Use of medical services and treatment for panic disorder with agoraphobia and for social phobia

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Objective: To examine the medical services and treatment for anxiety disorders reported by patients who had either panic disorder with agoraphobia or else social phobia.
Design: Archival research of consecutive records of psychiatric interviews conducted between January 1990 and December 1991. The records were examined by a trained research assistant who had had no contact with the patients.
Patients: One hundred patients who had panic disorder with agoraphobia and twenty-eight patients who had social phobia.
Setting: An anxiety disorders clinic in a university-affiliated psychiatric institute.
Outcome measures: Variables related to the use of medical services included history of hospitalization, emergency department visits and referrals to specialists. Variables related to treatment included types of medication received, whether behaviour therapy was received and types of health care professionals seen.
Results: Almost 30% of the patients with panic disorder and more than 20% of those with social phobia had a history of a major depressive episode at some time in their lives; 30% and 25% respectively had a current nonpsychiatric medical diagnosis. In the past year nearly one-third of both patient groups had seen three or more different health care professionals and almost one-fifth of those with panic disorder had gone to a general hospital emergency department. Of the patients with panic disorder 9% had previously been assessed by a cardiologist and 17% by a neurologist. At least two-thirds of each group had received benzodiazepines, often for use as needed. Although most of the patients in both groups had been seen by mental health professionals such as psychiatrists, few had received optimal treatment. Of those with panic disorder, only 15% had received the tricyclic antidepressant imipramine, 13% alprazolam and 11% cognitive-behavioural therapy. Only 4% of the patients with social phobia had received cognitive-behavioural therapy.
Conclusions: Both groups of patients, and particularly those with panic disorder, are frequent users of medical services. Although most have had contact with mental health professionals, few have received appropriate treatment. Benzodiazepines appear to be overprescribed, whereas forms of treatment that have been shown to reduce the use of medical services, such as cognitive-behavioural therapy, are infrequently given.

Objectif : Examiner les services médicaux et le traitement liés aux troubles anxieux signalés par des patients souffrant d'un trouble de panique avec agoraphobie ou d'une phobie sociale.
Conception : Recherche d'archives dans des dossiers consécutifs d'entrevues psychiatriques qui ont eu lieu entre janvier 1990 et décembre 1991. Les dossiers ont été

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examinés par un adjoint de recherche chevronné qui n'a eu aucun contact avec les patients.

Patients : Cent patients atteints de troubles de panique avec agoraphobie et vingt-huit patients atteints de phobie sociale.

Contexte : Clinique de troubles anxieux dans un institut psychiatrique affilié à une université.

Mesures des résultats : Les variables liées au recours aux services médicaux comprenaient les antécédents d'hospitalisation, les visites aux services d'urgence et la consultation de spécialistes. Les variables liées au traitement comprenaient les types de médicaments reçus, l'administration ou la non-administration d'une thérapie comportementale et les types de professionnels de soins de santé consultés.

Résultats : Presque 30 % des patients atteints d'un trouble de panique et plus de 20 % des patients atteints d'une phobie sociale avaient déjà fait une dépression majeure à un moment donné de leur vie; 30 % et 25 % respectivement des patients avaient un dossier médical non psychiatrique courant. Au cours de l'année écoulée, presque le tiers des deux groupes de patients avaient consulté au moins trois professionnels différents des soins de santé et presque le cinquième de ceux qui souffraient d'un trouble de panique s'étaient présentés à un service d'urgence d'un hôpital général. Parmi les patients souffrant d'un trouble de panique, 9 % avaient été examinés auparavant par un cardiologue et 17 % par un neurologue. Au moins deux tiers des patients de chaque groupe avaient reçu des benzodiazépines, souvent à prendre au besoin. Même si la plupart des patients des deux groupes avaient consulté des professionnels de la santé mentale comme des psychiatres, très peu avaient reçu un traitement optimal. Parmi ceux qui souffraient d'un trouble de panique, 15 % seulement avaient reçu de l'imipramine, antidépresseur tricyclique, 13 % de l'alprazolam et 11 % une thérapie cognitive du comportement. Seulement 4 % des patients atteints de phobie sociale avaient reçu une thérapie cognitive du comportement.

Conclusions : Les deux groupes de patients, et particulièrement ceux qui souffrent d'un trouble de panique, sont de fréquents consommateurs de services médicaux. Même si la plupart ont eu des contacts avec des professionnels de la santé mentale, peu ont reçu un traitement approprié. On semble surprescrire des benzodiazépines, tandis que l'on administre peu souvent des traitements qui ont fait leurs preuves pour réduire la consommation de services médicaux, comme la thérapie cognitive du comportement.

Results from studies in the United States suggest that patients with panic disorder are frequent users of health care services, either specialty or general,[1] and yet seldom receive appropriate treatment.[2] They often have a high level of somatization and hypochondriacal fears regarding the panic attacks, and there is evidence that this hypochondriasis lessens with successful anxiolytic treatment.[3,4]

Behavioural psychotherapy for panic and agoraphobia has been shown to reduce the use of health care services by these patients.[5,6] For example, Bowen and colleagues[5] found that patients who completed a trial of behavioural group therapy for panic disorder with agoraphobia reduced their yearly visits to general practitioners by about 40%.

Unfortunately, most patients with panic disorder do not receive specialty treatment and often do not have their problem correctly diagnosed by their general physician.[7] A US study found that fewer than 15% of almost 800 volunteers for panic disorder research had previously received appropriate behaviour therapy or the tricyclic antidepressant imipramine,[2] and the little information available on past treatment received by Canadian patients is not encouraging. In a survey of Canadian hospitals, only 15% reported having an anxiety disorders clinic.[8] Finally, US epidemiologic data suggest that, untreated, panic disorder may become associated with poor quality of life (e.g., alcoholism[9] and suicide attempts[10]), which can lead to even greater health care demands.

The purpose of the study described here was to document the types of medical services and anxiety treatment received by patients with panic disorder in Canada. We also studied a group of patients with social phobia, because most of the previous studies have not examined anxiety disorders other than panic disorder.

Patients and methods

The samples consisted of 100 consecutive patients who had panic disorder with agoraphobia and 28 consecutive patients who had social phobia. The diagnoses were based on the criteria of the *Diagnostic and Statistical Manual of Mental Disorders*, third edition, revised (DSM-III-R).[11] The DSM-III-R defines panic disorder with agoraphobia as a condition characterized by severe, unexpected anxiety attacks,

often accompanied by worry over future attacks, and a fear of being in situations from which escape might be difficult or help not easy to obtain in the event of a panic attack. Social phobia is defined as a persistent fear of being in situations in which one is exposed to possible scrutiny by others and fears doing something that will be embarrassing or even humiliating.

All the patients had presented to an anxiety disorders clinic and had given written consent that the information they provided be used for research purposes. All had voluntarily completed the State-Trait Anxiety Inventory,[12] the Fear Questionnaire,[13] the Beck Depression Inventory[14] and the Mobility Inventory for Agoraphobia.[15] Variables of interest had been recorded during semistructured psychiatric interviews conducted by a psychiatrist with 20 years of experience in anxiety disorders.

Only patients seen within the previous 2 years (January 1990 through December 1991) were included in the study, because many current treatments for anxiety disorders did not exist several years ago. Each patient record was independently reviewed and coded for past medical services and treatment by a research assistant who had had no contact with the patient. In addition to the current diagnosis of either panic disorder with agoraphobia or social phobia, any other diagnoses (e.g., major depressive episode) at some time in the patient's life were noted, as was the presence of panic attacks. Panic attacks are defined by DSM-III-R criteria as discrete episodes of intense fear accompanied by feelings of impending doom with symptoms such as dyspnea, depersonalization and fears of dying or doing something uncontrolled. Patients who were poor historians (less than 10) were not included in the study.

Results

The percentages in the tables are based on the numbers of patients for which the information in the record was clear enough to provide an answer to the applicable question.

Characteristics of the samples

The mean age of the patients with panic disorder (29 men, 71 women) was 33.4 (standard deviation [SD] 9.5) years. The mean age of the patients with social phobia (20 men, 8 women) was 32.3 (SD 9.8) years.

The Fear Questionnaire demonstrated mean scores of 15.1 (SD 10.2) for agoraphobia in the patients with panic disorder and 19.3 (SD 9.1) for social fears in the patients with social phobia, scores similar to those obtained in other samples of patients with phobias.[16] Both groups scored in the dysphoric range of the Beck Depression Inventory, the means being 18.9 (SD 10.7) and 16.7 (SD 7.9) respectively. Panic attacks within the past month were reported by 90% of the patients who had panic disorder with agoraphobia and 71% of the patients who had social phobia.

The medical history of the two groups of patients was similar (Table 1).

Medical services

Table 2 presents the types of medical services sought for anxiety complaints by the two groups of patients. Nearly one-third of both patient groups had seen three or more different health care professionals within the past year. When the social phobia group

Table 1: Medical history of two groups of patients with anxiety disorders

Variable	Diagnosis; % of patients*	
	Panic disorder with agoraphobia	Social phobia
Current nonpsychiatric medical diagnosis	30	25
Currently taking prescription medication (nonanxiolytic, nonanalgesic) for physical problem	25	14
Hospitalized in past year for physical problem	7	7
Hospitalized at some time in life for psychiatric problem other than anxiety	8	11
Major depressive episode at some time in life	28	21

*The percentages in the three tables are based on sample sizes of 100 and 28 respectively for the two groups of patients except when the information in the patient record was not clear enough to provide an answer to the applicable question; the denominators are then indicated in the table.

was subdivided into those with and those without panic attacks none of the rates changed substantially.

Anxiety treatment

Table 3 presents the types of treatment received for anxiety complaints by the two groups of patients. At least two-thirds of each group had received benzodiazepines. The presence of panic attacks in the patients with social phobia had not affected the nature of the treatment. Few patients in either group had received cognitive-behavioural therapy, whereas most had received some type of psychoactive medication.

The male patients with panic disorder were more likely than the female patients to report treatment with benzodiazepines other than alprazolam ($\chi^2 = 5.43$, one degree of freedom, $p < 0.02$). This was the only significant difference between the sexes that emerged from the study, but it was not a large difference, particularly given the number of comparisons.

Discussion

The results of this study indicate that patients with panic disorder and to a lesser extent patients with social phobia report a variety of physical and psychiatric problems (e.g., major depression) and are frequent users of the health care system. These findings are consistent with data collected in the United States[1,9] showing that a diagnosis of panic disorder is associated with a greater likelihood of alcohol abuse and more use of health services, including those of emergency departments, than is a diagnosis of major depression or neither diagnosis. The results are also consistent with recently published data provided by an Ontario sample of 354 general practitioners and family physicians who completed a survey on 50 consecutive patients presenting to each of their practices.[17] Patients with a diagnosis of anxiety or a stress condition accounted for 7.0% of the 16 125 encounters resulting in a diagnosis and 9.76% of the estimated $1.6 billion in expenditures. Almost 30% of the patients with anxiety received a prescription. These figures are probably underestimates, because many patients with an anxiety disorder present with cardiologic or neurologic complaints and are referred to specialists before an organic problem is ruled out. Almost 30% of the patients with panic disorder in our study had been assessed by a cardiologist or a neurologist or both, and 21% had presented to a general hospital emergency department, 19% in the past year.

These observations suggest that patients with anxiety disorders, particularly panic disorder, are unsuccessfully seeking relief from their symptoms through the general medical system. This unnecessary use of health care services could be reduced by more immediate and accurate diagnosis of the anxiety disorder and appropriate intervention. Patients with panic attacks presenting to general hospital emergency departments can be successfully treated with brief behaviour therapy,[18] and early recognition of an anxiety disorder in general practice is associated with a shorter episode duration.[7]

Table 2: Use of medical services specifically for anxiety complaints

Variable	Diagnosis; % of patients: Panic disorder with agoraphobia	Social phobia
Sometime in life		
Went to general hospital emergency department (n = 99 and 28)	21	7
Hospitalized	9	11
Assessed by cardiologist	9	4
Assessed by neurologist	17	0
In past year		
Went to general hospital emergency department (n = 99 and 28)	19	7
Contact with one or two different health care professionals	68	71
Contact with three or more different health care professionals	32	29
At least one visit to general physician (n = 97 and 28)	91	89

Our findings also show that even when treated by mental health specialists few patients with anxiety are receiving appropriate treatment, and many have taken several medications. Despite limited efficacy and problems associated with discontinuation, benzodiazepines are by far the drugs most commonly prescribed for both panic and social phobia. Among the patients in our study who had panic disorder with agoraphobia, only 15% had received imipramine, 13% alprazolam and 11% cognitive–behavioural therapy, all of which have empirically been found to be efficacious. Similarly, only 4% of the patients with social phobia had received cognitive–behavioural therapy, although almost two-thirds had received benzodiazepines. These findings are even more surprising given that almost one-third of the patients had had three or more contacts with different health care professionals in the past year and almost two-thirds had seen a psychiatrist. Many of the 40% with panic disorder who received tricyclic antidepressants other than imipramine may have received some benefit; however, only the use of imipramine has empiric support from numerous studies.[19]

The underuse of effective forms of treatment for panic disorder with agoraphobia has been observed outside Canada as well,[2] and our results suggest that this pattern holds true for social phobia. Our finding that many patients in both groups reported receiving psychotherapy or psychoanalysis with apparently little lasting effect is not surprising given the limited efficacy of these forms of therapy for anxiety disorders.[20,21]

Although we excluded patients who were poor historians, this was an archival study relying on retrospective data, and it is certainly possible that some patients did not remember all the treatments they had received.

Table 3: Past treatment for anxiety disorders

Variable	Diagnosis; % of patients	
	Panic disorder with agoraphobia	Social phobia
Therapy with any psychoactive medication for anxiety	89	75
Therapy with benzodiazepines (excluding alprazolam)	78	68
Prescribed by		
General physician (n = 81 and 26)	49	42
Psychiatrist (n = 80 and 26)	30	31
Emergency physician (n = 81 and 26)	7	4
Prescribed for use as needed (n = 98 and 27)	31	30
Therapy with alprazolam	13	0
Prescribed by		
General physician (n = 96 and 28)	2	0
Psychiatrist (n = 96 and 28)	6	0
Therapy with other drugs		
Tricyclic antidepressants (excluding imipramine)	40	32
Imipramine	15	14
Fluoxetine	10	4
Monoamine oxidase inhibitors (n = 100 and 27)	3	4
Cognitive–behavioural therapy (n = 99 and 26)	11	4
Psychotherapy/psychoanalysis	46	39
Supportive counselling	87	82
Other treatment (e.g., hypnosis) (n = 99 and 28)	17	29
Professional providing treatment		
Psychiatrist (n = 99 and 28)	66	64
Psychologist (n = 99 and 28)	18	36
Social worker	6	4
Other	15	18

In summary, the results of this study strongly suggest that patients with anxiety disorders, particularly panic disorder, are frequent users of health care services in Canada, and this may be partially explained by the fact that few have received appropriate treatment. Education regarding early recognition and intervention is needed for general and emergency department physicians, who are often the first point of contact for patients with anxiety disorders. Seminars on the different types of anxiety disorders and corresponding treatments as well as on standardized methods of assessment to ensure accurate diagnosis[22,23] would likely be of benefit and reduce the currently widespread use of nonspecific agents (benzodiazepines), which may be due to a lack of diagnostic specificity.[24] Simply giving a few minutes of exposure instructions (cognitive-behavioural therapy) to patients with panic disorder can significantly reduce their phobic avoidance.[18]

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