambulance	General or Family Physician*	Cardiologist	Psychiatrist	Psychologist
Demographics						
Sex (male)	1.6†					2.5‡
Socioeconomic status (class IV, V)				0.48§		
Comorbidity						
Alcohol dependence	1.6†					
Access						
Getting someone else to drive	2.0					2.4‡
Symptom perceptions						
Fear needs treatment	1.7‡					
Dyspnea needs treatment			2.4‡			
Choking interferes with function						0.32†
Panic characteristics						
Chest pain during attacks			1.9§			
Palpitations during attacks						0.39†
Severity of chest pain					1.6‡	
Severity of worst attack		1.4‡				
Appraisal dimension scales						
Panic believed not temporary			2.2			
Panic believed self-caused			0.7‡			
Quality of life						
Panic caused time off work			1.5‡			
Illness attitudes scales						
Treatment experience					2.0	
Concerns about pain				2.5‡		
Ways of coping						
Blames others						2.6‡

*= 2 subjects missing.
†P ≤ .05.
‡P ≤ .01.
§P ≤ .005.
||P ≤ .001.

asked about care-seeking behavior for broader reasons.^{11,29} Katerndahl⁸ asked about lifetime presentation specifically for panic attacks but used a mailed survey that yielded a low response rate. The current study is the first to combine community sampling methods similar to those of the ECA study with questions about care-seeking specifically for panic attacks.

Our study found that panic attack sufferers in San Antonio most commonly sought care for their attacks in medical settings rather than in mental health settings. The office of a general or family physician was the site most commonly chosen, followed by a hospital emergency department. Mental health settings, usually the office of a psychiatrist, were used less often. In contrast, the ECA study found that panic attack sufferers preferentially used the mental health sector,^{10,29} but this finding is likely related to that study's focus on seeking care for "emo-

tional problems." Findings from a mailed survey in a midwestern county⁸ were similar to those of the present study: 42% of people with panic attacks had reported their symptoms to their personal physician, and 14% had sought care in an emergency department.

Our findings highlight that people with panic attacks seek care in diverse settings, including the offices of subspecialists. For example, 16% of subjects who sought care did so at a cardiologist's office, a finding that is consistent with studies showing a substantial prevalence of panic disorder among cardiologists' patients.^{30,31} Subjects sought care from a variety of mental health sites, as well as from a variety of medical sites (Table 1).

The present study is the only study of Americans with panic attacks to focus on seeking care from sources outside the conventional health care system. Because of San Antonio's large Mexican-American population, it was

particularly important that this study include alternative sites, especially those where *curanderos*, or folk-healers, and the clergy could be contacted. Fewer subjects than we had anticipated had used such sites for panic attacks; however, five subjects had sought care solely from sites outside the conventional health care system. Subjects with phobic avoidance, such as agoraphobia, were more likely to use an alternative site. Perhaps patients sought care at these sites because they perceived them as less threatening than conventional medical or mental health sites. The only other study to investigate the seeking of care for panic attack sufferers from unconventional sources found that 23% of subjects in Africa sought care from a traditional healer and 6% from a priest.³²

There have been no community-based studies of persons with panic attacks that have focused on the number of sites of presentation. Our study found that only 12.3% of those who sought care had contacted more than three different sites. Studies based in tertiary care settings have found higher rates of multisite use; Sheehan³³ found that 70% of those with panic disorder reported seeking care from at least 10 physicians, and Swinson et al³⁴ found that 32% had sought care from at least three different professionals. It is likely that patients in tertiary care settings have been through a selection process that makes them unrepresentative of people in the community or of patients in primary care settings. Of course, our study included subjects with less frequent panic attacks and focused on sites rather than providers. These are methodologic differences that may contribute to the differing observations.

Our findings concerning variables that predict the seeking of care at specific sites are the result of a secondary analysis of cross-sectional data, from which multiple comparisons were made, and thus should be interpreted cautiously. Cause-and-effect relationships cannot be assumed. Nevertheless, the findings presented in Table 2 may clarify the decision-making process of our subjects in selecting a site.

Some of the factors associated with seeking care at certain sites concern the panic symptoms themselves. The severity of the worst panic attack was the sole independent predictor of ambulance use, a finding consistent with the traditional medical view that symptom severity is the primary determinant of seeking care.³⁵ The presence of chest pain during attacks was associated with seeking care from a general or family physician, and the presence of palpitations during attacks was inversely related to seeing a psychologist. On the other hand, the severity of chest pain during attacks predicted seeking care in a psychiatrist's office rather than in an emergency room or other medical setting. If the nature and severity of the symptoms are the

primary determinants in choosing a site, then this finding is surprising.

Demographic factors predicted patient use of some sites. It is not surprising that men were more likely to seek care at an emergency department, but that they were even more likely to seek care at the office of a psychologist was unexpected. However, Shapiro et al³⁶ found that men using health services were more likely to be seen by a mental health specialist. A high socioeconomic status predicted seeking care in the office of a cardiologist. The Medical Outcomes Study found that patients who visited cardiologists had higher incomes than did those who visited generalists, but the difference was not statistically significant.³⁷

Having to get someone to drive was strongly associated with seeking care from any site in the health care system,⁷ particularly at an emergency department or a psychologist's office. The question about getting someone to drive was intended to assess a potential barrier to seeking care, but instead may have reflected the decision to seek care and a feeling of helplessness.

Perceptions and attitudes were associated with patients seeking care at certain sites. The belief that fear should be treated predicted the use of an emergency department, while the belief that dyspnea should be treated predicted seeing a general or family physician. Subjects sought care from a general or family physician when they believed that the panic was not temporary and that they were not personally responsible for the attacks. Concern about pain predicted seeing a cardiologist, while blaming others as a coping strategy predicted seeking care from a psychologist.

In previous health care utilization studies, men utilized the health care system less frequently than women, especially for minor psychiatric disorders.³⁸ Although Dew et al³⁹ found that men were less likely than women to seek care from mental health professionals for depression, Faravelli et al¹¹ reported that choice of treatment site by patients with anxiety disorders was not related to gender. Hence, the observation that men sought care from psychologists more often than women is surprising.

Our study has a number of limitations, in addition to those mentioned above. Interviewed subjects might be systematically different, eg, less agoraphobic, from those refusing to participate or those unavailable for screening. Hence, our sample may not be truly representative of panic attack sufferers in the community. Moreover, the generalizability of our results to other communities is uncertain. San Antonio's demographic composition and health care system are unique. The ECA study found considerable differences in health care utilization among its five study sites.⁴⁰ Thus, this study's findings should be confirmed in other locations.

Our in-depth interviews utilized multiple instruments, some of which were translated or otherwise modified for use in this study. Previous validation studies may not apply to the modified instruments or to the Spanish translations of those instruments. The effects of administering multiple instruments and the effects of the order of administration are unknown. In addition, new instruments were developed for the PACT study.

Theoretically, the use of logistic regression requires a sample size of 10 times the number of independent variables used. Therefore, with 97 subjects, our regressions should include a maximum of nine independent variables. Because several of the regressions presented in Table 2 included more than nine independent variables, the validity of the findings may be questionable.

Conclusions

In San Antonio, persons with panic attacks often do not seek health care for their attacks. When they do seek care, they use medical settings more often than mental health settings. The most commonly used sites are the office of a general or family physician and a hospital emergency department. A minority of people with panic attacks seek care from sources outside the conventional health care system. Seeking care at many sites by persons with panic attacks appears to be less common than previously thought. Factors associated with seeking care at specific sites should be interpreted with caution but appear to include attitudes, perceptions, and treatment experience in addition to symptom characteristics, sex, and socioeconomic status.

Physicians in general medical settings should be educated to recognize panic attacks. It is anticipated that the majority of visits stimulated by the NIMH Panic Disorder Education Program will be to such medical settings.

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References

- Ballenger JC. Unrecognized prevalence of panic disorder in primary care, internal medicine, and cardiology. *Am J Cardiol* 1987; 60(suppl J):39J-47J.
- Katon W. Panic disorder and somatization. *Am J Med* 1984; 77: 101-6.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 3rd ed revised. Washington, DC: American Psychiatric Association, 1987.
- Norton GR, Harrison B, Hautch J, Rhodes L. Characteristics of people with infrequent panic attacks. *J Abnorm Psychol* 1985; 94: 216-21.
- Weissman MM, Klerman GL, Markowitz JS, Ouellette R. Suicidal ideation and suicide attempts in panic disorder and attacks. *N Engl J Med* 1989; 321:1209-13.
- Jensen CF, Cowley DS, Walker RD. Drug preferences of alcohol/polydrug abusers with and without panic. *J Clin Psychiatry* 1990; 51:189-91.
- Realini JP, Katerndahl DA. Factors affecting threshold for seeking care: the Panic Attack Care-Seeking Threshold (PACT) study. *J Am Board Fam Pract* 1993; 6:215-23.
- Katerndahl DA. Factors associated with persons with panic attacks seeking medical care. *Fam Med* 1990; 22:462-6.
- National Institute of Mental Health. Panic Disorder Education Program. Washington, DC: National Institute of Mental Health. DHHS publication no. (ADM) 91-1869, 1991.
- Thompson JW, Burns BJ, Bartko J, Boyd JH, Taube CA, Bourdon KH. Use of ambulatory services by persons with and without phobia. *Med Care* 1988; 26:183-98.
- Faravelli C, Degl'Innocenti BG, Giardivelli L. Epidemiology of anxiety disorders in Florence. *Acta Psychiatr Scand* 1989; 79:308-12.
- Katerndahl DA, Realini JP. Lifetime prevalence of panic states. *Am J Psychiatry* 1993; 150:246-9.
- Kish L. A procedure for objective respondent selection within the household. *J Am Stat Assoc* 1949; 44:380-7.
- Spitzer RL, Williams JBW. Structured clinical interview for DSM-III-R—Upjohn version—revised. New York: New York State Psychiatric Institute, 1989.
- Carr DB, Sheehan DV, Surman OS, Coleman JH, Greenblatt D, Heninger GR. Neuroendocrine correlates of lactate-induced anxiety and their response to chronic alprazolam therapy. *Am J Psychiatry* 1986; 143:483-94.
- Derogatis LR, Lipman RS, Rickels K, Uhlenhuth EH, Covi L. Hopkins Symptom Checklist (HSC). *Behav Sci* 1974; 19:1-15.
- Jones RA, Wiese HJ, Moore RW, Haley JV. On the perceived meaning of symptoms. *Med Care* 1981; 19:710-7.
- Pilowsky I, Spence ND. Manual for the Illness Behavior Questionnaire. Adelaide, South Australia: University of Adelaide, 1981.
- Kellner R. Illness Attitude Scales. Albuquerque, NM: University of New Mexico, 1983.
- Hibbard JH, Pope CR. Gender roles, illness orientation, and use of medical services. *Soc Sci Med* 1983; 17:129-37.
- Wallston BS, Wallston KA, Kaplan GD, Maides SA. Development and validation of the Health Locus of Control scale. *J Consult Clin Psychol* 1976; 44:580-5.
- Vitaliano PP, Russo J, Carr JE, Miauro RD, Becker J. Ways of Coping Checklist. *Multivar Behav Res* 1985; 20:3-26.
- Vitaliano PP. Manual for Appraisal Dimensions Scale and revised Ways of Coping Checklist. Seattle, Wash: University of Washington, 1985.
- Cuellar I, Harris LC, Jasso R. Acculturation scale for Mexican American normal and clinical populations. *Hispanic J Behav Sci* 1980; 2:199-217.
- McCubbin HI, Patterson JM, Wilson L. Family Inventory of Life Events and Changes. St Paul, Minn: Family Social Science, 1980.
- Olson DH, Portner J, Lavee Y. Family Adaptability and Cohesion Evaluation Scales, 3rd ed. St Paul, Minn: University of Minnesota, 1985.
- Duke Social Support and Stress Scale. Durham, NC: Duke University, 1986.
- Hollingshead A, Redlich F. Social class and mental illness. New York: John Wiley, 1958.
- Klerman GL, Weissman MM, Ouellette R, Johnson J, Greenwald J. Panic attacks in the community. *JAMA* 1991; 265:742-6.

30. White PD, Jones TD. Heart disease and disorders in New England. *Am Heart J* 1928; 3:302-18.

31. Katon W, Hall ML, Russo J, Cormier L, Hollifield M, Vitaliano PP, Beitman BD. Chest pain. *Am J Med* 1988; 84:1-9.

32. Hollifield M, Katon W, Spain D, Lamakatso P. Anxiety and depression in a village in Lesotho, Africa. *Br J Psychiatry* 1990; 156:343-50.

33. Sheehan DV. Panic attacks and phobias. *N Engl J Med* 1982; 307:156-8.

34. Swinson RP, Cox BJ, Woszczyna CB. Use of medical services and treatment for panic disorder with agoraphobia and for social phobia. *Can Med Assoc J* 1992; 147:878-83.

35. Mechanic D. Medical sociology, 2nd ed. New York: The Free Press, 1978:249-89.

36. Shapiro S, Skinner E, Kessler L, et al. Utilization of health and mental health services in three ECA sites. *Arch Gen Psychiatry* 1984; 41:971-8.

37. Kravitz RL, Greenfield S, Rogers W, Manning WG Jr, Zubkoff M, Nelson EC, et al. Differences in the mix of patients among medical specialties and systems of care. *JAMA* 1992; 267:1617-23.

38. Briscoe ME. Sex differences in perception of illness and expressed life satisfaction. *Psychol Med* 1978; 8:339-45.

39. Dew MA, Dunn LO, Bromet EJ, Schulberg HC. Factors affecting help-seeking during depression in a community sample. *J Affect Disord* 1988; 14:223-34.

40. Boyd JH. Use of mental health services for the treatment of panic disorder. *Am J Psychiatry* 1986; 143:1569-74.