CHAPTER 1

Mental Illnesses in Canada: An Overview

Highlights

- Mental illnesses indirectly affect all Canadians through illness in a family member, friend or colleague.
- Twenty percent of Canadians will personally experience a mental illness during their lifetime.
- Mental illnesses affect people of all ages, educational and income levels, and cultures.
- The onset of most mental illnesses occurs during adolescence and young adulthood.
- A complex interplay of genetic, biological, personality and environmental factors causes mental illnesses.
- Mental illnesses can be treated effectively.
- Mental illnesses are costly to the individual, the family, the health care system and the community.
- The economic cost of mental illnesses in Canada was estimated to be at least \$7.331 billion in 1993.
- Eight-six percent of hospitalizations for mental illness in Canada occur in general hospitals.
- In 1999, 3.8% of all admissions in general hospitals (1.5 million hospital days) were due to anxiety disorders, bipolar disorders, schizophrenia, major depression, personality disorders, eating disorders and suicidal behaviour.
- The stigma attached to mental illnesses presents a serious barrier not only to diagnosis and treatment but also to acceptance in the community.

What Is Mental Illness?

Mental illnesses are characterized by alterations in thinking, mood or behaviour (or some combination thereof) associated with significant distress and impaired functioning over an extended period of time. The symptoms of mental illness vary from mild to severe, depending on the type of mental illness, the individual, the family and the socio-economic environment.

In the course of a lifetime, every individual experiences feelings of isolation, loneliness, emotional distress or disconnection at times. These are usually normal, short-term reactions to difficult situations, rather than symptoms of mental illness. People learn to cope with difficult feelings just as they learn to cope with difficult situations. In some cases, however, the duration and intensity of painful feelings or disorienting patterns of thought may interfere seriously with everyday life. Ordinary coping skills are overwhelmed, and people may need help in regaining balance and restoring their fullest functioning.

Mental health is as important as physical health to daily living. In fact, the two are intertwined. Individuals with physical health problems often experience anxiety or depression that affects their response to the physical illness. Individuals with mental illnesses can develop physical symptoms and illnesses, such as weight loss and blood biochemical imbalances associated with eating disorders. Feelings, attitudes and patterns of thought strongly influence

people's experience of physical health or illness, and may affect the course of illness and the effectiveness of treatment.

Mental illnesses may occur together. An individual can experience both depression and an anxiety disorder, for example. In addition, attempts to manage symptoms through alcohol or drugs may contribute to substance abuse for some individuals. In one US study, 54% of those with a lifetime history of at least one mental illness also had at least one other mental illness or addiction to substances.¹

Mental illnesses take many forms. This report includes:

- Mood disorders
- Schizophrenia
- Anxiety disorders
- Personality disorders
- Eating disorders

A chapter on suicidal behaviour is also included because, while such behaviour is not in itself a mental illness, it is highly correlated with mental illness and raises many similar issues.

There are other significant mental illnesses (such as addictions) and issues surrounding special populations (such as children, the elderly and individuals with developmental delay). This report does not directly address these, but they will be the focus of future work. Nonetheless, the principles discussed in this overview apply to all mental illnesses.

How Common Are Mental Illnesses in Canada?

While in the past some regional population studies have investigated mental illness, recent national data on the prevalence of mental illnesses are lacking. Statistics Canada's Canadian Community Health Survey (CCHS), which is conducting a population-based study on some mental illnesses, is expected to provide prevalence data in the near future.

Previous Canadian studies^{2,3} have estimated that nearly one in five Canadian adults will personally experience a mental illness during a 1-year period. Table 1-1 summarizes Canadian estimates of the prevalence of the mental illnesses included in this report. Based on estimates from the United States, personality disorders may affect 6% to 9% of the population.⁵

Table 1-1 Estimated One-Year Prevalence^a of Mental Illnesses among Adults in Canada

Mental Illness	Estimates ^{2,3} of One-Year Prevalence	
Mood Disorders Major (Unipolar) depression	4.1 – 4.6%	
Bipolar disorder	0.2 - 0.6%	
Dysthymia	0.8 - 3.1%	
Schizophrenia	0.3%	
Anxiety Disorders	12.2%	
Personality Disorders	_	
Eating Disorders⁴ – Anorexia, Bulimia	Anorexia	0.7% women 0.2% men
	Bulimia	1.5% women 0.1% men
Deaths from Suicide (1998)	12.2 per 100,000 (1998) 2% of all deaths 24% of all deaths among those aged 15-24 years 16% of all deaths among those aged 25-44 years	

^a Estimated percentage of the population who have the disorder during any 1 year period

Impact of Mental Illnesses

Who Is Affected by Mental Illnesses?

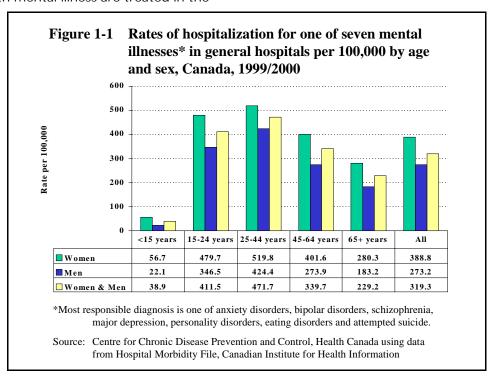
Mental illnesses affect people in all occupations, educational and income levels, and cultures. The distribution is not random or uniform; some mental illnesses are more prevalent in some population groups. However, no one is immune, and at some point in their lives, all Canadians are likely to be affected through a mental illness in a family member, friend or colleague.

Ideally, data from a population survey would provide information on the distribution of mental illnesses by age, sex and other characteristics. Statistics Canada's CCHS will provide some of these data in the future.

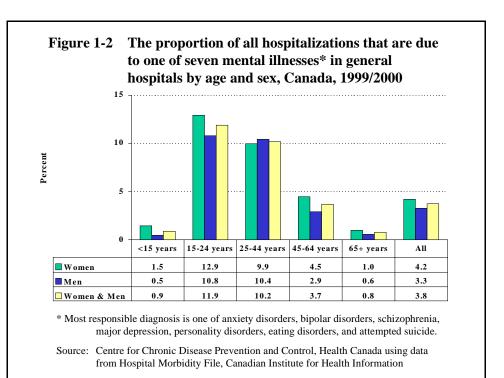
At the present time, hospitalization data provide the best available description of individuals with mental illness. These data have limitations, however, because most people with mental illness are treated in the

community rather than in hospitals, and many do not receive treatment at all. Many factors other than the prevalence and severity of illness can influence hospital admissions and lengths of stay. These limitations must be kept in mind, then, when interpreting the data presented in this report.

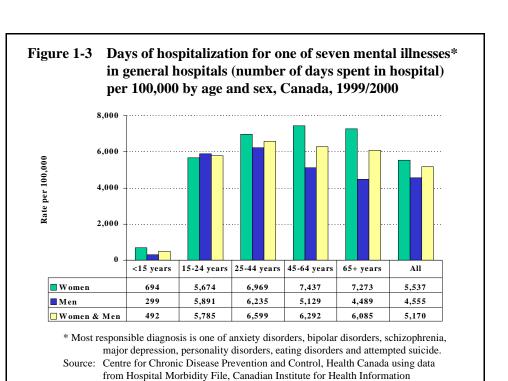
According to hospitalization data, mental illnesses affect all ages. In 1999, rates among women were higher than among men in all age groups (Figure 1-1). Nearly one-half of all admissions for one of the seven most common mental illnesses involved individuals between the ages of 25 and 44 years. Canadians between 45 and 64 years accounted for one-quarter (24%) of hospitalizations. The high rates of hospitalization among young adults aged between 15 and 24 years attest to the impact of mental illnesses on young people.



Overall, the conditions discussed in this report accounted for 3.8% of all general hospital admissions in 1999 (as the primary or most responsible diagnosis). The proportion among both men and women in the 15-24 and 25-44 year age groups was much higher, however: over 10% (Figure 1-2).



Although 1999 general hospital admission rates among women aged 65 years and over were much lower than among women aged 45 to 64 years, the days rate of hospitalization was almost the same (Figure 1–3). Hence, the older group stayed longer in hospital.



How Do Mental Illnesses Affect People?

The onset of most mental illnesses occurs during adolescence and young adulthood. This affects educational achievement, occupational or career opportunities and successes, and the formation and nature of personal relationships. The effect extends throughout an individual's life. The greater the number of episodes of illness that an individual experiences, the greater the degree of lasting disability. Receiving and complying with effective treatment and having the security of strong social supports, adequate income, housing and educational opportunities are essential elements in minimizing the impact of mental illness.

In developed countries, mental illnesses (major depression, bipolar disorder, schizophrenia, and obsessive-compulsive disorder) account for four of the 10 leading causes of disability.⁶

Suicide is a significant risk for individuals with some mental illnesses, such as major depression, bipolar disorder, schizophrenia and borderline personality disorder.

Mental illnesses have a significant impact on the family. To begin with, they may face difficult decisions about treatment, hospitalization, housing and contact with the family member with mental illness. The individuals and their families face the anxiety of an uncertain future and the stress of what can be a severe and limiting disability. The heavy demands of care may lead to burnout. Families sometimes fear that they caused the illness. The cost of medication, time off work, and extra support can create a severe financial burden for families. Both the care requirements and the stigma attached to

mental illness often lead to isolation of family members from the community and their social support network and may even contribute to the suicide of a family member.

Economic Impact

Mental illnesses also have a major impact on the Canadian economy in terms of productivity losses and health care costs. Measuring the economic impact of mental illnesses in Canada faces the challenge of a lack of comprehensive data on not only the use and cost of services, but also the economic impact of lost productivity through, for example, absence from work.

A 1993 study by Health Canada used several types of administrative and survey data, including physician billing data, hospitalization data, and data on self-reported activity restriction to estimate the cost of mental illnesses at \$7.331 billion in 1993 dollars. Some costs, such as loss of productivity by those too ill to complete surveys, could not be captured through the available data.

A later Canadian study drew upon the same data as well as data from the 1996/97 NPHS questions regarding depression and distress and self-reported use of health services; the authors estimated that the annual economic impact of mental health problems in Canada is \$14.4 billion.⁸ The authors of this study also believe the figure to be an under-estimate due to the limitations of their dataset.

While estimates will vary widely depending on what costs are included, it is clear that the economic burden of mental illnesses is enormous. Mental illnesses are a major contributor to hospital costs. According to the Canadian Institute for Health Information (CIHI), Canadian hospitals reported 199,308 separations related to mental illness in 1999/2000. General hospitals accounted for 86% and provincial psychiatric hospitals for 14%. In 1999/2000, 9,022,382 hospital days

were utilized by individuals with mental illnesses. These were almost equally distributed between provincial psychiatric and general hospitals. The overall average length of stay was 45 days. The average length of stay in psychiatric hospitals was 160 days compared to 27 days in general hospitals.

Stigma and Discrimination Associated with Mental Illnesses

The serious stigma and discrimination attached to mental illnesses are among the most tragic realities facing people with mental illness in Canada. Arising from superstition, lack of knowledge and empathy, old belief systems, and a tendency to fear and exclude people who are perceived as different, stigma and discrimination have existed throughout history. They result in stereotyping, fear, embarrassment, anger and avoidance behaviours. They force people to remain quiet about their mental illnesses, often causing them to delay seeking health care, avoid following through with recommended treatment, and avoid sharing their concerns with family, friends, co-workers,

employers, health service providers and others in the community.

The Canadian Alliance for Mental Illness and Mental Health (CAMIMH) has identified combating the stigma of mental illnesses and preventing discrimination against people with mental illnesses as one of the most pressing priorities for improving the mental health of Canadians. Educating the public and the media about mental illness is a first step toward reducing the stigma and encouraging greater acceptance and understanding of mental illness. Developing and enforcing policies that address discrimination and human rights violations provides incentives for change.

Causes of Mental Illnesses

Research suggests that mental illnesses are the result of a complex interaction of genetic, biological, personality and environmental factors; however, the brain is the final common pathway for the control of behaviour, cognition, mood and anxiety. At this time, the links between specific brain dysfunction and specific mental illnesses are not fully understood.9 In the chapters that follow reference is frequently made to both genetic endowment (e.g. inherited dysfunctions affecting brain chemistry) and the environment (e.g. external physical and psychosocial factors) when discussing the causes, treatment and prevention of mental illnesses. It is important not to over-interpret the available evidence about the role of either genetic or environmental factors in causing mental illnesses as much more research is needed to fully understand the cause of mental illness.

Most mental illnesses are found to be more common in close family members of a person with a mental illness, suggesting a genetic basis to the disorders. In some instances there is research evidence suggesting that particular genetic factors affecting brain chemistry contribute to the onset and progression of mental illness. However, there is also increasing evidence that long-term changes in brain function can occur in response to factors in the environment such as stimulation, experiences of traumatic or chronic stress, or various kinds of deprivation. In other words, the interaction between brain biology and lived experience appears to work both ways.

For reasons that may be biological, psychosocial, or both, age and sex affect

rates of mental illness. Environmental factors such as family situation, workplace pressures and the socio-economic status of the individual can precipitate the onset or recurrence of a mental illness. Lifestyle choices (e.g. substance abuse) and learned patterns of thought and behaviour can influence the onset, course and outcome of mental illness.

The interaction of physical and mental illness is similarly complex. There is evidence that mental illness can contribute to, result from, or share a common causal pathway with, physical illnesses such as cancer, heart disease and chronic obstructive pulmonary disease (COPD).

Since a great deal remains unknown about the respective roles and interactions of heredity and environment, brain dysfunction and lived experience, it is prudent to give them equal consideration.

Poverty and Mental Illnesses

The relationship between poverty and mental illnesses is complicated. Many studies have found that socio-economic status is inversely related to the development of mental illness. Two frameworks¹⁰ have been proposed to explain this relationship.

Indirect Association: Selection and Drift

The concept of selection proposes that certain individuals may be predisposed both to a mental illness and to lower expectations and ambition. These in turn, result in lower levels of educational and occupational achievement. On the other hand, milder undiagnosed mental illness makes it difficult

for individuals to succeed in the complex post-industrial society. Poverty is associated with a lower level of achievement in formal education. In this situation, then, there is an indirect association between poverty and mental illness.

"Drift" refers to the likelihood that those with a mental illness may drift into poverty as they have difficulty achieving and maintaining regular employment. This indirect association between poverty and mental illness may be mitigated by the "class" effect, whereby the networks of support around people in higher socio-economic classes prevent their drift into poverty.

<u>Direct Association:</u> Social Causation

Direct association between poverty and mental illness implies that the social experience of individuals who are poor increases the likelihood that they may develop a mental illness. For example, living in poverty may lead to a lack of opportunity and consequently to hopelessness, anger and despair. Poverty may also increase the risk of exposure to chronic or traumatic stress. When combined with a genetic predisposition, such factors may contribute to the development of mental illnesses. However, it is important to note that most people who are poor do not have mental illnesses. This suggests that if there is social causation, it involves additional factors.

Prevention and Treatment

Addressing the psychological and social determinants of mental health can promote mental health and perhaps prevent some mental illnesses.

At the level of the individual, such factors as secure attachment, good parenting, friendship and social support, meaningful employment and social roles, adequate income, physical activity, and an internal locus of control will strengthen mental health and, indirectly, reduce the impact or incidence of some mental health problems.

At a system level, strategies that create supportive environments, strengthen community action, develop personal skills and reorient health services can help to ensure that the population has some control over the psychological and social determinants of mental health.

Primary prevention of most mental disorders is still in early stages of development. Given the very consistent evidence that a history of severe trauma (such as physical or sexual abuse) is correlated with various mental health problems (dissociative disorders, personality disorders, addictions, post traumatic stress disorder (PTSD))^{11,12}, it is reasonable to conclude that preventing such traumas would prevent mental health problems. There is promising evidence that early teaching of cognitive-behavioural strategies can prevent or reduce the impact of anxiety disorders. ¹³

Most mental illnesses can be treated.

Treatment must reflect the complex origins of mental illnesses. A variety of interventions, such as psychotherapy, cognitive behavioural therapy, medication, occupational therapy and social work, can improve an individual's functioning and quality of life. Since mental illnesses involve disorders of brain functioning, medication often forms an important part of treatment.

Making the correct diagnosis and tailoring effective treatment to the individual's needs are essential components of an overall management plan. The active involvement of the individual in the choice of therapy and his/her adherence to the chosen therapy are critical to successful treatment. Sometimes, protecting the health of the individual may require the involvement of alternative decision-makers.

Treatment requires a variety of health and social service providers and volunteers organized into a comprehensive system of services. Service providers need to work as a team to ensure continuity of care.

For maximal effectiveness, a treatment system should provide all individuals with access to services where needed. When adequately resourced, treatment in the community has many advantages. The reforms of the mental health system of the 1960s and 1970s reduced the number beds in psychiatric institutions. Many individuals with a mental illness moved from chronic care facilities back into the community. Communities have faced major challenges in helping not only these individuals, but also those newly diagnosed with severe mental illness, to create a reasonable quality of life in the community. ¹⁴

Towards a Comprehensive System

There are many perspectives on what would constitute a comprehensive, effective mental health care system. The following are a number of elements that could be regarded as essential to such a system.

Education for Users of Services and Their Families

Individuals and families directly affected by mental illness need information about the signs and symptoms of these illnesses, sources of help, medications, therapy and early warning signs of relapse. Booklets, videotapes and family consultations can help to raise awareness. Outcomes may be improved by educating people in order to enhance their abilities to identify episodes in the earlier stages and to respond with appropriate actions.

Community Education

Dispelling the myths surrounding mental illness requires community education programs, including programs in schools. Such programs could help to reduce the stigma associated with mental illness and improve the early recognition of a problem. They may also be instrumental not only in encouraging people to seek care but also in creating a supportive environment for the individual.

Self-Help/Mutual Aid Network

Self-help (mutual aid) organizations and programs connect individuals to others facing similar challenges and provide support to both individuals and family members. Mutual aid groups have been found to empower individuals, in particular by providing

information, reducing isolation and teaching coping skills. They can work in effective partnerships with professional services if their strengths are recognized and the boundaries between formal health care and mutual aid are acknowledged.

Primary and Specialty Care

For most Canadians, the primary care physician is their first and often only contact with the health care system. Under-diagnosis, misdiagnosis and under-treatment of mental illness can result in poor outcomes. As a result, educating primary care physicians to properly recognize, diagnose and treat most mental illnesses, and to know when to refer the affected individuals to others, has a crucial role in maximizing the care that they provide. Training of family medicine residents in these topics is also essential. Creating and distributing consensus treatment guidelines is a first step to increase knowledge about mental illnesses, their diagnosis and treatment. Encouraging the use of these guidelines requires attention to the predisposing, enabling and reinforcing factors that exist in the clinical setting.

In the Shared Care Model of mental health care delivery, ¹⁵ psychiatrists and mental health professionals work with family physicians, providing support and counselling assistance in the daily clinic setting. Care providers and individuals requiring service have found this to be an effective model.

Other health professions, such as psychology and social work, also provide essential services to those with mental illness. An ideal primary care model would involve psychologists, social workers, family physicians, psychiatrists, nurses, pharmacists and others working in a collaborative and integrated system.

Hospitals

The hospital emergency department is a valuable resource for crisis interventions and may be an individual's first point of contact with the health care system. However, an ideal system would incorporate a more comprehensive crisis response system (see next section).

Hospitalization for a mental illness can assist in the diagnosis and can stabilize symptoms. It can provide a critical respite from the sometimes overwhelming challenges of daily living. The hospital also serves as a safe and supportive environment when the risk of suicide is high or judgement is severely compromised by the presence of mental illness. Ideally, multidisciplinary teams of physicians, nurses, occupational therapists, pharmacists, social workers and case managers work with the individual and family to identify and respond to the factors that influence symptoms. They also assist the individual and family in understanding and coping with their personal responses to the mental illness.

Although hospitalization provides important short-term respite and care, prolonged periods in hospital remove individuals from their normal environment and can weaken social connections, making re-integration into community living more challenging. Planning for the person's transition back into community living is an important role of the hospital team, which should be carried out in cooperation with care providers and service agencies in the community. An investment in community outreach programs, which support individuals in living productive, meaningful, and connected lives, is an essential cost-effective complement or alternative to hospital-based care.

Hospital-based programs targeted at

A Report on Mental Illnesses in Canada

improving independent living skills can help individuals acquire social, communication and functional living skills that improve their ability to cope with the demands of living.

<u>Crisis Response Systems/</u> <u>Psychiatric Emergency Services</u>

Many persons with severe mental illness are vulnerable to stress and face recurrent episodes of psychosis. Others experience crises due to poverty, recurrent unemployment, loss of housing or loss of support networks. Despite the differing origins and manifestations of these crises, hospital emergency rooms have been the primary venue for crisis management. Unfortunately, adequate follow-up has been difficult to ensure, and crisis prevention and early intervention are not addressed. Opportunities to link new users to appropriate resources, or to mobilize existing networks to help manage crisis situations, are missed.

Crisis response systems (CRS) have been proposed to provide a more effective approach. Rather than a single service response, a CRS encompasses a range of services integrated across various providers. With its expertise and range of options, a CRS is positioned to resolve crises using minimally intrusive options, particularly for noncompliant persons. A CRS offers backup to community providers, including mental health personnel, family practitioners and police; it provides an important community outreach mechanism by connecting first time users to appropriate services; and it serves as a valuable community relations tool by reassuring members of the community, such as landlords, that persons with severe mental

illness will be supported during crises.

Crisis-specific functions include:

- Medical services, including inpatient services when other options have been exhausted:
- Short-term residential placements for crisis stabilization in protective and supportive settings;
- Mobile crisis outreach which brings assistance to virtually any site in the community where crisis is occurring;
- Walk-in crisis intervention services;
 and
- Telephone crisis services. 16

<u>Case Management/</u> <u>Community Outreach Programs</u>

Case management programs (sometimes referred to as community outreach) come in many forms, but generally consist of multidisciplinary teams that share the clinical responsibility for each individual receiving care in the community. A team aims to help individuals with mental illness to achieve the highest level of functioning possible in the least restrictive setting. To this end the team works to ensure compliance with treatment (particularly for those with schizophrenia and other psychotic illnesses) and, consequently, improve functioning in order to reduce the need for hospital readmission. The program also focuses on obtaining and coordinating needed services from a variety of health and social agencies; resolving problems with housing, employment, leisure, relationships and activities of daily living; and providing social skills training to improve social functioning.

Key features of good case management include:

- A caring, supportive relationship between the team and the individual;
 and
- Emphasis on flexibility and continuity of care - that is, supports provided as long as needed, across service and program settings, even when the person's needs change over time.

A model of case management that has been positively evaluated is Assertive Community Treatment (ACT). The ACT team has a high staff/patient ratio and provides the individual with access to support when and where needed - 24 hours a day, 7 days a week. An individual who is at high risk of relapse and hospitalization needs this type of support, especially when family or social support is limited.¹⁷

Workplace Supports

Aside from the home, the workplace is the primary location of adult life. As such, it plays an influential role in an individual's health and well-being. Much of the impact of mental illnesses in the workplace is reflected in poor productivity and increased use of sick leave. Stigma surrounds people with mental health difficulties, and the recovery process is often misunderstood. Employers need to demonstrate that they do not discriminate and are fair in their policies and procedures in dealing with mental health problems.¹⁸

The workplace has great potential to develop and maintain a healthy work environment by educating employers and employees in the area of mental health issues and providing supportive reintegration into the work environment for those experiencing mental illness. Vocational rehabilitation supports permanent competitive employment - that is, the ability to hold a regular job in the community.

It is important to address the high levels of unemployment and poverty found among people with mental illness and to support their desire for work. Consumer/survivor-run businesses have proven effective in restoring employment to individuals with mental illnesses.

Other Supports

A variety of other programs and services - such as long-term care residences, community rehabilitation, special needs groups, specialty services (sleep laboratory, psycho-pharmacological consultation), and community crisis centres - can contribute to the diagnosis, treatment and integration of individuals into the community and the improvement of their quality of life.

Other supports are required to ensure adequate income, safe housing and opportunities for regular education for these individuals with mental illnesses.

The Best Practices in Mental Health Reform documents produced under the aegis of the Federal/Provincial/Territorial Advisory Network on Mental Health provide more detailed information and recommendations about specific components of a comprehensive, effective mental health care and support system. They also discuss system-wide strategies that foster the widespread implementation of effective services and supports for people with serious and chronic mental illness. These documents are available on Health Canada's web site at: http://www.hc-sc.gc.ca/hppb/mentalhealth/service_systems.htm.

Future Directions

As a group, mental illnesses present an important public health challenge for Canada. All sectors of society and all levels of government have roles to play in responding adequately to this challenge. The Canadian Alliance for Mental Illness and Mental Health (CAMIMH), a coalition of non-governmental organizations that includes representation from the voluntary, professional, consumer and family sectors, has proposed a national action plan to guide the national response to mental illnesses. (See Appendix B.) CAMIMH views this as a blueprint that will be expanded upon and further developed in collaboration with other stakeholders.

A health problem of the scope and importance of mental illness requires a comprehensive surveillance system to monitor progress in achieving the goals of the national action plan. A workshop held in September 1999, co-sponsored by Health Canada and CAMIMH, developed a comprehensive indicator framework for a Mental Illnesses and Mental Health Surveillance System. This report responds to the recommendations from the workshop to collate existing data in order to begin the process of creating a picture of mental illness in Canada.

As will be seen in the following chapters, hospitalization and mortality data provide a partial picture of mental illness in Canada. Since most people do not die from mental illnesses and most care is provided outside of

the hospital setting, however, the information that these data provide is limited. Concern also exists about the quality and the scope of the hospitalization and mortality data.

The CCHS-Cycle 2 – Mental Illnesses Survey, to be completed by Statistics Canada in 2003, will provide new data on mental illnesses, including prevalence, quality of life, stigma and the use of health services.

The Development of Indicators for Mental Health and Addiction Service project at the Canadian Institute for Health Information (CIHI) will provide a report on inpatient hospital indicators that could be calculated using existing data.

The linking of provincial databases, such as physician billing, hospitalization, pharamacare and mortality, would also provide valuable information for a mental illness surveillance system. In all steps to improve surveillance, the protection of private information is a critical concern.

While the future holds the promise of improved data for mental illness surveillance in Canada, much more needs to be done. Each chapter in this report focuses on a specific mental illness or group of disorders, using existing hospitalization data and identifying priority data needs for surveillance. The collection, analysis and dissemination of this data will then serve to guide decisions in policies and services aimed at improving the quality of life of people who live with mental illnesses.

Resources

A list of Web-sites of national organizations for mental illnesses.

- Alzheimer Society of Canada: www.alzheimer.ca
- Canadian Association for the Mentally III: www.cami.org
- Canadian Association of Social Workers: www.casw-acts.ca
- Canadian Health Network: www.canadian-health-network.ca/1mental_health.html
- Canadian Institute for Health Information: www.cihi.ca
- Canadian Institutes of Health Research Institute of Neurosciences, Mental Health and Addiction: www.cihr-irsc.gc.ca/institutes/inmha
- Canadian Medical Association: www.cma.ca
- Canadian Mental Health Association: www.cmha.ca.
- Canadian Psychiatric Association: www.cpa-apc.org
- Canadian Psychiatric Research Foundation: www.cprf.ca
- Canadian Psychological Association: www.cpa.ca
- Centers for Disease Control and Prevention: www.cdc.gov
- Centre for Addiction and Mental Health: www.camh.net
- The College of Family Physicians of Canada: www.cfpc.ca
- Health Canada, Mental Health: www.hc-sc.gc.ca/hppb/mentalhealth/mhp/index.html and www.hc-sc.gc.ca/english/lifestyles/mental_health.html
- The Mood Disorders Society of Canada: www.mooddisorderscanada.ca
- The National Eating Disorder Information Centre: www.nedic.ca
- National Network for Mental Health: www.nnmh.ca
- Schizophrenia Society of Canada: www.schizophrenia.ca
- Statistics Canada: www.statscan.ca
- Canadian Association of Occupational Therapists: www.caot.ca/index.cfm

References

- ¹ Kessler RC, Ahangang Z. The prevalence of mental illness. Horwitz AV, Sheid TL, ed., A Handbook for the Study of Mental Health Social Context, Theories and Systems, (Ch. 3). Cambridge University Press, 1999.
- ² Offord DR, Boyle MH, Campbell D, Goering P, Lin E, Wong M, Racine YA. One-year prevalence of psychiatric disorder in Ontarians 15 to 64 years of age. Can J Psychiatry 1996;41:559-563.
- ³ Bland RC, Newman SC, Orn H. Period prevalence of psychiatric disorders in Edmonton. Acta Psychiatr Scand 1988;77(Suppl 338):33-42.
- ⁴ Woodside DB, Garfinkel PE, Lin E, Goering P, Kaplan AS, Goldbloom DS et al. Comparisons of men with full or partial eating disorders, men without eating disorders, and women with eating disorders in the community. Am J Psychiatry 2001;158:570-574.
- ⁵ Narrow WE, Rae DS, Robins LN, Regier DA. Revised prevalence estimates of mental disorders in the United States. Arch Gen Psychiatry 2002;59:115-123.
- ⁶ Murray CJL, Lopez AD, Eds. Summary: The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Cambridge, MA: Harvard School of Public Health on behalf of the World Health Organization and the World Bank, Harvard University Press, 1996.
- ⁷ Moore R, Mao Y, Zhang J, Clarke K. Economic Burden of Illness in Canada, 1993. Ottawa: Health Canada, 1997.
- ⁸ Stephens T, Joubert N. The economic burden of mental health problems in Canada. Chronic Diseases in Canada 2001:22:1:18-23.
- Schwartz S. Biological approaches to psychological disorders. Horwitz AV, Sheid TL, ed., A Handbook for the Study of Mental Health - Social Context, Theories and Systems, (Ch. 4). Cambridge University Press, 1999
- ¹⁰ Eaton WW, Muntaner C. Socioeconomic stratification and mental disorder. Horwitz AV, Sheid TL, ed., "A Handbook for the Study of Mental Health Social Context, Theories and Systems, (Ch. 14). Cambridge University Press, 1999: 259.
- ¹¹ Rosenberg SD, Drake RE, Mueser K. New directions for treatment research on sequelae of sexual abuse in persons with severe mental illness. Community Ment Health J. 1996 Aug;32(4):387-400.
- ¹² Leverich GS, McElroy SL, Suppes T, Keck PE, Denicoff KD, Nolen WA, Altshuler LL et al. Early physical and sexual abuse associated with an adverse course of bipolar illness. Biol Psychiatry 2002 Feb 15;51(4):288-97.
- ¹³ Dadds MR, Spence SH, Holland DE, Barrett PM, Laurens KR. Prevention and early intervention for anxiety disorders: a controlled trial. J Consult Clin Psychol 1997;65:627-35.
- ¹⁴ Canadian Alliance on Mental Illness and Mental Health. A Call for Action: Building Consensus for a National Plan on Mental Illness and Mental Health, 2000.
- ¹⁵ Kates N. Shared mental health care: the way ahead. Can Fam Physician, 2002 May;48:853-5.
- ¹⁶ Adapted from "Crisis response systems/psychiatric emergency services," in Review of Best Practices in Mental Health Reform, Federal/Provincial/Territorial Advisory Committee on Mental Health, 1997, available online at http://www.hc-sc.gc.ca/hppb/mentalhealth/pubs/bp_review/e_index.html.
- ¹⁷ For more information about case management and ACT, see "Case management/assertive community treatment" in Review of Best Practices in Mental Health Reform, Federal/Provincial/Territorial Advisory Committee on Mental Health, 1997, available online at http://www.hc-sc.gc.ca/hppb/mentalhealth/pubs/bp_review/e_index.html.
- ¹⁸ Gabriel P, Liimatainen M. Mental Health in the Workplace. Geneva: International Labour Office, 2000.