The Use of Outpatient Mental Health Services in the United States and Ontario: The Impact of Mental Morbidity and Perceived Need for Care

ABSTRACT

Objectives. This study compared the associations of individual mental health disorders, self-rated mental health, disability, and perceived need for care with the use of outpatient mental health services in the United States and the Canadian province of Ontario.

Methods. A cross-sectional study design was employed. Data came from the 1990 US National Comorbidity Survey and the 1990 Mental Health Supplement to the Ontario Health Survey.

Results. The odds of receiving any medical or psychiatric specialty services were as follows: for persons with any affective disorder, 3.1 in the United States vs 11.0 in Ontario; for persons with fair or poor self-rated mental health, 2.7 in the United States vs 5.0 in Ontario; for persons with mental health–related disability, 3.0 in the United States vs 1.5 in Ontario. When perceived need was controlled for, most of the between-country differences in use disappeared.

Conclusions. The higher use of mental health services in the United States than in Ontario is mostly explained by the combination of a higher prevalence of mental morbidity and a higher prevalence of perceived need for care among persons with low mental morbidity in the United States. (*Am J Public Health.* 1997;87:1136–1143)

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Introduction

Rapid changes in the organization and financing of mental health care in the United States have in part been motivated by a widespread concern that service use is poorly matched to need.[1] On the one hand, many persons with serious mental health problems never receive professional help.[2] On the other hand, there is concern that many persons with little need are using services of uncertain value. Some payers are reluctant to expand coverage because of concerns that this overuse of services will increase.[3,4] Proponents of expanded coverage have responded by noting that little evidence exists of such use patterns in countries that offer more generous insurance coverage.[5] Between-country comparisons of mental health services use for persons with different levels of mental morbidity and impairments are lacking, thereby limiting the ability to make this assessment.

Comparisons with Canada can help illuminate this policy debate in the United States because Canada has universal insurance coverage for mental health services. For example, in the province of Ontario, there are no limits on inpatient stays or outpatient visits for psychiatric care, and there is minimal patient cost sharing.[6] However, there are some potential constraints in the supply of providers. Unlike the case in the United States, in Ontario only psychiatrists are reimbursed through the insurance plan. Psychologists and social workers largely occupy salaried positions in centers funded by the Ministry of Health. Though the per capita number of general practice physicians is higher in Ontario and the number of psychiatrists is similar between countries, there are most likely fewer psychiatric social workers and psychologists in Ontario.

We have previously compared the use of any outpatient service for psychiatric problems in the United States and Ontario among persons who differ in the number and recency of psychiatric disorders.[7] We showed that overall service use was higher in the United States (13.3%, vs 8.0% in Ontario). This higher use in the United States, however, was observed only among persons who did not report a psychiatric disorder within the 12 months prior to the interview. But mental health services use was similar between countries among persons with one or more recent psychiatric disorders. One explanation for these rate differences may be that mental morbidity was poorly measured because we restricted the measurement of morbidity in that analysis to the number and recency of disorders defined by the *Diagnostic and Statistical Manual of*

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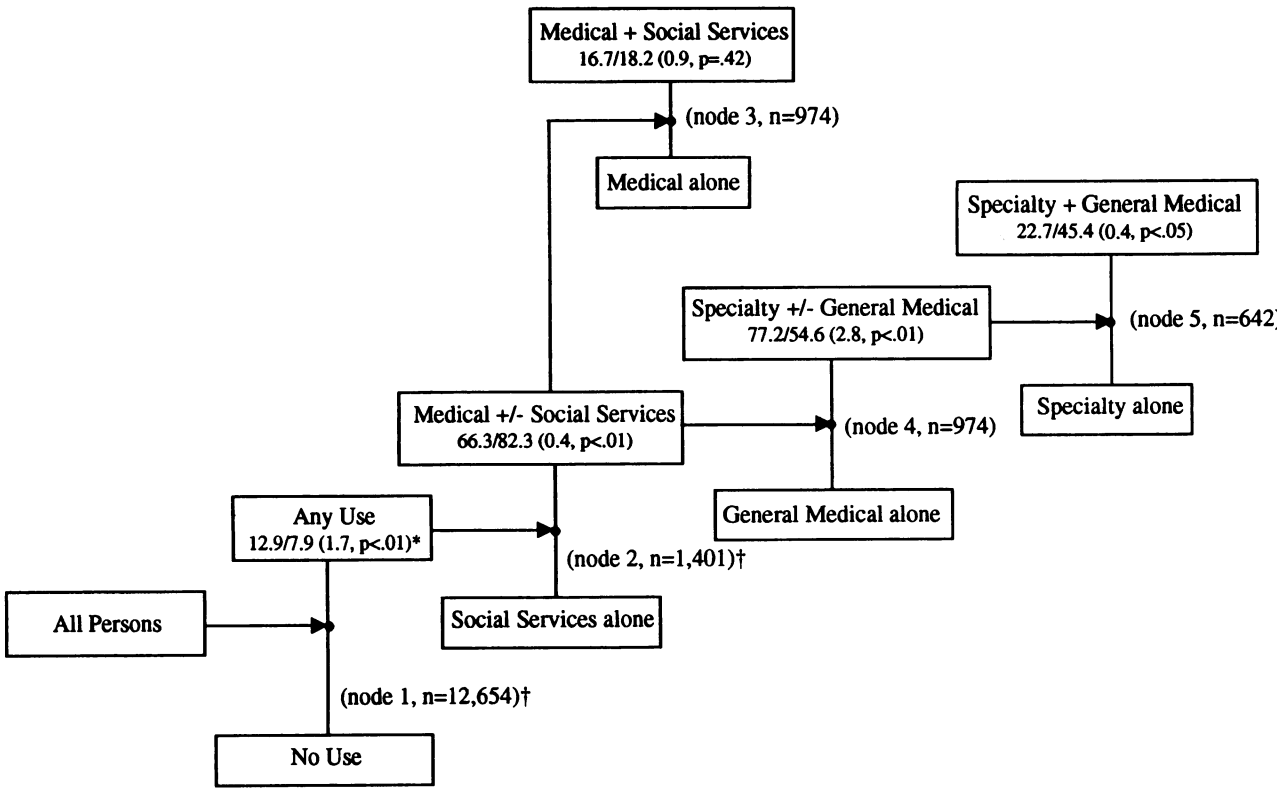

Note. Specialty = mental health specialists (psychiatrists, psychologists, psychiatric social workers, or nurses); General Medical = nonpsychiatrist physicians; Medical = total medical sector (specialty and general medical); Social Services = religious, social welfare, school-based, and self-help group contacts; Any Use = use of any medical or social services.
*US % receiving services in this category/Ontario % receiving services in this category (US: Ontario odds ratio).
† n = number of respondents in the use category.

FIGURE 1—Proportion of persons using any mental health services, by country and service sector.

Mental Disorders (3rd ed., revised; DSM-III-R).[8]

To expand on this previous work, we examined the relationship of specific psychiatric disorders and additional indicators of impairment (mental health–related disability and self-rated mental health) to use of mental health services in the United States and Ontario. These dimensions have been widely used to assess population needs for mental health services.[9,10] The specific objectives of our study were (1) to compare between countries the associations of individual disorders, disability, and self-rated mental health with any use of mental health services; (2) to compare between countries the associations of these indicators of mental morbidity and impairment with specific care settings; and (3) to examine the impact of persons' perceived need for mental health care on differences between countries in use of general medical and psychiatric specialty services.

Methods

Study Population and Data

We used a sample representative of all noninstitutionalized persons aged 18 through 54 years living in the United States (n = 5393) and Ontario (n = 6261) during 1990 and 1991. Data were taken from the US National Comorbidity Survey (NCS) and the Mental Health Supplement to the Ontario Health Survey, parallel population-based surveys that collected detailed information on mental health care use, disorders, health status, and disabilities. Both surveys were conducted in 1990 by administering face-to-face interviews to a probability sample of persons in the general household population. The surveys used identical structured psychiatric interviews and questions about the use of services for psychiatric disorders. The overall response rate was 82% for the NCS and 69.7% for the Supplement.

Variables

The principal dependent variable was any ambulatory use of a health professional, social services professional, religious professional, or self-help group for a mental health problem within 12 months prior to the interview. To examine the association of morbidity with specific treatment settings, we constructed four additional binary dependent variables that indicated where respondents received care. Figure 1 defines these five use variables and their relationships. Persons enter the use tree at the box labeled "Any Use" if they received any mental health services within the 12 months prior to interview. Each node, representing a subset of users, is further divided into two possible use categories. For instance, persons who received any service may have received medical services with or without social services (coded as 1), or social services alone (coded as 0; node 2). For example, respondents who saw only a

TABLE 1—Prevalence (%) of Mental Morbidity, Impairment, and Perceived Need for Mental Health Care: United States vs Ontario, 1990

	United States (n = 5393)	Ontario (n = 6261)
Disorder		
Any affective**	10.5	4.9
Any anxiety**	16.8	12.3
Two or more mental health diagnoses**	9.1	4.6
Any substance dependence*	6.8	4.5
Any substance abuse	3.3	2.4
Self-rated mental health**		
Excellent	31.4	40.0
Very good	38.6	40.9
Good	22.2	15.8
Fair	6.9	2.8
Poor	0.9	0.6
Disability**	7.4	4.0
Perceived need**	19.4	11.7

*US:Ontario differences significant, $P < .01$.
**US:Ontario differences significant, $P < .05$.

psychiatrist in the previous 12 months are coded as 1 in dependent variables (nodes) 1 (any use), 2, and 4, and as 0 in variables (nodes) 3 and 5.

The outpatient utilization questions queried patients in detail about the number, place, and types of outpatient contacts within the previous 12 months for "problems with your emotions or nerves." *Mental health specialty* contact was defined as (1) seeing a psychiatrist or psychologist; (2) seeing a social worker, counselor, or nurse in a psychiatric outpatient clinic, a drug or alcohol outpatient clinic, a substance abuse drop-in center, or a program for people with emotional problems; or (3) seeing a social worker or counselor in an emergency room. *General medical* contact was defined as (1) seeing a physician other than a psychiatrist, regardless of place, or (2) seeing a nurse, occupational therapist, or other allied health professional in either a hospital emergency department or a doctor's office. Social services contacts (e.g., a counselor, social worker, or nurse in a social service agency), religious contacts (e.g., a minister, priest, or rabbi in any setting), and other types of nonmedical professional contacts (e.g., school counselors, self-help groups such as Alcoholics Anonymous, or a hotline) were combined into a category called *social services.*

The principal independent variables were specific mental disorders, self-assessed mental health status, and mental health–related disability. The diagnostic interview used in both the NCS and the Supplement was a modified version of the Composite International Diagnostic Interview (CIDI), a structured interview designed to be used by interviewers who are not clinicians.[11,12] The psychiatric disorders assessed include affective disorders (major depression, dysthymia, mania), anxiety disorders (generalized anxiety, panic, phobia), and substance abuse disorders (alcohol abuse or dependence, drug abuse or dependence). Nonaffective psychoses and Axis II diagnoses were generally not included in the study because the diagnostic instrument was unreliable for these diagnoses or because too few cases were identified. All diagnoses were categorized according to DSM-III-R criteria by the CIDI diagnostic computer program. The World Health Organization field trials documented good reliability and validity for all the CIDI diagnoses used here.[13]

For self-assessed mental health status, respondents were asked, "How would you rate your overall mental health?" on a 5-point scale (responses ranged from "excellent" to "poor"). Two separate questions were asked to quantify the number of days within the previous 30 days that the respondent either cut down on or was unable to perform usual activities because of a mental problem. Respondents were considered to have disability if they reported 1 or more such days.

Finally, respondents were asked two questions that assessed their perceived need for help because of an emotional problem. Persons who saw any professional for a mental health problem were asked, "Was this something you wanted to do or did you go only because someone else put pressure on you?" Persons who indicated that they had wanted to go were considered to have a perceived need for care. Persons who did not go to a professional for a mental health problem were asked, "Was there a time during the past 12 months when you thought you needed to see someone for a problem with your nerves or emotions or your use of alcohol or drugs?" Respondents were considered to have a perceived need for mental health care if they answered yes to this question. Thus, we assessed perceived need for care among both users and nonusers of mental health services.

Analysis

The pertinent data from both surveys were combined into a single analytic file. For each disorder we calculated the proportion of individuals receiving any services and odds of receiving any services for a mental health problem by country. We then tested for interactions between each disorder and country, controlling for demographic factors, by means of logistic regression.

We then examined the joint effects of disorders, self-rated mental health, and disability for each of the dependent variables (use variables) by means of logistic regression. We assessed the relative strength of these predictors in the multivariate models by calculating adjusted odds ratios and by using the likelihood-ratio test to compare the chi-square of alternative models. A systematic examination of interactions between sets of covariates found none, and thus we report only main effects. The final model contained the following variables: dummy variables for any affective disorder, any anxiety disorder, any substance dependence (alcohol or drugs, excluding marijuana), self-rated mental health (good, fair/poor), and disability, and indicator variables for country, age (five categories), female sex, urban location, and education (four categories). The distribution of the demographic variables was similar in the two countries. For each dependent variable, first-order interaction terms between morbidity or impairment covariates and country were used to assess the significance of between-country differences.

Finally, we examined the impact of perceived need for care on differences between countries in the use of any

TABLE 2—Percentage of the Population with Any Use of Mental Health Services, by 12-Month Disorder: United States vs Ontario, 1990

	United States (n = 5393)			Ontario (n = 6261)		
	With Disorder	Without Disorder	OR (95% CI)[a]	With Disorder	Without Disorder	OR (95% CI)[a]
Affective disorder						
Depression*	35.5	10.6	4.6 (3.4, 6.2)	55.5	5.8	21.4 (12.9, 33.1)
Dysthymia*	31.2	12.5	3.2 (2.1, 4.8)	59.4	7.5	18.3 (7.2, 44.9)
Mania	49.4	12.3	7.0 (4.2, 11.7)	37.7	7.7	7.4 (2.3, 22.4)
Any*	36.4	10.1	5.1 (3.8, 6.9)	52.7	5.7	18.6 (11.4, 30.5)
Anxiety disorder						
Generalized anxiety*	37.0	12.1	4.3 (2.6, 6.9)	60.0	7.3	19.4 (9.6, 37.8)
Panic*	53.5	12.0	8.4 (5.9, 12.0)	53.0	7.4	14.4 (8.7, 22.6)
Social phobia	23.9	12.0	2.3 (1.7, 3.1)	22.8	6.9	4.0 (2.5, 6.4)
Simple phobia	25.0	11.7	2.5 (1.8, 3.4)	23.8	6.9	4.3 (3.3, 5.5)
Agoraphobia*	38.7	11.7	4.8 (3.2, 7.2)	51.0	7.2	13.4 (9.5, 19.0)
Any*	25.8	10.3	3.0 (2.3, 4.0)	25.0	5.5	5.7 (4.1, 7.9)
Two or more mental health diagnoses*	36.5	10.5	4.9 (3.8, 6.3)	43.4	6.2	11.6 (7.8, 17.1)
Any substance dependence	28.8	11.7	3.1 (2.2, 4.3)	20.4	7.4	3.2 (1.6, 5.2)
Any substance abuse	15.8	12.8	1.3 (0.8, 2.0)	19.5	7.7	2.9 (1.5, 5.7)

Note. Percentages are adjusted for age, sex, urban location, and education. "Mental health services" refers to contact with physicians, mental health specialists, or social service personnel within the year before the survey. "12-month disorder" refers to specific diagnoses derived from symptoms reported by respondents during the 12 months prior to the survey.
[a]Odds ratio (OR) for any use, persons with the specific diagnosis compared with persons without the diagnosis. CI = confidence interval.
*Interaction between disorder and country is significant, $P < .01$.

TABLE 3—Adjusted Odds Ratios for Different Types of Use of Mental Health Services, by Disorder and Impairment

	Type of Use[a]				
	Any Use, OR (95% CI)	Node 2, OR (95% CI)	Node 3, OR (95% CI)	Node 4, OR (95% CI)	Node 5, OR (95% CI)
Disorder					
Any affective	3.9 (2.7, 5.7)	2.2 (1.4, 3.5)	1.4 (0.9, 2.3)	0.8 (0.5, 1.3)	1.8 (1.1, 3.3)
Any anxiety	2.0 (1.5, 2.7)	1.0 (0.6, 1.7)	1.4 (0.7, 2.4)	0.8 (0.4, 1.7)	0.8 (0.4, 1.2)
Any dependence	1.9 (1.4, 2.6)	0.9 (0.5, 1.4)	1.9 (1.0, 3.8)	3.1 (1.7, 5.6)	0.8 (0.4, 2.1)
Two or more disorders	1.0 (0.7, 1.6)	1.1 (0.6, 2.2)	0.9 (0.5, 1.9)	2.5 (1.0, 6.4)	0.9 (0.4, 2.2)
Self-rated mental health					
Excellent/very good	Reference	. . .	. . .	. . .	. . .
Good	1.8 (1.4, 2.3)	1.3 (0.8, 1.9)	1.0 (0.5, 1.6)	1.3 (0.9, 1.9)	0.8 (0.4, 1.7)
Fair/poor	3.0 (2.1, 4.2)	1.5 (0.8, 7.5)	1.0 (0.4, 2.5)	1.7 (0.9, 3.3)	1.3 (0.7, 2.6)
Disability	2.0 (1.3, 3.2)	1.8 (1.1, 3.1)	1.0 (0.4, 1.7)	0.7 (0.3, 1.4)	1.3 (0.8, 2.1)

Note. Odds ratios (ORs) are adjusted for age, sex, urban location, education, and country. CI = confidence interval.
[a]Node 2 = medical services, with or without social services, or social services alone; node 3 = medical and social services or medical services alone; node 4 = specialty medical services, with or without general medical services, or general medical services alone; node 5 = specialty and general medical services or specialty medical services alone.

medical service (general medical or psychiatric specialty). Because of the presence of interactions between perceived need and morbidity or impairment indicators, we controlled for perceived need by stratifying a model containing all main effects, country, and first-order interactions between the sets of covariates and country by perceived need.

Because both surveys used complex sampling designs, all analyses were performed with analytic weights. Variances for the regression coefficients were calculated with a jackknife repeated replication technique,[14] which accounts for the different sampling strategies in each survey. Wald chi-square tests were used to assess the significance of coefficients. All models exhibited acceptable fit by the Hosmer-Lemeshow statistic. All analyses were run with STATA (STATA Corp, College Station, Tex).

Results

The prevalence of mental morbidity, impairment, and perceived need was consistently higher in the United States than in Ontario (Table 1). The 12-month prevalence of depression in the United States was twice that of Ontario (10.5% vs 4.9%, $P < .01$), and the prevalence of substance dependence was one third higher in the United States (6.8% vs 4.5%,

TABLE 4—Percentage of the Population with Perceived Need for Mental Health Care, by Disorder, Self-Rated Mental Health Status, and Disability: United States vs Ontario, 1990

	United States (n = 5393)	Ontario (n = 6261)
Disorder		
Any affective*	53.9	65.8
Any anxiety	36.2	35.5
Two or more mental health diagnoses*	49.3	60.0
Any substance dependence	40.0	30.0
Any substance abuse	21.4	23.8
None**	12.9	6.7
Self-rated mental health**		
Excellent/very good	14.6	7.5
Good	23.9	26.1
Fair/poor	44.8	44.6
Disability		
Yes	54.8	52.2
No**	16.2	10.0

*US:Ontario differences significant, $P < .05$.
**US:Ontario differences significant, $P < .01$.

$P < .01$). More than twice as many Americans reported fair or poor mental health status (7.8% vs 3.4%, $P < .01$). Similarly, the prevalence of mental health–related disability was higher in the United States (7.4% vs 4.0%, $P < .01$). Finally, more Americans had a perceived need for care for a mental health problem (19.4% vs 11.7%, $P < .01$).

The two countries differed in the proportion of respondents in the "any use" category (see Figure 1, node 1; 12.9% of Americans vs 7.9% of Canadians, $P < .01$). More than two thirds of all users received services in the medical sector. This proportion was lower in the United States than in Ontario (node 2; 66.2% vs 82.3%, $P < .01$), Thus, there was greater use of religious, social welfare, and self-help groups (exclusive of medical care services) in the United States than in Ontario. Finally, Americans were more likely than respondents in Ontario to have received specialty psychiatric services (node 4; 77.2% vs 54.6%, $P < .01$), especially in the absence of general medical services (node 5).

Table 2 shows associations of each disorder with the use of any mental health service. The reference group is persons without the particular disorder. These associations were consistently lower in the United States than in Ontario. This is the result of consistently higher use in the United States than in Ontario among persons without the disorder in question (observed in all 13 rows of the table), coupled with a tendency toward higher use in Ontario than in the United States among persons with the disorder in question (observed in 7 of the 13 rows; percentages of users were higher in the United States for 2 disorders and there were no differences between countries for the remaining 4).

Although specific disorders were strong predictors of receiving any mental health service, they were weaker predictors of where people received care (Table 3). However, there were significant associations between some disorders and the intensity of the health care setting. For instance, affective disorders were positively associated with receiving any medical service, with or without social services, vs social services alone (node 2; adjusted odds ratio [OR] = 2.2, 95% confidence interval [CI] = 1.4, 3.5), and with receiving specialty services with general medical services vs specialty services alone (node 5; OR = 1.8, 95% CI = 1.1, 3.3). Substance dependence was associated with using both the medical and social service sectors (node 3; OR = 1.9, 95% CI = 1.0, 3.8) and using specialty services (node 4; OR = 3.1, 95% CI = 1.7, 5.6). Though there were substantial between-country differences in the associations between disorders and any mental health service use, there were no significant between-country differences in the associations between disorders and types of care.

Self-rated mental health and disability were independently associated with any use of services. Like disorders, these variables were more strongly associated with whether persons received any service than with type of service received. The association of self-rated mental health with any use was about twice as strong in Ontario as in the United States (χ^2 for country interaction terms = 14.9, $P < .01$), but there were no interactions between country and self-reported mental health in predicting any of the four treatment-type outcomes. Nor was there any significant interaction between disability and country in predicting any of the five use outcomes.

Perceived need explains most of these international differences in the use of mental health services. Table 4 shows the distribution of persons with perceived need for mental health care by disorder, self-rated mental health status, presence or absence of disability, and country. Among persons with low mental morbidity and impairment, Americans were much more likely than Canadians to perceive need, but there were few differences between countries for persons with higher mental morbidity and impairment. Persons who perceived a need for mental health care were much more likely to receive services (of those who perceived need, 60.0% received services in the United States and 54.0% received services in Ontario) than persons who did not perceive need (of those who did not perceive need, 1.8% received services in both countries). This difference between countries is not significant (US: Ontario odds = 1.3, 95% CI = 0.7, 1.4).

Table 5 shows adjusted odds ratios for having received any medical service for a mental health problem (with age, sex, urban location, and education controlled), by presence or absence of perceived need for care. In the main models, all three morbidity and impairment indicators were independently associated with use in both countries and there were no interactions between these sets of covariates. The disorder variables were the strongest predictors, while disability was the weakest predictor. The association of disorders and self-rated mental health remained significantly weaker in the United States than in Ontario. When we stratified the main models by persons with and without perceived need, most of the between-country differences in use disappeared. In both countries, the positive association between disorders, disability, and mental health care use was seen predominantly for persons without perceived need. Indeed, the association of these variables was stronger for these

TABLE 5—Adjusted Odds Ratios for Any Use of Medical Services for a Mental Health Problem, by Perceived Need for Care: United States vs Ontario, 1990

	United States			Ontario		
	Main Model	Without Perceived Need[a]	With Perceived Need[a]	Main Model	Without Perceived Need[a]	With Perceived Need[a]
Disorder[b]						
Any affective	3.1	4.4	1.0	11.0	12.3	2.0
Any anxiety	1.5	4.8	0.9	2.6	3.0	1.0
Any substance dependence	1.7	2.4	0.8	1.0	2.6	0.6
χ^2	58.1**	40.3**	0.2	123.0**	89.1**	11.0**
Self-rated mental health[c]						
Excellent/very good	Reference	Reference	Reference	Reference	Reference	Reference
Good	1.7	2.9	1.2	2.5	1.8	1.2
Fair/poor	2.7	7.7	1.3	5.0	1.4	2.8
χ^2	13.0**	12.0**	0.1	70.0**	1.2	7.1*
Disability[d]	3.0	4.0	1.0	1.5	4.5	0.4
χ^2	14.1**	10.6**	0.8	10.8**	16.6**	4.6

Note. The model controlled for age, sex, urban location, and education. Use of medical services refers to any contact with a physician or mental health specialist for a mental problem within the year before the survey.
[a]There were no significant country interactions after controlling for perceived need.
[b]χ^2 for country interaction (main model) = 26.3, $P < .01$.
[c]χ^2 for country interaction (main model) = 8.2, $P < .05$.
[d]χ^2 for country interaction (main model) = 3.2, $P = .08$.
*$P < .05$; **$P < .01$.

persons than for the full sample. For instance, the odds ratio of any medical use for persons with any substance dependence was 1.7 (95% CI = 1.2, 2.4) in the United States and 1.0 (95% CI = 0.4, 2.6) in Ontario, but for persons without perceived need it was 2.4 (95% CI = 1.0, 6.0) in the United States and 2.6 (95% CI = 1.1, 9.0) in Ontario. For persons with perceived need, however, these indicator variables had little effect on use. For instance, the odds ratio of any use for persons with any substance dependence was 0.8 (95% CI = 0.4, 1.4) in the United States and 0.6 (95% CI = 0.3, 1.8) in Ontario. When perceived need was controlled, there were no statistically significant between-country differences in these associations of morbidity indicators with any use, and the main effect of country was no longer significant (for persons without perceived need, OR = 0.7, 95% CI = 0.4, 1.4; for persons with perceived need, OR = 1.6, 95% CI = 0.9, 2.4).

Discussion

Consistent with previous studies, we found that psychiatric disorders, self-rated mental health, and mental health–related disability are all powerful independent and additive predictors of mental health services use in the United States and in Ontario.[15,16] Of these variables, disorders (particularly affective disorders) are the most powerful predictors of any use. The preeminence of specific anxiety and affective disorders as predictors of any mental health care use in both countries suggests that symptoms associated with these disorders may be more important triggers of care seeking than subjective mental health or disability. These disorders are associated with particularly distressing symptoms, such as sleep disturbance, anorexia, and acute anxiety, which may trigger care seeking or bring an afflicted person to the attention of family members or friends.[17,18]

Though these indicators of mental morbidity are powerful predictors of whether persons receive care, they are weak predictors of where persons receive care. Only affective disorders independently predict where persons receive services, generally predicting a greater intensity of treatment setting (e.g., medical sector and social services sector as opposed to social services sector alone). Our findings are consistent with those of two earlier studies using large population samples.[19,20]

Several aspects of the present study merit comment. Although we used two different surveys to make our comparisons, for the variables used in the study the sample design, question structure, and content were very similar. However, the higher prevalence of morbidity we found in the United States may in part be due to greater sensitivity of the diagnostic instrument used in the United States. Unlike the Supplement, the NCS used a "commitment probe," a statement to motivate the respondent to recall previous events. If persons with a given psychiatric disorder were sicker in Ontario than in the United States, this might partly explain the observed higher morbidity in the United States. However, this difference in instrument sensitivity, if corrected, could only strengthen our observation that use is higher in the United States than in Ontario among persons with low morbidity.

The power of our study to detect between-country differences in the associations between morbidity indicators and different treatment settings may be low because only 1401 persons (12% of the sample) had used any services within the 12 months before interview. However, the direction of the interaction terms between specific disorders and country (Table 2) did not suggest a consistent trend.

Psychiatric disorders and self-rated mental health are substantially weaker predictors of any service use in the United States than in Ontario. This is mainly the result of an approximately 75% higher use rate among persons with no morbidity or impairment in the United States compared with their counterparts in Ontario. Thus, under the Ontario health system, with its universal and comprehensive insurance for mental health care, there is little evidence of excessive use of services by

persons with low mental morbidity and impairment, at least relative to the United States.

Differences in the prevalence of perceived need for mental health care accounted for most of the between-country differences in the associations of mental morbidity and impairment with medical sector use. Among persons with low levels of mental morbidity, perceived need was more prevalent in the United States than in Ontario, but there was little difference between countries among those with higher levels of morbidity. When we controlled for perceived need in the analysis of use of medical services and indicators of mental morbidity, we found that these indicators were important predictors of use only among persons who did not perceive a need for care. Among persons who did perceive a need, these indicators had little effect. Furthermore, after perceived need is controlled, the main effect of country and interactions between these indicator variables and country are insignificant. Thus, the combination of a higher prevalence of perceived need and higher mental morbidity and impairment in the United States explains the higher use of mental health services in the United States than in Ontario.

These findings make clinical sense. In the absence of perceived need, symptoms of psychiatric disorders may bring an afflicted person to the attention of others. In the presence of perceived need, these factors become less important as the individual requires less external motivation to seek care. These relationships probably exist in both countries, because the association between perceived need and use is the same in the two countries.

We can only speculate on why, in the absence of reported mental morbidity and impairment, more Americans than Canadians perceive need for services. Sociocultural factors, attitudes toward professional services, and adequacy of social support networks may each play a role. Leaf et al. have noted that these factors may be as important as indicators of mental morbidity in triggering mental health care seeking.[20] We speculate that higher expectations and desire for medical care among Americans may be an important factor contributing to international differences in the use of medical care, including mental health care. Our results, however, cannot address the question of whether the higher prevalence of perceived need in the United States is partly the result of the larger supply of psychologists and social workers in the United States.

What are the implications of our findings for health policy in the United States? First, even under a more generous insurance scenario, the majority of persons with recent mental health disorders do not receive treatment from any source. Our findings reinforce the important role of non–insurance-related barriers to care and the special challenges health care providers face under any insurance program when facilitating the provision of mental health care services. Second, comparisons with Ontario suggest that expanded coverage does not necessarily lead to a worse match between services and mental morbidity and impairment. The utilization rate among persons without mental morbidity or impairment was less than 4% in Ontario. Furthermore, our results suggest that the recognition and treatment of specific disorders is as high in Ontario as in the United States. However, between-country differences in perceived need for mental health care suggest the need for caution in extrapolating from the Ontario experience to the United States. □

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