

# CHAPTER 4

## ANXIETY DISORDERS

### **Highlights**

- **Anxiety disorders affect 12% of the population, causing mild to severe impairment.**
- **For a variety of reasons, many individuals may not seek treatment for their anxiety; they may consider the symptoms mild or normal, or the symptoms themselves may interfere with help-seeking.**
- **Anxiety disorders can be effectively treated in the community setting.**
- **Hospitalization rates for anxiety disorders in general hospitals are twice as high among women as among men.**
- **The highest rates of hospitalization for anxiety disorders in general hospitals are among adults aged 65 years and over.**
- **Since 1987, hospitalization rates for anxiety disorders in general hospitals have decreased by 49%.**

## What Are Anxiety Disorders?

Individuals with anxiety disorders experience excessive anxiety, fear or worry, causing them either to avoid situations that might precipitate the anxiety or to develop compulsive rituals that lessen the anxiety. Everyone feels anxious in response to specific

events - but individuals with an anxiety disorder have excessive and unrealistic feelings that interfere with their lives in their relationships, school and work performance, social activities and recreation.

<u>Symptoms</u>
<u>Anxiety Disorders</u>
<ul style="list-style-type: none"><li>• <b>Intense and prolonged feelings of fear and distress that occur out of proportion to the actual threat or danger</b></li><li>• <b>Feelings of fear and distress that interfere with normal daily functioning</b></li></ul>

### Types of Anxiety Disorders<sup>1</sup>

#### Generalized Anxiety Disorder (GAD)

Excessive anxiety and worry about a number of events or activities occurring for more days than not over a period of at least 6 months with associated symptoms (such as fatigue and poor concentration).

#### Specific Phobia

Marked and persistent fear of clearly discernible objects or situations (such as flying, heights and animals).

#### Post Traumatic Stress Disorder

Flashbacks, persistent frightening thoughts and memories, anger or irritability in response to a terrifying experience in which physical harm occurred or was threatened (such as rape, child abuse, war or natural disaster).

#### Social Phobia, also known as Social Anxiety Disorder

Exposure to social or performance situations

almost invariably provokes an immediate anxiety response that may include palpitations, tremors, sweating, gastrointestinal discomfort, diarrhoea, muscle tension, blushing or confusion, and which may meet criteria for the panic attack in severe cases.

#### Obsessive-Compulsive Disorder

Obsessions: Persistent thoughts, ideas, impulses or images that are intrusive and inappropriate and that cause marked anxiety or distress. Individuals with obsessions usually attempt to ignore or suppress such thoughts or impulses or to counteract them by other thoughts or actions (compulsions).

Compulsions: Repetitive behaviours (such as hand washing, ordering or checking) or mental acts (such as praying, counting or repeating words) that occur in response to an obsession or in a ritualistic way.

**Panic Disorder**

Presence of recurrent, unexpected panic attacks, followed by at least 1 month of persistent concern about having additional attacks, worry about the implication of the attack or its consequences, or a significant change in behaviour related to the attacks. There are three clusters of symptoms: re-experiencing, avoidance and numbing, and arousal.

Panic disorders are sometimes associated with agoraphobia - anxiety about, or the avoidance of, places or situations from which escape might be difficult or embarrassing, or in which help may not be available in the event of a panic attack or panic-like symptoms.

The essential feature of the panic attack is a discrete period of intense fear or discomfort that is accompanied by at least 4 of 13 physical symptoms, such as:

- Palpitations, increased heart rate or pounding heart
- Sweating
- Trembling or shaking
- Sensations of shortness of breath or smothering
- Feeling of choking
- Chest pain or discomfort
- Nausea or abdominal distress
- Dizziness, unsteadiness, light-headedness or fainting
- De-realization or de-personalization
- Fear of losing control or going crazy
- Fear of dying
- Paresthesias (numbness or tingling sensation)
- Chills or hot flashes

## How Common Are Anxiety Disorders?

Combined anxiety disorders affect approximately 12% of Canadians: about 9% of men and 16% of women during a one-year period.<sup>2</sup> As a group, anxiety disorders represent the most common of all mental illnesses.

**Table 4-1 One-Year Prevalence of Anxiety Disorders in Canada.**

Type of Anxiety Disorder	Canada (Ages 15-64 years) % with anxiety disorder <sup>2-4</sup>
Generalized Anxiety Disorder	1.1
Specific Phobia	6.2 - 8.0
Post Traumatic Stress Disorder	---
Social Phobia	6.7
Obsessive Compulsive Disorder	1.8
Panic Disorder	0.7

## Impact of Anxiety Disorders

### Who Is Affected by Anxiety Disorders?

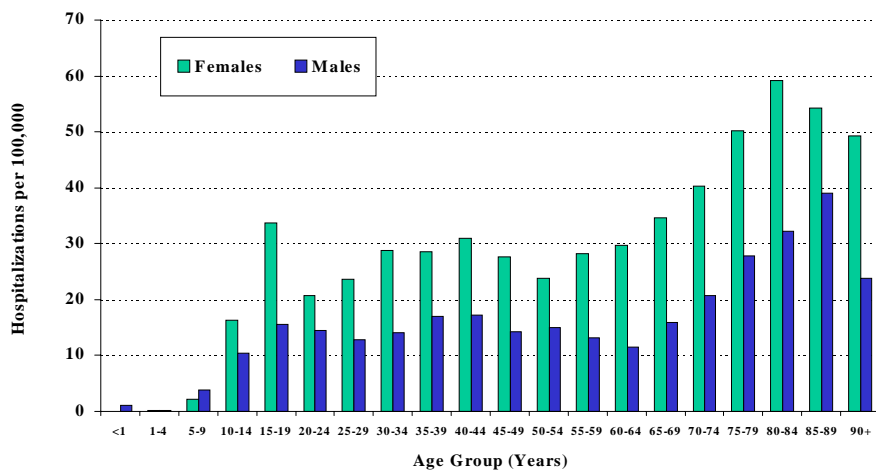
Women report and are diagnosed with some anxiety disorders more frequently than men. This may reflect the differences between men and women in their health-service-seeking behaviours, however, rather than true differences in prevalence.

Ideally, data from a population survey would provide information on the age/sex distribution of individuals with anxiety disorders. Statistics Canada's Canadian Community Health Survey (CCHS) will provide these data in the future.

At the present time, hospitalization data provide the best available description of individuals with anxiety disorders. These data have limitations, however, because most people with anxiety disorders are treated in the community rather than in hospitals, and many do not receive treatment at all. As a result, the data represents only a subset of all those with anxiety disorders, and the results must be interpreted with caution.

In 1999, women were hospitalized for anxiety disorders at higher rates than men in every age category (Figure 4-1). Young women aged between 15 and 19 years had much higher rates of hospitalization than the immediately adjacent age groups. Women and men over the age of 65 had the highest rates of hospitalization.

**Figure 4-1 Hospitalizations for anxiety disorders\* in general hospitals per 100,000 by age group, Canada, 1999/2000**



\* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

## How Does It Affect Them?

Symptoms of anxiety disorders often develop during early adulthood. Although the majority of people have mild or no impairment, anxiety disorders can seriously restrict an individual's education, work, recreation and social activities because he/she avoids situations that precipitate the symptoms.

Individuals severely affected by anxiety disorders are also more likely to have either another type of anxiety disorder, major depression or dysthymia, alcohol or substance abuse, or a personality disorder.<sup>5</sup> This compounds the impact of the anxiety

disorder and presents challenges for effective treatment.

## Economic Impact

Because they are so common, anxiety disorders have a major economic impact.<sup>6</sup> They contribute to lost productivity due to both time away from work and unemployment. Other associated costs include claims on disability insurance.

Heavy use of the emergency department and primary care system in reaction to physical symptoms also contributes to significant health care costs.

## Stigma Associated with Anxiety Disorders

Because anxiety disorders are the extension of what most people perceive as normal worry and concern, those who experience them may fear that others would label their

excessive worry and fear as simply a weakness. As a result, they may try to ignore the seriousness of their condition and deal with it themselves. They often avoid seeking help and suffer in silence.

## Causes of Anxiety Disorders

The development of anxiety disorders appears to result from a complex interplay of genetic, biological, developmental and other factors such as socio-economic and workplace stress. A variety of theories have been proposed to explain how these factors contribute to the development of the disorder.<sup>7</sup>

The first is experiential: people may learn their fear from an initial experience, such as an embarrassing situation, physical or sexual abuse, or the witnessing of a violent act. Similar subsequent experiences serve to reinforce the fear.

A second theory relates to cognition or thinking, in that people believe or predict that the result of a specific situation will be

embarrassing or harmful. This may occur, for example, if parents are over-protective and continually warn against potential problems.

A third theory focuses on a biological basis. Research suggests that the amygdala, a structure deep within the brain, serves as a communication hub that signals the presence of a threat and triggers a fear response or anxiety. It also stores emotional memories and may play a role in the development of anxiety disorders. The children of adults with anxiety disorders are at much greater risk of an anxiety disorder than is the general population,<sup>4</sup> which may imply a genetic factor, an effect of parenting practices, or both.

## Treatment of Anxiety Disorders

Early recognition and appropriate management are imperative in order to enhance the quality of life of individuals with anxiety disorders. Proper recognition and management also help to prevent common secondary disorders, such as depression and abuse of drugs and alcohol.

The delay in seeking and receiving a diagnosis and treatment may be due to a number of factors, such as stigma, a lack of human resources, restrictive government funding systems and lack of knowledge. In addition, family physicians may not always recognize the pattern in an individual's symptoms that would lead them to a correct diagnosis. Too often, the symptoms are not taken seriously and an individual with an anxiety disorder is labelled as being emotionally unstable.

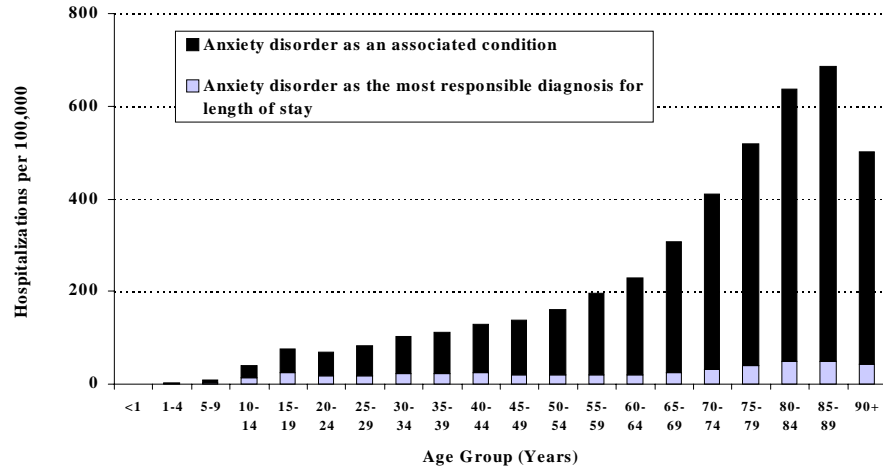
Education of both the public and family physicians would help to solve this problem.

A recent review of anxiety disorders suggests that effective treatments include drug therapy (with anti-depressants or anti-anxiety drugs) and cognitive-behavioural therapy, which helps people turn their anxious thoughts into more rational and less anxiety-producing ideas.<sup>8</sup> Support groups for individuals and families can also help develop the tools for minimizing and coping with the symptoms.

Anxiety disorders can be well managed in the primary care setting. Creating access to experts in cognitive-behaviour therapy through a shared-care model can help family physicians provide optimal care for the individuals they are treating.

When individuals with anxiety disorders are hospitalized, another associated condition is usually responsible for determining their length of stay (Figure 4-2).

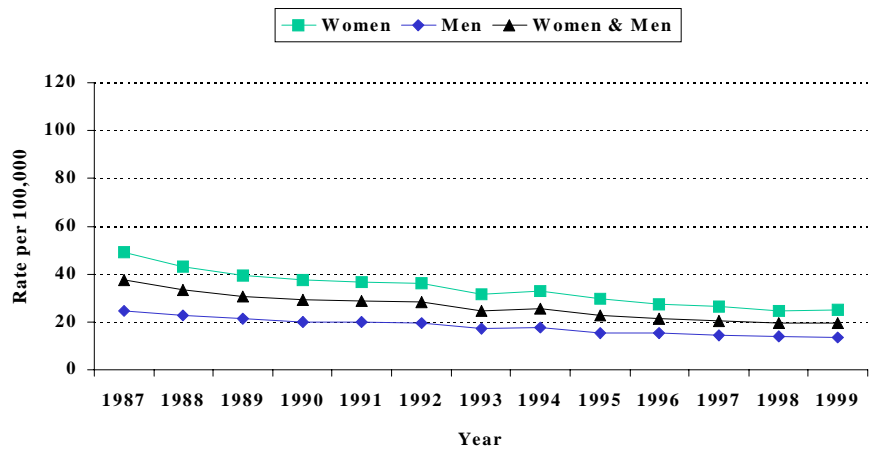
**Figure 4-2 Hospitalizations for anxiety disorders in general hospitals per 100,000 by contribution to length of stay and age group, Canada, 1999/2000**



Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

Overall, hospitalization rates for anxiety disorders decreased dramatically between 1987 and 1999, by 50% among women and 46% among men, with a combined reduction of 49% (Figure 4-3).

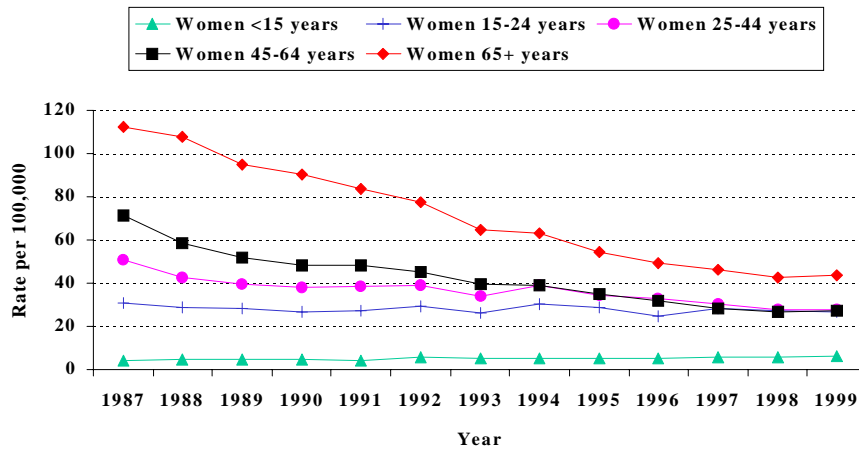
**Figure 4-3 Rates of hospitalization per 100,000 for anxiety disorders\* in general hospitals by sex, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)**



\* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

**Figure 4-4 Rates of hospitalization per 100,000 for anxiety disorders\* in general hospitals among women by age, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)**

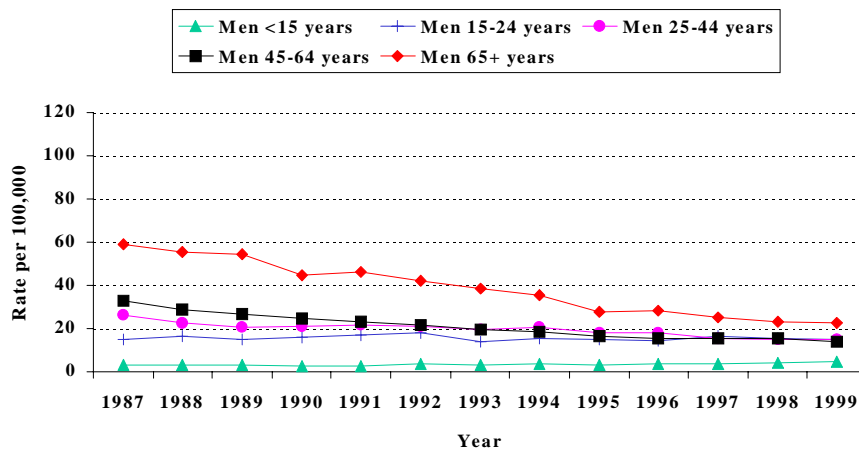


\* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

Between 1987 and 1999, hospitalization rates for anxiety disorders decreased by 45% among women aged 25-44 years, and by 62% in both the 45-64 and 65+ year age groups (Figure 4-4). Among girls under 15 years of age, even though hospitalization rates remained low, there was a 52% increase over the time period.

**Figure 4-5 Rates of hospitalization per 100,000 for anxiety disorders\* in general hospitals among men by age, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)**



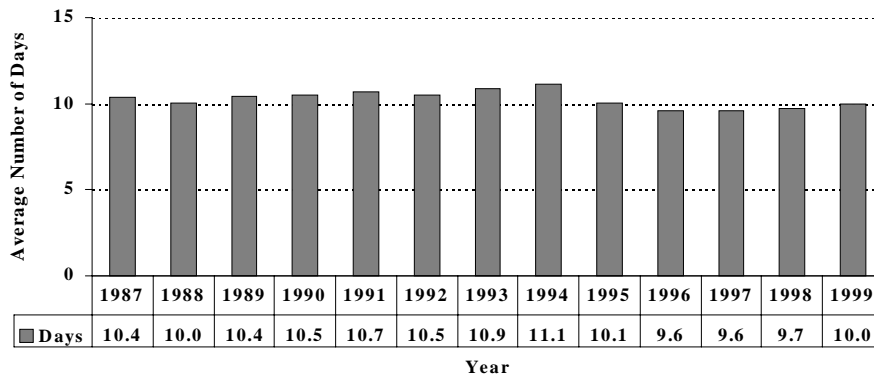
\* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

Among men, the reduction in hospitalization rates for anxiety disorder in each age group reflected the reduction reported by women: a reduction of 42% among men aged 25-44 years; 58% among men aged 45-64 years; and 61% among those 65+ years of age (Figure 4-5). For boys under the age of 15 years, rates increased by 49%.



**Figure 4-6 Average length of stay in general hospitals due to anxiety disorders\*, Canada, 1987/88-1999/2000**



The average length of stay in general hospitals due to anxiety disorders changed very little between 1987 and 1999 (Figure 4-6).

\* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

## Discussion of Hospitalization Data

Since most anxiety disorders are treated outside of hospitals, hospitalization data provide a very limited picture of these disorders in Canada. The data do support the view that anxiety disorders are associated with other health problems and it is usually these, rather than anxiety disorders, that lead to hospitalization.

The decrease in hospitalization rates for anxiety may be due to bed closures and a re-focusing of hospital services to ambulatory services. Hospitalizations for anxiety disorders in general hospitals among seniors have shown a dramatic decrease (much greater than any other age group) since 1987. This trend reflects the pattern for the same age group for major depression. Further research is needed to determine the reason for this trend: Is the prevalence of the disorders

decreasing? Have treatment methods changed? Have outcomes improved?

The higher rates of hospitalization for anxiety disorders in general hospitals among women than men prompt several research questions: Are anxiety disorders really more common among women? Are women more likely to seek treatment than men? Are women treated differently than men, with greater use of hospitalization?

Hospitalization rates for anxiety disorders have a pronounced peak among women between 15 and 19 years of age. This peak is also found in hospitalization rates for depression and personality disorders. This suggests that women in this age group are vulnerable to mental illnesses. The reasons for this phenomenon require further clarification through research.

## Future Surveillance Needs

Anxiety disorders are common among Canadians, causing not only a great deal of personal distress but also impairment of social and occupational functioning. Anxiety disorders can be effectively treated with a combination of medication and cognitive-behavioural therapy.

Existing data provide a very limited profile of anxiety disorders in Canada. The available hospitalization data need to be complemented with additional data to fully monitor these disorders in Canada. Priority data needs include:

- Incidence and prevalence of each of the anxiety disorders by age, sex and other key variables (for example, socio-economic status, education and ethnicity).
- Impact of anxiety disorders on the quality of life of the individual and family.
- Access to and use of primary and specialist health care services.
- Impact of anxiety disorders on the workplace and the economy.
- Stigma associated with anxiety disorders.
- Access to and use of public and private mental health services.
- Access to and use of mental health services in other systems, such as schools, criminal justice programs and facilities, and employee assistance programs.
- Treatment outcomes.
- Exposure to known or suspected risk and protective factors.

## References

- <sup>1</sup> American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4<sup>th</sup> edition. Washington, DC: American Psychiatric Association, 1994.
- <sup>2</sup> Offord DR, Boyle MH, Campbell D, Goering P, Lin E, Wong M et al. One-year prevalence of psychiatric disorder in Ontarians 15 to 64 years of age. *Can J Psychiatry* 1996;41:559-563.
- <sup>3</sup> Bland RC, Newman SC, Orn H. Period prevalence of psychiatric disorders in Edmonton. *Acta Psychiatr Scand* 1988;77(Suppl 338):33-42.
- <sup>4</sup> Dick CL, Bland RC, Newman SC. Epidemiology of psychiatric disorder in Edmonton: panic disorder. *Acta Psychiatr Scand* 1994;Suppl 376:45-53.
- <sup>5</sup> Eaton WW, Kessler RC, Wittchen HU, Magee WJ. Panic and panic disorder in the United States. *Am J Psychiatry* 1994;151:413-420.
- <sup>6</sup> Adult Mental Health Division, British Columbia Ministry of Health. *The Provincial Strategy Advisory Committee for Anxiety Disorders. A Provincial Anxiety Disorders Strategy*, 2002.
- <sup>7</sup> Millon T, Blaney PH, Davis R, ed. *Oxford Textbook of Psychopathology*. New York: Oxford University Press, 1999.
- <sup>8</sup> Antony MM, Swinson RP. *Anxiety disorders and their treatment: a critical review of the evidence-based literature*. Ottawa: Health Canada, 1996.