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Kerry A Collins

Henny A Westra

David J A Dozois
ddozois@uwo.ca

David D Burns

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Gaps in Accessing Treatment for Anxiety and Depression:

Challenges for the Delivery of Care

Kerry A. Collins, Ph.D. and Henny A. Westra, Ph.D.

London Health Sciences Centre;

David J. A. Dozois, Ph.D.

University of Western Ontario

David D. Burns, MD.

Stanford University

Name and Address of Author for Correspondence:

Dr. Kerry Collins
Child and Adolescent Centre,
London Health Sciences Centre,
346 South Street, London, Ontario,
Canada, N6A 4G5

Phone: (519) 685-8500 ext. 74778

Fax: (519) 667-6814

Email: kerry.collins@lhsc.on.ca

Abstract

Epidemiological studies have identified high prevalence rates of anxiety and depression in North America (e.g., Kessler et al., 1994). However, only a small percentage of these individuals access effective treatment. The undertreatment of anxiety and depression is a major public health issue, and is associated with significant personal, social, and economic burden. This article describes the existing discrepancy between prevalence of anxiety and depression and access to effective treatment for adults and children, the contributors to this discrepancy, and suggests various means through which access to effective treatment may be enhanced. We begin with a brief overview of the prevalence and associated personal, societal and systemic burdens of anxiety and depression. This is followed by a review of current rates of access to treatment and possible individual, provider and systemic barriers to accessing treatment. Recommendations for bridging the gap between the high rates of these disorders and limited accessibility of effective care are then presented.

Gaps in Accessing Treatment for Anxiety and Depression:

Challenges for the Delivery of Care

Epidemiological studies have identified that anxiety and depression are highly prevalent in North American society (e.g., Blazer, Kessler, McGonagle, & Swartz., 1994; Kessler et al., 1994; Regier et al., 1993) and associated with a significant burden personally, socially, and economically (Greenberg et al., 1999; Katzelnick & Greist, 2001). In fact, it is expected that depression will become the second leading cause of disability worldwide over the next decade (Murray & Lopez, 1996) and rank second as the most costly of all illnesses by 2010 (World Health Organization, 1990). Anxiety disorders are the most prevalent of all mental health problems and are estimated to affect 25% of the population over a lifetime (Blazer et al., 1994; Kessler et al., 1994). Despite the scope and severity of these problems, the vast majority of adults and children with anxiety and/or depression do not access effective treatment. Dissemination of and access to effective treatments for adults and children with these disorders is imperative, within the present health care system, for improving the quality of life for individual sufferers, as well as reducing the societal costs and economic burden incurred by these disorders.

The purpose of the article is to review the rates of access to effective treatment among those individuals with anxiety and depression, and to highlight the many barriers regarding accessibility of treatment. Our evaluation is limited to studies of depression and anxiety disorders in light of the high prevalence of these disorders in our society. However, it is important to note that the issues identified apply to the treatment of other mental health disorders. From the review, we suggest multiple directions that can be pursued to bridge the gap between disorder and effective treatment. To contextualize these issues, the prevalence of anxiety and depression in adults and children is detailed briefly, to draw attention to the severity and breadth of this

public health issue.

Prevalence, Course, and Burden of Anxiety and Depression

Prevalence. Numerous epidemiological studies have demonstrated the high occurrence of anxiety and depression among children and adults (for a review see Dozois, Dobson, & Westra, 2004). The National Comorbidity Survey (NCS; Blazer et al., 1994; Kessler et al., 1994) estimated the cumulative one-year prevalence rate of anxiety disorders at 17% and 11% for mood disorders, with lifetime prevalence at 25% and 17%, respectively. In the Epidemiologic Catchment Area study (Eaton & Kessler, 1985; Eaton et al., 1989; Regier et al., 1988; Regier et al., 1993), the 6-month prevalence rates for adults ranged from 6.6% to 14.8% across the combined anxiety and somatoform categories, with a lifetime prevalence of major depression estimated at 6.3%. These figures are likely an underestimate of the prevalence of these disorders given that rates of subclinical symptom presentations are high and represent an important risk factor for the development of later clinical levels of these disorders. For example, up to 30% of adolescents will exceed the clinical cutoffs on self-report indices of depression (Hammen & Rudolph, 1996) and the first major depressive episode is usually preceded by a series of subthreshold episodes (Coyne, Pepper, & Flynn, 1999).

Anxiety, and secondly depression, are also the most prevalent psychiatric problems in children and the most common reasons for referral to mental health services (Beidel, 1991). The overall prevalence rate of anxiety disorders in children and adolescents has been estimated at approximately 10% (Breton et al., 1999; McGee et al., 1990) and the rate of major depressive disorder in children and adolescents, collapsed across ages, ranges between 6% and 8% (Hammen & Rudolph, 1996). The prevalence of depression may also be increasing, especially among children and adolescents (Garber & Flynn, 2001; Hammen & Rudolph, 2003) and it has

been suggested that, by 18 years of age, as many as 25% of adolescents have had at least one depressive episode (Lewinsohn, Rohde, Seeley, & Fischer, 1993).

Course. Anxiety and depression tend to be chronic and recurrent. Research has shown that many anxiety disorders begin early, with the expected course of illness marked by high rates of relapse and recurrence (Durham, Allan, & Hackett, 1997; Moreno & Delgado, 2000) and low probability of spontaneous remission (Keller et al., 1994). Only 17% and 39% of individuals with panic disorder with agoraphobia and panic disorder, respectively, show remission at one-year follow-up (Keller et al., 1994). Moreover, the cumulative probability of remission is only .21 for GAD and .16 for social phobia after two years (Hirschfield, 1996). While longitudinal studies of children have indicated high rates of remission for anxiety disorders (e.g., Angold & Costello, 1995; Last, Perrin, Hersen, and Kazdin, 1996), other investigations suggest that children who suffer anxiety disorders have a higher probability of developing subsequent depression, social phobia, and panic disorder (Biederman et al., 1993; Black & Robbins, 1990; Moreau & Follett, 1993). Thus, it is apparent that the majority of adults and children with anxiety disorders tend to endure a persistent and recurrent course.

Research has also clearly demonstrated a chronic and recurrent course for depression. The first onset of major depressive disorder has been identified to occur in mid- to late-adolescence (Burke, Burke, Regier, & Rae, 1990; Hammen, 2001), and depressive disorders can persist for years (Duggan, 1997; Hoencamp, et al., 2001; Kessler, DuPont, Berglund, & Wittchen, 1999; Kupfer, Frank & Wamhoff, 1996; Sherbourne et al., 2001). Between 50% and 85% of depressed patients experience multiple episodes (Coyne et al., 1999), with an average of five episodes during the course of their life (Gotlib & Hammen, 1992). In fact, at the present time, the best predictor of future depression is past depression (e.g., Lewinsohn, Hoberman, & Rosenbaum,

1988). In addition, subclinical depression results in considerable impairment, is associated with increased use of nonpsychiatric health care, and is related to elevated risk for more severe psychiatric conditions (Boulenger et al., 1997; Gotlib & Beach, 1995; Wittchen & Essau, 1993).

Burden. The debilitating nature of anxiety and depression becomes more apparent when the personal, social, and economic burdens of these problems are considered. For instance, children with anxiety disorders have been found to display poorer academic performance (Dweck, 1999), a higher probability of being expelled, school absenteeism, and running away from home (Katzelnick & Greist, 2001), as well as family stress (Costello, 1989; Ezpeleta et al., 2001). Among adults, anxiety disorders have been associated with unemployment (Leon, Portera, & Weissman, 1995), work absenteeism, and financial disability (Katzelnick & Greist, 2001), restrictions in partner relationships, educational/career development, and family interactions (Schneier et al., 1994). Family members of individuals with obsessive-compulsive disorder or generalized anxiety disorder, for instance, also report substantial disruptions in family routine, leisure activities, and interpersonal interaction, as well as increased financial difficulties (Chakrabarti, Kulhara, & Verma, 1993; Cooper, 1996). Anxiety disorders have been estimated to cost 42.3 billion dollars annually in the United States, with the majority of costs incurred for nonpsychiatric medical service utilization (Greenberg et al., 1999). As just one example, up to 40% of high utilizers of medical care have a lifetime history of generalized anxiety disorder (Katon, 1996).

The symptomatology of depressive disorders impacts most aspects of everyday functioning (Judd et al., 2000; Lecrubier, 2001) including disruption in occupational functioning (Broadhead, Blazer, George, & Tse, 1990; McQuaid et al., 1999), troubled parent-child relationships (Ingram, 2001), marital distress (Coyne, Gallo, Klinkman, & Calarco, 1998; Dudek

et al., 2001), and other interpersonal difficulties (Joiner & Coyne, 1999; Lewinsohn, Gotlib, & Seeley, 1997). Moreover, those with a depressive episode in adolescence show a pattern of significant long-term difficulties including persistent emotional disorder, educational and employment problems (Fergusson & Woodward, 2002). The direct and indirect monetary costs of depression have been estimated to be a substantive 44 billion dollars each year in the United States (Cicchetti & Toth, 1998; Finkelstein et al., 1996; Greenberg, Stiglin, Finkelstein, & Berndt, 1993).

The scope, recurrence, and personal, societal and economic burden of anxiety and depression in the general population suggest that the availability and efficacy of treatments for these problems is an issue of critical importance to public health. We now turn our attention to summarizing epidemiological studies on rates of access to care for anxiety and depression.

Rates of Access to Mental Health Care in Anxiety and Depression

The vast majority of individuals who suffer from anxiety and depression do not access treatment for these problems (e.g., Greenberg et al., 1993; Ohayon, Shapiro, & Kennedy, 2000). This fact is particularly unfortunate given that highly effective interventions for these problems have been developed over the past two decades. In general, epidemiological studies reveal significant underutilization of mental health care among those with mental health problems. The NCS for example identified that only 20% of those with a 12-month psychiatric disorder obtained any professional treatment in the past year (Kessler et al., 1994) and only 40% of those with a lifetime disorder ever obtained any professional assistance (Wang, Demler & Kessler, 2002). In a survey of over 3000 residents in the United States, Wang, Berglund and Kessler (2000) reported that only 14.3% of those with a psychiatric disorder within the past twelve months obtained treatment consistent with evidence-based care recommendations. Comparable

rates have been observed in Canada, as a national mental health survey (Statistics Canada, 2002) reported that only 32% of individuals with mental health problems had contact with a health care professional in the past year. Teenagers and young adults were found to be the least likely age group to seek mental health resources, despite having a higher likelihood of suffering mental health problems.

In regard to rates of help-seeking for depression and anxiety, a community survey of a major Canadian city (Ohayon et al., 2000) revealed that only 30% of adults with a current mood disorder, and merely 11% of those with a current anxiety disorder, received some form of treatment. Moreover, only 5% and 1.4% of individuals with a mood and anxiety disorder, respectively, had ever consulted with a psychiatrist; and only 13% (mood disorder) and 9% (anxiety) of those diagnosed were on psychotropic medication. As these figures suggest, anxiety disorders, relative to depression, may be at particular risk for undertreatment. Research has shown that the perceived need for help is lower among individuals with anxiety disorders compared with those with mood disorders (Mojtabai, Olfson, & Mechanic, 2002), and symptoms of depression are the leading reason for pursuit of mental health services (Zimmerman & Mattia, 2000). Yet, most studies also indicate that the majority of individuals with depression do not receive treatment (Mojtabai et al., 2002; Ohayon et al., 2000; Young, Klap, Sherbourne, & Wells, 2001).

Although it might be tempting to conclude that specialty mental health care is effectively being reserved for the most severe cases, epidemiological data do not support this conclusion, as only 25% (Wang et al., 2000) to 40% (Kessler et al., 1994) of those with severe mental health problems access specialty mental health services. And only 15.3% of respondents with a serious mental illness are estimated to receive minimally adequate treatment (Wang et al., 2002).

The situation of gross undertreatment of anxiety and depression is paralleled among children with estimates of fewer than 20% of those requiring mental health services receiving the necessary intervention (McGee et al., 1990; Tuma, 1989). Even though 32% of a large community sample of over 1,200 children (aged 9 to 17) had a psychiatric diagnosis, only 36.5% of those used mental health services and only 25% of those with severe impairment received such services (Leaf et al., 1996). Similarly, Wu et al. (2001) found that 36% of children and adolescents (aged 9-17) with depression never sought professional assistance in a New York community. These results are consistent with findings from a pediatric setting, where 55% of parents with a child found to carry a diagnosed psychiatric disorder, failed to discuss behavioral/emotional concerns with their pediatrician (Briggs-Gowan et al., 2000) and fewer than half of parents of children with a psychiatric disorder consult their primary care provider about these problems (Dulcan et al., 1990; Leaf et al., 1996). Parents of affected children are also undertreated. For example, Ferro, Verdeli, Pierre, and Weissman (2000) found that whereas 14% of mothers who brought their depressed children in for treatment were themselves currently depressed (and 59% were subthreshold for depression), only 5% were currently receiving any form of treatment.

Delays in help-seeking are also common and exacerbate the personal and societal burden associated with these mental health difficulties. In a large retrospective study, Christiana et al. (2000) reported average delays of 8 years for seeking professional treatment among individuals with anxiety and mood disorders. Moreover, time to help-seeking was inversely related to age across all cohorts, suggesting that the longer such mental health difficulties are undetected, the less likely an individual will obtain treatment. Among anxiety and mood problems, treatment-seeking delays tend to be longest for generalized anxiety disorder (up to 14

years from the time of onset; Kessler, Olfson, & Berglund, 1998). This delay in treatment, coupled with the underutilization of mental health services, and the overutilization of medical services, results in protracted personal and economic costs.

Moreover, even when patients do present for treatment, the range of effective treatment options for anxiety and mood disorders is typically not presented to patients. For example, among panic disorder, which is more frequently detected than other anxiety disorders (Kessler et al., 1998), Roy-Byrne et al. (1999) found that only 22% received adequate and appropriate medications and only 12% received Cognitive Behavioural Therapy (CBT), the most consistently supported effective intervention for this disorder (see Barlow, 2002). This is consistent with findings of the Harvard Anxiety Research Program, which reported that less than 20% of anxiety patients were receiving CBT (Goisman, Warshaw, & Keller, 1999).

Most patients who do present for treatment are managed with pharmacotherapy alone (e.g., Olfson et al., 2002; Wang et al., 2000) rather than with other evidence-based psychotherapies. This practice occurs despite numerous reviews and meta-analyses supporting the efficacy of psychotherapy compared to no-treatment and placebo control groups (e.g., Howard, Kopta, Krause, & Orlinsky, 1986; Lambert & Bergin, 1994). In a survey of over 3,500 members of mental health patient advocacy groups for mood and anxiety disorders, 88% reported receiving a treatment recommendation of pharmacotherapy, while only 39% received recommendations for psychotherapy (Wang et al., 2000). Guidelines for primary care providers recommend psychotherapy only after failure on two antidepressant medications (Agency for Health Care Policy and Research, 1993). This is particularly disturbing in view of the consistent findings demonstrating poor breadth and maintenance of gains in pharmacotherapy (anxiety: Liebowitz et al., 1999; depression: Fava et al., 1998), greater undesirable side effects with psychotropic

medications (e.g. Healy, 2003), and greater treatment adherence problems in pharmacotherapy (Wang et al., 2000) and the strong data supporting the prophylactic benefits of psychotherapy. For example, the use of CBT in depression has been shown to significantly reduce relapse rates over pharmacotherapy alone (30% relapse in CBT versus 60% in pharmacotherapy; Gloaguen et al., 1998). CBT has also yielded greater response rates relative to pharmacotherapy in the treatment of panic disorder, social anxiety, generalized anxiety disorder, and post-traumatic stress disorder (Barlow et al., 2000; Gould, Otto, & Pollack, 1995; Gould, Otto, Pollack, & Yap, 1997). CBT also appears to be a better tolerated treatment, as evidenced by lower dropout and treatment refusal rates than pharmacotherapy (Gould et al., 1997; Hofmann et al., 1998). Moreover, many patients are adverse to medication treatment of anxiety and depression. For example, while the number of general community respondents indicating they would be willing to take medication for depression increased from 12% in 1986 to 28% in 2000 (Roper Reports, 1986; Langer, 2000; as cited in Olfson et al., 2002), the number who would *not* be willing was more than two-thirds. In addition, psychotherapy can be brief and as such has also been found to be more cost-effective in the long-term than pharmacotherapy (Hollon, Thase, & Markowitz, 2002; Otto, Pollack, & Maki, 2000).

While a substantial body of research supports the efficacy of psychotherapy for anxiety and depression (e.g., Chambless et al., 1996; Clark, 1997; Ladouceur et al., 2000; Lambert & Bergin, 1994; Westra & Stewart, 1998), these treatments are highly underutilized and perhaps increasingly so. For example, a recent study reported a three-fold increase in the number of people receiving outpatient treatment for depression from 1987 to 1997 (Olfson et al., 2002). While promising, the number of psychotropic medication prescriptions among those treated increased from 45% to 79%, while treatment with psychotherapy declined from 71% to 60%

over this same time period. This finding may be largely attributable to an increase in primary care treatment of depression. When one considers the highly recurrent nature of depression (Kupfer, Frank & Wamhoff, 1996) and the low probability of spontaneous remission in anxiety disorders (Keller et al., 1994), psychotherapies, especially brief treatments, represent important and cost-effective options for anxiety and depression management. As such, there is a great need for increased awareness of effective treatments among patients and providers alike, and increased availability of such treatments.

It is evident from this review that a gross undertreatment of anxiety and depressive disorders currently exists among adults and children. Only a minority of afflicted individuals access effective treatment and there are numerous personal, provider, and systemic barriers that contribute to this treatment gap. We now turn to a discussion of the various possible barriers that may account for the underutilization of treatment for anxiety and depression.

Barriers to Accessing Effective Treatment for Anxiety and Depressive Disorders

Barriers to obtaining effective mental health services include individual factors (e.g., help-seeking behavior), provider factors (e.g., detection), and systemic factors (e.g., availability of effective treatment), which will each be described in turn. Giel, Koeter, and Ormel (1990) have identified the following levels of filtering to occur in the course of an individual obtaining treatment: Level 1, individual factors (the person in the community makes a decision to consult with a professional); Level 2, provider factors (the person presents to a general practitioner and the physician has to identify the problem); Level 3, systemic factors (the physician has to help the patient access mental health care); and Level 4, the patient obtains effective mental health treatment. In light of the structure of the present health care system, it is apparent that the primary care physician plays a central role in this filtering process. The variables that influence

each of these levels are discussed below and summarized in Table 1.

Barriers at the Individual Level

Health care seeking is a multi-dimensional phenomenon (Strosahl, 2002), with numerous factors likely influencing an individual's decision to seek professional assistance. These include a willingness to disclose problems, fear of stigma and embarrassment, lack of time for treatment, negative stereotypes of treatments, presence of comorbid medical problems, cultural factors, demographic and geographic variables (Christiana et al., 2000; Giel et al., 1990; Hunter & Peterson, 2001). Other factors likely to influence treatment seeking may include an individual's perception that such treatment is likely to be of benefit (Dozois & Westra, 2003) and financial costs associated with treatment, particularly in the United States where there is a nonpublic health care system. Christiana et al. (2000) surveyed members of patient mental health advocacy groups and found that the most common factors associated with delays in treatment seeking were a desire to handle the problem on one's own and lack of awareness of available treatments. Mojtabai et al. (2002) argued that many people do not seek assistance because they view their problems as transient and minimize their severity. Moreover, the degree of individual distress seems to contribute to seeking mental health care (Giel et al., 1990). Research on anxiety disorders, for example, has suggested that the severity and presence of comorbid disorders predicts help-seeking behavior (Goodwin et al., 2002; Koenen et al., 2003). In a national sample of 2,713 individuals with PTSD, the level of interference of anxiety symptoms and the comorbid diagnosis of panic disorder were related to treatment seeking (Koenen et al., 2003).

The probability of help-seeking behavior for anxiety and depressive disorders has also shown to be highest during the first year of onset and declines thereafter (Kessler et al., 1998), supporting the importance of early detection. However, even when individuals do seek treatment,

numerous factors may influence their commitment and response to treatment. In a study of treatment initiation for adults with social anxiety (Colesa, Turkb, Jindraa, & Heimberg, 2002), only 15% of individuals who made telephone inquiries to a specialty mental health clinic actually accessed treatment. Factors associated with pre-treatment attrition included whether the individual scheduled an initial interview, attended the initial interview, and starting treatment after receiving the diagnosis of social anxiety disorder. Readiness for change is an additional individual difference variable being investigated more recently that may play an important role in help-seeking (Prochaska, 1994). Studies have noted that less than 20% of individuals with a health or mental health problem are in a stage of change where they are prepared to take action on the problem (Prochaska, 1994; O'Hare, 1996). In a national screening sample, Koenen et al. (2003) identified enabling (e.g., geographic location), predisposing (e.g., demographic characteristics), and need factors to influence both treatment seeking and readiness. Predisposing factors related to help-seeking behavior included being ages 45 to 64 years and separated or divorced being. An individual's perceived need for treatment has also been shown to predict help-seeking, as assessed through ratings of symptom interference in daily functioning (Koenen et al., 2003) and attributions about the nature of symptoms (e.g., somatic versus emotional distress; Moeller-Leimkuehler, 2002). Comparable to these findings, Brown et al. (2001) identified patient's perceptions about the cause (somatic versus emotional), timeline (acute versus chronic), consequences, and controllability of depressive symptoms played a significant role in accessing treatment.

Barriers at the Provider Level

Giel et al. (1990) noted that the primary care setting plays a central role in the second level of filtering between a patient and treatment. In fact, general practitioners have been described as

the gatekeepers to mental health services (Ormel, Koeter, van den Brink, & van de Willige, 1991), given that the vast majority of individuals with anxiety and depression have contact with the primary care sector (e.g., Depression Guideline Panel; AHCP, 1993; Greenberg et al., 1999; Perez-Stable, Miranda, Munoz, & Ying, 1990; Sherbourne et al., 2001; Simon, Von Korff, & Barlow, 1995). Up to 83% of individuals with anxiety and/or depression have consulted a family physician at least once in the past year and these individuals are more frequent consumers of primary care services than is the general population (Ohayon et al., 2000). Moreover, up to 50% of individuals with depression have consulted their primary care physician about this problem (Brown & Schulberg, 1998). Regier et al. (1982) found that of those individuals who do seek care for mental health issues more generally, 60% do so with primary care physicians and merely 20% with mental health professionals. As many as 25% of those individuals with panic disorder, for example, first present at hospital emergency rooms (Segee et al., 1999; Swinson, Soulios, Cox, & Kuch, 1992), often repeatedly, and one third have seen three or more nonpsychiatric health care professionals (Swinson et al., 1992).

Despite this high rate of presentation to health care providers, there is significant underdetection of mood and anxiety disorders within the primary care domain (e.g., Simon et al., 1995). Studies examining family physicians identification of mental illness consistently reveals detection rates ranging from 15% to 36% for anxiety and depression (Kessler, Lloyd, Lewis, & Gray, 1999; Lecrubier, 1998; Ustun & Sartorius, 1995). Research has highlighted various factors that contribute to this problem, including physician's knowledge of mental health problems, skill in recognizing symptoms indicative of mental illness, busyness of practice, and willingness to diagnose and treat mental health issues (Tylee, 1996). Kendrick, Tylee and Freeling (1996) speculate that the factors that contribute to a physician's underrecognition of depression include

lack of knowledge regarding common symptoms and their management, preoccupation with possible organic pathology, failure to elicit symptoms relevant to the diagnosis, and the structure of the general practice setting (e.g., lack of a consistent health care provider, time constraints). Providers may also assume a stigma concerning emotional issues and avoid asking questions about depression or anxiety for fear of harming the relationship with the patient.

An individual's symptom pattern may play an additional role in detection, as patients who display less overt evidence of depression (i.e., look less depressed; Freeling et al., 1985) and somatize their distress (Bridges & Goldberg, 1987) are more likely to go unrecognized by primary care providers. Similarly, the degree of individual distress constitutes a factor in seeking mental health care, suggesting that the illness behavior of the patient is an important influence on the physicians' decision to refer for mental health care (Giel et al., 1990). Although a study by Hooper et al. (1984) suggests that even when information about the mental health status of patients was given to their primary health-care providers, this did not affect the management of their patients; implying that merely 'educating' providers is not enough to produce changes in practice.

Barriers at the Systemic Level

A third level of filtering that influences the probability that an individual will obtain effective treatment is the physicians' access to mental health care resources. Despite studies that highlight the limits of current physician treatment for anxiety and depression (e.g, Depression Guideline Panel; AHCP, 1993), general practitioners remain the most common providers of mental health services (Parslow & Jorm, 2000) spending up to one-quarter of their time per week providing direct treatment for psychiatric conditions (Howard, 1992). A lack of knowledge about the range of effective treatments, limited expertise in psychotherapy, and limited availability of

specialty mental health providers, may contribute to a physician's decision to treat anxiety and depression with pharmacotherapy, rather than providing or referring to mental health services. Also, guidelines for primary care providers support this method of triage and recommend psychotherapy only after failure on two antidepressant medications (AHCPR, 1993). An additional influence contributing to higher rates of pharmacotherapy versus other effective treatments likely includes the strong marketing of psychotropic medications (Antonuccio, Burns, & Danton, 2002) and the lack of inclusion in medical education of training in the management of common psychiatric conditions (Hunt, Gibbons, Paraison & Rabik, 2004).

Additional structural barriers also impact physicians' management of patients with mood and anxiety problems, such as the lack of integration of mental health services with primary care settings. At the present time, specialty mental health care is a reactive system (Giel et al., 1990), waiting for the patient to be identified and referred for treatment; a process that produces staggering delays in treatment (e.g., median treatment delay of six years for depression/dysthymia and 14 years for GAD; Kessler et al., 1998). The failure to make mental health care available in those settings where individuals first seek assistance (i.e., primary care settings) inhibits access and utilization of effective treatments for mood and anxiety disorders. The separation of mental health services may also serve to maintain the public's fear and misunderstanding of mental health difficulties (Hunter & Peterson, 2001).

Additional systemic barriers also arise within the mental health system itself. Consider, for instance, the relatively low rates of provision of treatments consistent with guidelines for evidence-based practice among mood and anxiety disorders (e.g., Goisman et al., 1999). For instance, despite literature demonstrating the efficacy of exposure therapy for anxiety disorders, a random survey of U.S. psychologists revealed that only 17% were utilizing this method to treat

post-traumatic stress disorder (Becker, Zayfert, & Anderson, 2003). Moreover, even when professionals do provide evidence-based treatments, specific treatment techniques may not be implemented effectively. For example, a Minnesota survey (Freiheit, Vye, Swan, & Cady, 2004) revealed that even when psychologists report using cognitive behavioural methods for anxiety treatment in their clinical practice, less than 25% reported using interoceptive exposure for panic disorder and 28% endorsed using exposure and response prevention to treat obsessive compulsive disorder. This may result partially from limitations in professional training. The Society of Clinical Psychology Task Force on Promotion and Dissemination of Psychological Procedures found that training in evidence-based treatments was somewhat limited both in doctoral programs and predoctoral internships (Crits-Christoph et al., 1995). At the time of the survey, only 59% of pre-doctoral clinical internship training programs provided supervision in CBT for depression. Similarly, both psychiatry residency programs (Accreditation Council for Graduate Medical Education; Tomita, 2000) and social work training neglect to emphasize training in evidence-based psychotherapy. To some degree, this may change secondary to an increased impetus for the provision of time-limited effective treatments given managed care within the United States, which places various external constraints (e.g., time, funding) on mental health service delivery (Goisman et al., 1998).

Barriers at the Treatment Efficacy Level

Even when depression and anxiety are detected, individuals often fail to receive adequate treatment, particularly in the primary care sector where they are most likely to present (Depression Guideline Panel; AHCPR, 1993; Perez-Stable et al., 1990; Simon et al., 1995). In a Bulletin for the World Health Organization on the persistence of the burden of anxiety and depression, Andrews, Sanderson, Slade, and Issakidis (2000) cite both failure to seek treatment

and failure to access efficacious treatment as two major contributors to this ongoing problem. It has been estimated that fewer than 10% of people suffering from major depression receive a therapeutic dose of medication (Keller & Boland, 1998), and poor breadth and maintenance of gains have been demonstrated for the pharmacological treatment of mood disorders (Fava et al., 1998). Moreover, concerns have also been raised recently about possible long-term adverse effects of antidepressants (Fava, 2003). Among anxiety disorders, Katschnig and Amering (1994) reported that only 31% of panic patients recovered following a course of pharmacotherapy and the majority of their sample continued to have symptoms over the 6-year follow-up period. This recovery rate is consistent with other findings of anxiolytic medications that demonstrate poor maintenance of treatment gains (Clum, Clum, & Surls, 1993; Gould, Otto, & Pollack, 2002; Westra & Stewart, 1998), and suggestions that the efficacy of newer antidepressant agents are seen only as long as the medication is continued (Ballenger et al., 1998; Figgitt & McClellan, 2000; Sharp et al., 1996).

Despite research supporting the efficacy of psychological therapies for these disorders (e.g., Brent et al., 1997; Chambless & Ollendick, 2001; Clarke et al., 1999), it is also increasingly clear that there is room to improve response rates to CBT for example (e.g., Fisher & Durham 1999; Otto, Pollack & Maki, 2000) and to reduce drop out rates in psychotherapy which tend to range between 20% and 47% (McQuaid, Stein, Laffaye, & McCahill, 1999). Rates of remission vary across the anxiety disorders but generally suggest that a significant proportion of individuals fail to respond to even the most efficacious treatments, respond only partially, or dropout prematurely. In a review and reanalysis of 11 well-controlled studies of exposure treatment for agoraphobia, Jacobson, Wilson, and Tupper (1988) found that only 27% of subjects could be classified as “recovered” at post-treatment, and 34% at follow-up, when stringent

criteria were used to define recovery. Similar findings have been reported for CBT with GAD (e.g., Fisher & Durhan, 1999; Westen & Morrison, 2001), and only 50% of individuals receiving CBT for social anxiety demonstrated clinically significant improvements (Clark, 1997).

Comparable response rates have been obtained in treatment outcome studies with children, in which 30% to 40% of individuals continue to meet criteria for a clinically significant anxiety disorder following treatment (Barrett, Dadds, Rapee, & Ryan, 1996; Kendall, 1994). It is important to point out that outcome varies markedly depending on how conservative the criteria are that one considers for treatment success (Brown & Barlow, 1995; Nathan, 2001).

Among depressed children and adults who have received antidepressant or psychological treatment, some individuals achieve a complete remission of symptoms, however, in a substantial proportion of cases there are enduring or fluctuating periods of residual symptoms that persist for months to years (Keller & Boland, 1998; Rush & Thase, 1997; Rush et al., 1998). Within treated samples, the base rate of recovery is approximately 40% within 3 months, 60% within 6 months, and 80% within one year (Coryell et al., 1994). Even the most efficacious psychotherapeutic treatments for depression produce only partial treatment response (Cuijpers, 1998; Hollon et al., 1992; Robinson, Berman, & Neimeyer, 1990). For instance, Paykel et al., (1999) reported that 25% of individuals receiving CBT remitted and only 29% experienced a relapse. Although this was superior to clinical management (47% relapse), there remain a significant proportion of individuals who fail to respond to treatment. As another illustration, Elkin et al. (1989) reported a post-CBT remission rate of 51%; suggesting about one-half of the sample remained symptomatic. This is consistent with reports from meta-analytic studies of CBT for depression indicating that post-CBT depression scores continue to be in the mildly depressed range (Cuijpers, 1998; Robinson et al., 1990). Thus, although psychotherapies have been

demonstrated to be effective, there remains a large proportion of individuals who do not attain significant treatment gains or remission.

Strategies for Bridging the Gap Between Disorder and Treatment

The previous review outlined the nature of existing barriers encountered by individuals in obtaining effective treatment for anxiety and depression. Given such barriers and the enormity of this public health issue, it is imperative to consider what strategies can be implemented to render access to mental health care more accessible and effective. Potential remediative steps can be executed at multiple levels from public and provider education, to promoting earlier detection, to increasing effective mental health care training and changes to the manner of care delivery. Such initiatives, which are summarized in Table 2, are described in turn.

Increasing Detection and Access at the Level of the Individual

(1) *Enhancing public awareness of anxiety and depression.* Interventions aimed at the individual level focus on identifying problems and increasing help-seeking behavior among those with anxiety and depression. Public awareness and education initiatives seem to be increasing in recent years and may assist in improving individuals' ability to recognize the symptoms of anxiety and depression, as well as reduce the stigma associated with mental health services (Suinn, 2003; Schare, 2003). For instance, the public currently appears to have greater knowledge about depression and this enhanced awareness may be partially responsible for a more recent increase in reported prevalence of depression (Angst, 1997). One example of such detection and awareness campaigns are national screening days for anxiety and mood disorders, which allow individuals in the community to learn about these disorders and undergo a brief screen to detect potential problems. Such public awareness campaigns may not only serve to increase individual help-seeking behavior but also assist individuals in learning about and

accessing available mental health resources in their community. These and other public awareness campaigns may also be useful in by-passing some of the other barriers that individuals encounter once a decision is made to seek treatment (e.g., systemic barriers such as provider nondetection or failure to access evidence-based treatments).

Another example of enhancing public awareness is the increasing availability of internet and self-help resources (see Table 3 for some examples; Taylor, Jobson, Winzelberg, & Abascal, 2002). To the extent that they offer valid and accurate information, web-based treatments and education about anxiety and depression would appear to have the advantage of broader access among sufferers (e.g., individuals house-bound because of anxiety or depression) and providers (e.g., web-based guidelines for the treatment of anxiety and depression). In fact, research has demonstrated that internet-based programs can reduce the length of provider-based treatment among individuals with panic disorder and social phobia (Carlbring et al., 2001; Gruber et al., 2001). Moreover, the proliferation of self-help books is a welcome development, allowing wider dissemination of effective treatments for mood and anxiety disorders. For example, Burns (1980) *Feeling Good: The New Mood Therapy* has been found to significantly reduce depressive symptoms among readers (Scogin, Hamblin, & Beutler, 1987; Scogin, Jamison, Floyd, & Chaplin, 1998). Meta-analyses (Cuijpers, 1997; Gould & Clum, 1993; Scogin, Bynum, Stephens, & Calhoun, 1990) have shown that self-help approaches yield large overall treatment effect sizes (0.76-1.19) and that additional therapist input may have no additional effect on participant outcomes. Clearly, one needs to be discriminating in selecting resources in the public domain (i.e., not all self-help books are based on evidence-based treatments), yet the availability of a number of empirically-based self-help resources may provide access to treatment, and in a more timely fashion, for those who would otherwise not access it (e.g., individuals in rural

communities, those reluctant to present for treatment). This is particularly important in view of the large discrepancy between the number of sufferers and the limited number of health care providers, particularly specialty mental health care providers (Williams, 2001). In addition, these resources may also be used adjunctively with specialty mental health care, or busy family physician practices, to reduce the amount of provider-based treatment required. For instance, Carlbring et al. (2001) found that an internet-delivered CBT self-help program, with minimal therapist contact, was effective for reducing symptoms among individuals with panic disorder.

(2) *The prevention of anxiety and depressive disorders.* Efforts also need to be directed towards the prevention and early detection/management of anxiety and mood disorders (see Dozois & Dobson, 2004). Given the growing body of literature identifying risk factors for the development of mood disorders (e.g., Nolen-Hoeksema & Girus, 1994; Spence, 2001), preventative interventions need to target these specific pathways. For instance, numerous vulnerability factors (e.g., restricted range of social roles, body image concerns, and higher risk for sexual abuse) appear to account for the higher rates of depression observed among adolescent females (Nolen-Hoeksema & Girus, 1994). Such knowledge allows the development of prevention initiatives, which target interventions towards reducing the incidence of dysfunction or decreasing the impact of environmental risks for mood disorders. For instance, Gardenswartz and Craske (2001) demonstrated the efficacy for the prevention of panic disorder (and reduction of panic symptoms at 6-month follow-up) of a one-day workshop geared towards individuals identified as at risk for panic disorder. While such initiatives are emerging, greater effort in this area may assist in reducing the chronic disability and burden currently common-place in those with anxiety and depressive disorders. Earlier detection and treatment may also reduce the severity and course of depression for example, by minimizing the number of subsequent

depressive episodes (McQuaid et al., 1999).

Several prevention programs for children and adolescents, such as the Resourceful Adolescent Program in Canada for adolescent girls (Wolfe, Collins, & Empringham, 2004) and the Queensland Early Intervention and Prevention of Anxiety Project (Dadds, Spence, Holland, Barrett, & Laurens, 1997; Dadds et al., 1999) in Australia have recently been implemented in the school system. Early prevention initiatives have also been directed at reducing the risk of developing emotional disturbance in children who have parents with mental health difficulties. Such interventions are based on the high concordance rates observed between parents and children for emotional distress (Beidel & Turner, 1997; Goodman & Gotlib, 1999; Hammen, 2000; Wickramaratne & Weissman, 1998). For example, Clarke et al. (2001) conducted a randomized controlled trial to prevent depressive episodes in offspring of adults who had been treated for depression in a health maintenance organization. Ninety-four adolescent offspring (aged 13 to 18 years) of depressed parents were randomly assigned to either treatment as usual or treatment as usual plus a 15-week CBT prevention program. The results indicated that only 9% of CBT participants developed a depressive episode during the 15-month follow-up interval, compared with 29% of the treatment as usual children. Although such prevention programs yield promising results, further research is necessary to clarify the most effective methods for directing such interventions (universal versus targeted groups) and age groups to be targeted (early in life versus adolescence).

Given our increasing awareness that the modal course of depression and anxiety is marked by relapse, greater efforts are also necessary to prevent relapse and recurrence of these disorders. That is, beyond acute treatment of the disorder, efforts are needed to develop and integrate relapse prevention strategies in existing treatments. For example, residual agoraphobic symptoms

have been found to confer increased risk for re-emergence of this disorder (Fava et al., 2001). Relapse prevention efforts are particularly necessary in light of the increased risk of depression associated with each sequential episode. Theorists have recently attempted to account for this increased risk by suggesting a “sensitization” hypothesis. That is, depressed individuals may become more "sensitized" the longer they experience depression or the more frequently their episodes recur (Segal, Williams, Teasdale, & Gemar, 1996; Segal, Williams, & Teasdale, 2002; Teasdale et al., 2000). Specifically, the threshold for the reactivation of negative thinking patterns associated with dysphoric mood may be lowered the more an individual has experienced depression. Consistent with this idea, the structural organization of negative self-referential content appears to be stable even when individuals remit from their depression (Dozois & Dobson, 2001). Individuals with a greater number of past episodes of depression also appear to organize cognitive content differently than do individuals with fewer episodes (Dozois & Dobson, 2003). Depressed individuals may therefore benefit from strategies that help them to reallocate attention once they begin to experience dysphoric mood (see Segal et al., 2002).

A major strength of psychotherapies are their potential to facilitate relapse prevention. A meta-analysis (Gould et al., 1995) of long-term treatment outcome for panic disorder found that cognitive-behavioral interventions were most successful at maintaining treatment gains at 1-year follow-up. Increasing efforts are also being directed explicitly toward relapse prevention in depression. As one illustration, mindfulness-based cognitive therapy treatment has relapse prevention as a prime focus (Segal et al., 2002). Early evaluations of this treatment for individuals prone to recurrent depression, but currently remitted, suggest favorable outcomes in reducing the probability of depressive relapse in comparison to treatment as usual (Teasdale et al., 2000). Continuation-phase cognitive therapy (Jarret et al., 2001) is another recent treatment

development that has demonstrated efficacy in reducing relapse in depression in comparison to treatment as usual. Further research is necessary to also evaluate the specific pathways for targeting relapse prevention strategies for anxiety and depression. In this regard, Joiner (2000) has presented an interpersonal model of depression identifying multiple interpersonal variables (e.g., stress generation, negative feedback seeking, excessive reassurance seeking, interpersonal conflict, avoidance) that may interact in reciprocal and dynamic ways to maintain the depressive process and increase vulnerability for the recurrence of depressive episodes. Such models have important implications for understanding and ultimately reducing the high rate of relapse in depression.

Increasing Detection and Access at the Level of the Provider

(1) *Improving screening measures in primary care.* Research has shown that even among those individuals who are identified as having anxiety and depression in primary care, a low percentage are correctly diagnosed (Wittchen et al., 2002). This finding draws attention to the important need for reliable and accurate screening instruments for anxiety and depression. Inclusion of brief screening measures or procedures may facilitate integration into primary care, given the multiple demands of general practitioners and busyness of a family medicine practice (Kendrick et al., 1996). Accuracy of detection is also imperative for ensuring the provision of appropriate treatment. Detection rates have been found to be particularly low for those individuals with generalized anxiety disorder (0.5%; Katzelnick & Greist, 2001), despite the higher prevalence rates of the disorder within the primary care sector (Culpepper, 2002). The importance of screening for generalized anxiety disorder within the primary care sector seems to be particularly important given that those individuals are more likely to develop further mental health difficulties, such as depression (Kessler et al., 1996). Similarly, research has demonstrated

that individuals with social anxiety are at risk for developing depression and alcoholism (Lecrubier & Weiller, 1997).

Accurate detection of anxiety and depression may be improved by targeting the identified risk factors for the disorders. For example, individuals with depression and anxiety disorders have higher number of visits to general practitioners (e.g., Greenberg et al., 1999). Efforts directed towards screening high utilizers of health care services would serve to increase detection, improve access to appropriate treatment, and reduce further health care visits (Margraf & Schneider, 1995). Screening could also be directed toward the children of individuals with anxiety and depression, given the high concordance rates (up to 50%) of emotional distress between parents and children (e.g., Beidel & Turner, 1997; Goodman & Gotlib, 1999).

Investigators (e.g., Hunt et al., 2004; Kramer, Simonsick, Lima, & Levac, 1992) have suggested that efforts be made to assist primary-care physicians, residents in training, and medical students to acquire the necessary skills for assessing mental health problems, managing patients with such difficulties, and formulating appropriate treatment plans. Incorporating mental health educational components into existing medical training programs may be potentially successful in this aim. Additionally, training workshops and seminars increasingly being held for general practitioners in the community may be useful in promoting awareness and detection of mental health problems (e.g., Defeat Depression Campaign; Paykel, 1994).

(2) Educating physicians and other mental health providers about available evidence-based treatments. Efforts are required to challenge assumptions of biological psychiatry and educate mental health care providers about psychosocial factors involved in the etiology and treatment of depression and anxiety disorders. Berger (2001) has drawn attention to the reductionistic perspective of the medical model towards mental health difficulties and

marginalization of psychotherapy. Pharmacological treatment for depression and anxiety is emphasized despite research findings demonstrating the power of common factors in treatment outcome (i.e., ‘placebo’ effects, Scovern, 1999). In particular, studies have highlighted the importance of the therapeutic alliance in medical treatment outcomes and rather than considering such psychological variables as extraneous, medical training should emphasize how to facilitate the doctor-patient relationship (Greenberg, 1999). There is evidence (Pirbhai, 2003) suggesting that the medical paradigm may be shifting to emphasize communication, such as exploring feelings about one’s illness, beliefs regarding causation, and impact of illness on individual functioning. For instance, the BATHE method (Lieberman & Stuart, 1999) has been introduced as a technique for improving the doctor-patient relationship by collecting information about the psychosocial context of patients’ symptoms and providing empathic responses. Preliminary empirical support for such models of patient care has suggested improved patient satisfaction and improved health and mental health outcomes (Stewart, 2004).

It is also important for physicians and other mental health care providers to be aware of recent research findings on evidence-based treatments in order to ensure the delivery of effective treatment. This is particularly true in the case of evidence-based psychotherapies. Further dissemination of research findings to medical journals, textbooks, newsletters, and educational training programs and/or workshops is necessary to improve awareness of the range of evidence-based interventions. Such dissemination must include efforts to challenge professional and public assumptions about the efficacy of medication for treating depression and anxiety. For instance, researchers have highlighted the influence of the ‘placebo effect’ (Greenberg, 1999; Scovern, 1999).

In regard to improving the quality of patient care, further initiatives have attempted to

achieve this aim through collaboration between mental health professionals and primary care providers. For example, Unutzer et al. (2001) reported improved compliance with antidepressant usage over treatment-as-usual in primary care attendees with depression who were provided with education and follow-up with a nurse practitioner trained in mental health care. Hunter and Peterson (2001) reported on the development of a "primary care psychology training program" in which the clinical skills of assessment, behavioral analysis, behavioral therapy, and differential diagnosis were adapted to the primary practice setting. Such educational programs may additionally serve to challenge the general assumption within the medical profession that pharmacotherapy is the most cost-effective treatment option for mood disorders.

Systemic Changes to Increase Detection and Access

(1) *Integration of mental health and health services.* Strosahl (1998) proposed that the structure of general health care precludes physicians from responding to mental health concerns in a meaningful way. The segregation of psychological and psychiatric services from primary care results in the delivery of ineffective services. Given the fundamental importance of the primary care setting for the treatment of anxiety and depression disorders (Robinson, 2002), strategies for integrating mental health services within the primary care setting are required. Shared-care models of health care represent such an initiative, and there are currently several models in existence to guide such procedures (e.g., Blount, 1998; Cummings, Cummings, & Johnson, 1997; Katon et al., 1995; Strosahl, 1996). These models emphasize a collaborative treatment approach, with patients being co-managed by mental health and primary care providers, and treatment integrating psychoeducation with regard to self-management strategies. Studies have demonstrated the efficacy of shared-care models and suggest that the integration of mental health treatment within primary care settings is potentially more effective than traditional

treatments delivered in mental health clinics (Katon et al., 1995; Mynors-Wallis, Gath, Day, & Baker, 2000).

A growing body of research further suggests that integrated mental health service delivery is substantially more cost-effective than the existing health care system (Cummings, 1997; O'Donohue, Ferguson, & Cummings, 2002; Strosahl, 1998; Strosahl & Sobel, 1996; Von Korff et al., 1998). The additional benefits of increased patient and provider satisfaction (Katon et al., 1996), as well as improved patient outcomes (Hellman et al., 1990) have been demonstrated for shared-care models of treatment. For example, Von Korff et al. (1998) found that the costs of integrated mental health and primary care services for depression were significantly lower than treatment as usual (\$123 per patient versus \$317). A recent meta-analysis of 57 controlled cost offset studies (Chiles, Lambert, & Hatch, 1999) demonstrated an average cost return of 20% for integrated behavioral health services. Providing cost-effective treatments has become a fundamental issue in North American in light of the rising costs of health care. In fact, the United States spends a greater percentage of its Gross National Product on healthcare than any other country, with an approximate expenditure of 1.2 trillion dollars on health care in the year 2000 (Strosahl, 2002). In regard to the treatment of mood disorders, the cost of providing effective treatment is offset by the decrease in future medical utilization among afflicted individuals (Strosahl, 2002; Yingling et al., 1993). For example, Margraf and Schneider (1995) reported an 81% decrease in healthcare costs for individuals with panic disorder following 15-sessions of CBT. However, further health care initiatives are required to capitalize on such medical cost savings pathways and facilitate the delivery of effective treatment. For instance, hospitals and mental health clinics need to ensure that evidence-based treatments are put into practice in community and hospital settings (Barlow, Levitt, & Bufka, 1999).

(2) *Increased governmental funding for mental health services.* While the integration of mental health and health services will facilitate the delivery of effective treatment, governmental funding initiatives are also necessary to ensure the availability of treatment. The Canadian Alliance on Mental Illness and Mental Health (CAMIMH, 2003) has drawn attention to the disproportionate governmental funding allotted to mental health resources in comparison to general health care, and the consequences of this discrepancy. It is imperative that reform takes place in health care systems within North America to increase the availability of psychiatric and psychological services to those individuals suffering from anxiety and depression. In Canada for example, partnerships between provincial and federal governmental health agencies may be a step toward implementing National Action Plans for mental health reform (CAMIMH, 2003).

(3) *Greater training in evidence-based treatments.* Currently, CBT and other evidence-based treatments are not being made available to a wide range of patients with anxiety and affective disorders (e.g., Wilson, 1997), despite the growing body of empirical support for this treatment. Greist (2000) suggested that this discrepancy exists because there are not enough therapists available who are competent in the provision of evidence-based psychotherapies. Other investigators (e.g., Becker et al., 2003) have drawn attention to the need for further research to understand practitioner perceptions of barriers to using evidence-based treatment. We have already noted that there is a need to provide educational and training workshops for mental health and health professionals on the provision of such treatments. In order to facilitate this training, it is also necessary for evidence-based psychotherapies to be adapted for delivery by non-specialty mental health care providers and practitioners in the primary care setting. To achieve this aim, the components and requisite amount of such training also needs to be evaluated.

Increasing the amount of training in evidence-based treatments in existing doctoral psychology training programs and predoctoral internships is further required to meet the growing public demand for such treatment. Educational initiatives need to address professional barriers to such treatments, including misperceptions of manual-based treatments and the important role of supervisors in providing such training (Kendall, 2002). Moreover, research also needs to be directed at the means through which effective transfer of information can occur (Hayes, Barlow, & Nelson-Gray, 1999). For example, work by Miller and Mount (2001) reveals that attendance at workshops has little appreciable impact on actual skill utilization or integration into the clinical practice of attendees.

Other researchers (Calhoun, Mora, Pilkonis, & Rehm, 1998) have suggested that additional training initiatives (e.g., the development of post-doctoral training programs) are required to ensure sufficient expertise in evidence-based treatments. Although such initiatives may increase the level of available training, infrastructures by professional governing boards may be necessary to ensure that effective treatments are being delivered by service providers (Barlow et al., 1999). The Guidelines and Principles for Accreditation of Programs in Professional Psychology (APA, 1996) is one positive impetus in this direction, as it includes a mandate that sufficient attention be given to the empirical base of psychological methods. However, the guidelines outline that doctoral programs have responsibility for giving students a sound academic background in the “science of psychology,” but permit individual programs to determine their own “philosophy of training.” Within social work, there are currently no guidelines to ensure the inclusion of empirically based approaches in training. However, psychiatry has recently taken steps towards improving training by including CBT as a requirement of the new accreditation criteria for psychiatry residency programs (Beck, 2000).

(4) *Greater accountability to provide evidence-based care.* Developing such guidelines may ensure that professionals learn the necessary skills for providing effective treatment, but new infrastructures may be required to guarantee appropriate mental health service delivery. Having regulated guidelines available to specify the course of treatment of mood disorders may facilitate this process. For example, the Depression Guideline Panel (AHCPR, 1993) has provided recommended treatment for major depressive disorder and these guidelines have become enforced by law in some states in the U.S. (Barlow et al., 1999). The U.S. Congress also passed a public law to establish the Agency for Health Care Policy and Research (Public Law 101-239, 1989) with the mandate of enhancing the quality, appropriateness, and effectiveness of health care services. Modifications to the accreditation standards of professional organizations (e.g., American Psychological Association) may also serve to improve the quality of mental health services provided by holding professionals and public agencies more accountable.

Additional systemic changes are required to reward service providers for offering evidence-based services. For instance, insurance agencies could adjust rates of reimbursement for services dependent upon empirical justification and professional licensing boards could offer insurance credits to providers of evidence-based treatments. Taylor and Biglan (1998) draw attention to the impetus of financial incentives by pointing out that agencies would ensure the use of evidence-based treatments if doing so would increase their funding base, and clinicians would do the same if they could get on more provider lists.

(5) *Identification of "active" treatment ingredients.* While evidence-based treatments need to be advocated, it is apparent that further research is required to improve the response rates for individuals with anxiety and depression. Further treatment dismantling studies are necessary to delineate the specific active components of broader treatment packages (e.g., psychoeducation,

cognitive restructuring) in order to streamline interventions without sacrificing treatment potency (Telch, Smits, Brown, & Beckner, 2002). For example, behavioral activation has been found to be a core factor in depression management (Martell, Addis, & Jacobson, 2001) and exposure is a critical treatment element for anxiety (Barlow, 2002), whereas breathing retraining in panic disorder has been found to be nonessential (Schmidt et al., 2000; Taylor, 2001). Such findings have served as an important step in the dissemination of psychological treatments by contributing to the development of briefer interventions that can be made available to a wider range of patients and by allowing existing protocols to be differentially focused on the active treatment ingredients of the protocol. The brevity and efficiency of existing treatments is imperative in light of the rising costs of health care, which serve to place restraints on available services. There is also evidence that providing a brief educational intervention in the emergency room to patients presenting with panic attacks, can reduce the number of subsequent ER presentations (Dyckman, Rosenbaum, Hartmeyer, & Walter, 1999; Westra, Leach & Phoenix, 2003). This is consistent not only with adaptations of practice toward brevity and efficiency but also adaptations to fit delivery of care where the patient is most likely to present in the system (c.f. Phoenix & Westra, 2003).

(6) Innovations in practice to supplement existing effective treatments. Additional theory-driven developments or adaptations of treatments are also necessary to address the need for improved response rates in anxiety and depression. Increasing need is also being recognized for the development of new treatments (and/or integration of existing treatments) that more widely address the diverse presentations of clinical problems (Kohlenberg, 2003). For instance, Ladouceur et al. (2000) reported strong preliminary support for a focal treatment targeting worry in individuals with generalized anxiety disorder (e.g., challenging positive beliefs about worry,

worry exposure, etc.). The treatment led to superior results, relative to a wait-list control group, and there were post-treatment reductions in the intolerance of uncertainty, a central theoretical concept of generalized anxiety disorder. Investigators (e.g., Roemer & Orsillo, 2002) have also suggested the potential utility of Mindfulness-based Cognitive Therapy for the treatment of generalized anxiety disorder, and research is beginning in this area.

Innovations in clinical treatments may also improve response rates through the systematic identification of individual difference variables related to treatment response (Hayes et al. 1999; Prochaska, 2000). For instance, individual differences in change-readiness has been found to be a significant predictor of treatment completion (panic disorder: Dozois et al., 2004; general mental health outpatients: Brogan et al., 1999) and outcome (CBT outcomes in anxiety: Dozois et al., 2004; benzodiazepine response in anxiety: Wilson et al., 1997). Treatments such as Motivational Interviewing have received strong empirical support in the addictions and other health behavior domains (Burke, Arkowitz, & Dunn, 2002; Burke, Arkowitz, & Menchola., 2003; Miller, 2004). As such, they hold promise for extending response rates to existing evidence-based treatments (Arkowitz & Westra, in press; Murphy, Rosen, Cameron, & Thompson, 2002; Taylor, 2004; Westra, 2004).

Moreover, if variation in readiness for change is consistently associated with lower treatment-seeking and poorer outcomes to existing treatments in anxiety and depression, treatments that enhance change-readiness may be particularly amenable to population health approaches to enhancing treatment access. For example, Prochaska and colleagues (Brogan, Prochaska, & Prochaska, 1999; Prochaska, 2000; Prochaska, Norcross, & DiClemente, 1994) report substantively higher recruitment rates for motivational enhancement treatments than change-based treatments for smoking cessation. Another promising avenue to increase help-

seeking may involve the adaptation of the community reinforcement treatment model developed and supported by Miller and colleagues (e.g. Miller, Meyers, & Hiller-Sturmhofel, 1999; Meyers, Miller, Hill, & Tonigan, 1999) in the addictions domain. This approach takes a systems perspective on treatment, by coaching family and supports of the person with the problem to respond in a more therapeutic way, designed to increase motivation for change and help-seeking. Preliminary findings have demonstrated the efficacy of this approach (Meyers et al., 1999). Adapting such strategies to the management of prevalent problems such as anxiety and depression may be worthwhile in attempting to increase treatment-entry and also empowering individuals closely affected by the sufferer's difficulties.

Conclusions and Future Directions

This article highlighted the gaps that exist in accessing effective treatment among children and adults with anxiety and depression. It is apparent from the magnitude and burden of these mental health problems that this is a significant public health issue, requiring increased public, professional, and systemic attention. Effective treatments are available for these disorders, however, increased efforts are necessary to overcome the barriers for obtaining such treatment and improving the quality of life among individual sufferers.

We have identified a number of factors which may influence the likelihood of seeking and accessing treatment. However, these are merely suggestive at this stage since research on these factors, and their interrelationships, is severely limited. More research is required on basic yet fundamental questions such as 'Why would someone seek treatment?', 'What provider or systemic factors most strongly influences the probability of help-seeking?', and 'Once a person decides to seek treatment, what are the factors influencing staying in treatment and *utilization* of effective symptom management strategies?'. In other words, we need to advance our

understanding of factors influencing 'engagement' in treatment. Understanding how to engage people in treatment is critical to broadening rates of treatment-seeking and treatment-utilization, particularly as investigators embark on prevention efforts. As one illustration, Barsky and Ahern (2004) supported the efficacy of CBT for hypochondriasis in primary care. However, of the 776 individuals who screened positive for high health anxiety, over 50% either declined to participate or could not be reached subsequent to the screening. Thus, the majority of individuals with the problem failed to follow-up on treatment, even when it was offered.

Arguably, simply adding more techniques to our treatment repertoire or educating people about existing techniques, while important, will likely not be sufficient to accomplish the goal of greater utilization of effective treatment. Individual, provider, and contextual factors need to be delineated which influence the individual to seek out and utilize treatment. Hubble, Duncan, and Miller (1999) have conceptualized psychotherapy outcome as influenced by client factors, relationship factors, expectancy, and technique. This may be a useful broad framework for guiding investigations on engagement with change strategies. For example, optimism that one can be effective in producing change (Dozois & Westra, 2003) and treatment credibility (Chambless, Tran, & Glass, 1997) have been found to be important determinants of psychotherapy outcome. Moreover, the impact of a positive working alliance in psychotherapy (Bachelor & Horvath, 1999), and increasingly in medicine (Stewart, 2004), has been consistently and strongly supported in facilitating effective treatment. That is, understanding the individual seeking treatment (their hopes, resources, preferences, biases, community, etc.), and the context in which they consider treatment (credibility of the provider and the treatment, quality of the relationship with the provider, characteristics of the setting in which treatment is sought), may very well be keys to bridging the gap between problem and resolution on a population-health

basis in mental health. For example, CBT has been repeatedly found in recent surveys to be more acceptable, credible, and rated as more likely to be effective by anxiety sufferers compared with pharmacotherapy (Walker et al., 1999; Zoellner, Feeny, Cochran, & Pruitt, 2003). Moreover, physicians who are more positive and confident in the efficacy of their pharmacotherapy recommendations produce more positive responses to treatment compared to their less confident counterparts (Fisher et al., 1964; Uhlenhuth et al., 1966). In all likelihood, such patient and provider factors are related to increased expectancy of change and greater probability of utilization of treatment recommendations. Given their crucial role in symptom relief, these factors and others merit greater empirical attention, particularly in relation to the mechanisms and means through which they influence problem identification, treatment seeking, and treatment utilization.

This review has served to draw attention to numerous avenues for bridging the treatment gap and this list is by no means exhaustive. Joint efforts are now required between professionals and governing agencies to support efforts directed at increasing access and efficacy of mental health care for anxiety and depression.

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Table 1

Barriers for Accessing Effective Treatment for Anxiety and Depression

<i>Level</i>	<i>Barrier</i>
Individual	Willingness to disclose problems Fear of stigma & embarrassment Lack of time for treatment Negative stereotypes of treatment Presence of comorbid medical problems Cultural factors Demographic factors (age, marital status) Geographic influences Desire to handle problems on one's own Lack of awareness of available treatment Minimizing severity of problems Degree of distress & disruption of symptoms Readiness for change
Provider	Underdetection within primary care sector Lack of knowledge of mental health problems Preoccupation with possible organic pathology Skill in assessing mental health difficulties Busyness and structure of practice Willingness to diagnose and treat mental health issues Stigma regarding discussing mental health issues Somatizing patient presentation style Level of distress in presentation
Systemic	Limited physician access to mental health services Lack of awareness of range of effective treatment options Primary care guidelines emphasizing pharmacotherapy Limited availability of specialty mental health providers Lack of integration of mental health services in primary care Low rates of provision of evidence-based care in mental health services Limited training in evidence-based care among mental health training programs Limited response rates to empirically supported treatments

Table 2
Strategies for Bridging the Gap Between Anxiety and Depressive Disorders with Treatment

<i>Level</i>	<i>Goal of Strategy</i>	<i>Intervention</i>
Individual	1) Enhancing public awareness	Public education campaigns within the media, school system and other public domains; National public screening days; Increased web-based and self-help resources.
	2) Prevention programs	Early prevention efforts targeted at identified risk factors; Interventions with children at risk, such as those whose parents suffer from anxiety or depression; Integrating relapse prevention strategies within existing treatments.
Provider	1) Improving screening & treatment	Develop brief, reliable, and accurate screening measures for general practitioners; Educate physicians about risk factors for the disorders. Educate medical professionals about the assessment and treatment of the disorders; Incorporate mental health education into existing medical training programs.
	2) Improving access to effective treatment	Educate physicians on available empirically supported treatments; Disseminate research findings to medical journals, textbooks, and newsletters; Increased collaboration efforts between medical and mental health professionals

Systemic	1) Increased access to treatment	Integrating mental health and health services; Shared-care models of health care.
	2) Increased availability of treatment	Increase governmental funding for mental health services.
	3) Ensuring effective delivery of treatment.	Greater professional school training in empirically supported treatments; More educational training workshops for professionals; Adapting empirically supported treatments to be amenable to delivery by nonspecialty mental health providers; Research into most effective modes of transfer of knowledge; Infrastructure support from professional governing boards to ensure delivery of effective treatment.
	4) Ensuring provision of effective treatment.	Greater accountability of professionals to provide empirically supported care; Implementing regulated guidelines for practice in accordance with empirically supported care; Modifications to accreditation standards of regulating bodies; Incentives to provide empirically supported care from professional licensing boards and insurance agents
	5) Improving efficiency of available treatments.	Identification of “active” treatment ingredients; Provision of brief and effective treatments.
	6) Improving effectiveness of available treatments.	Clinical innovations to supplement existing treatments and address low response rates; Identification of individual difference variables related to treatment response.

Table 3

Suggested Self-Help Readings and Website Resources on CBT for Anxiety and Depression

Title	Treatment Target	Source	Author
The Feeling Good Handbook	Depression & Anxiety	Penguin books	Burns (1989)
An End to Panic: Breakthrough Techniques for Overcoming Panic Disorder	Panic Disorder	New Harbinger	Zuercher-White (1998).
Dying of Embarrassment	Social Anxiety Disorder	New Harbinger	Markway et al. (1996).
Mastery of Your Anxiety and Panic II	Panic Disorder	The Psychological Corporation	Barlow & Craske (1994)
Mind over mood	Depression	Guilford books	Greenberger & Padesky (1995)
Overcoming Generalized Anxiety Disorder	Generalized Anxiety Disorder	New Harbinger	White (1999)
Stop Obsessing: How to Overcome Your Obsessions & Compulsions	Obsessive-Compulsive Disorder	Bantam Books	Foa & Wilson (1991)
www.paniccenter.net	Provides 12-session free weekly program of CBT for panic disorder & agoraphobia		
www.anxieties.com	Provides free step-by-step CBT treatment plans for a variety of anxiety disorders including social anxiety, panic, PTSD, OCD		

www.nimh.nih.gov/anxiety	US government sponsored site with lots of educational materials on anxiety and useful links (e.g. clinical trials)
www.adaa.org	Lists specialty anxiety service providers in North America (useful links to clinical trials)
www.cmha.ca	Non-profit Canadian website with extensive and broad information on various mental health problems
www.nmha.org	Non-profit American website with very extensive and broad information on various mental health problems
