Physical Health Complaints and the Use of Outpatient Mental Health Services Among Those with a Mental Disorder

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Although persons with mental disorder may benefit from outpatient mental health services, only 20% receive such services annually.¹ As mental disorder and physical health problems are associated,²⁻⁸ together they may increase the probability of use by increasing need and/or access to services.⁹⁻¹¹ The purpose of this study is to determine whether physical health complaints are associated with the use and volume of use of outpatient mental health services among those with mental disorder.

METHODS

The study sample consists of 1,607 individuals aged 15 to 64 years, interviewed for the Mental Health Supplement (Supplement) to the Ontario Health Survey (OHS) between December 1990 and April 1991, who had a mental disorder during the previous year. A DSM-III-R mental disorder is determined via the Composite International Diagnostic Interview, University of Michigan Version

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TABLE I
Physical Health Complaints and the Use of Outpatient Mental Health Services

Independent Variables	Adjusted* Odds Ratios and 95% Confidence Intervals		P-value
One or More Physical Health Complaints vs. None			
among urban dwellers	2.39	(1.43, 3.99)	0.01†
among rural dwellers	0.74	(1.23, 0.30)	0.03†
among women	3.16	(2.57, 3.89)	
among men	1.15	(0.61, 2.15)	

* The odds ratios are adjusted for age, employment status, subjective mental health, and one or more disability days in the previous month.

† Statistically significant at alpha level $p = 0.05$; two-sided test

Note: approximately 1.1% of the sample are missing due to missing values in one or more of the predictor variables.

(UM-CIDI).^{12,13} Information about the survey design and methodology are presented elsewhere.¹⁴

Data concerning physical health are drawn from the OHS which was conducted in 1990 before the Supplement. In the OHS, household informants identified which household members had health problems. Each health problem was later assigned an ICD-9 disease classification code.¹⁵ A physical health complaint is defined by excluding mental health-related ICD-9 health problems.¹⁶

Use of outpatient mental health services is determined by subjects stating they saw at least one provider in the previous year for mental health reasons listed in the Supplement.¹⁴ Volume of use is the number of outpatient visits by those who made at least one visit in the previous year. Because this distribution is skewed, a dichotomous outcome variable based on the median split (one to five vs. greater than five visits) is used.

ANALYSES

The goal of the analyses is to determine whether there is a statistically significant

association between physical health complaints and each dependent variable (use of outpatient mental health services and volume of use). Statistical significance is set at an alpha level of $p=0.05$ and all tests are two-sided. Crude odds ratios are calculated first. Multiple logistic regression analyses are then applied to determine whether either association is affected by sociodemographic factors, available resources or need.¹⁷⁻²⁰ Data are weighted to represent the 1991 Ontario population and analyzed using SUDAAN to adjust for the effects of the complex sampling design upon the variance.²¹

RESULTS

Twenty-two percent of those with mental disorder sought outpatient mental health services. Most saw a general practitioner or family physician (13%) and of these, fewer than half saw any other providers.

Those with mental disorder are more likely to have physical complaint(s) (72%) compared to those without mental disorder (62%), $X^2=25.51$, 1 df; $0.01 > p \geq 0.001$, [Crude OR: 1.56; 95% CI: 1.29 to 1.86].

TABLE II
Physical Health Complaints and the Volume of Use
of Outpatient Mental Health Services

Independent Variables	Adjusted* Odds Ratios and 95% Confidence Intervals	P-value
One or More Physical Health Complaints vs. None	1.45 (0.65, 3.23)	0.37

* The odds ratio is adjusted for receipt of public assistance, English language spoken at home, education, living alone, and subjective mental health
Note: approximately 2% of the 336 persons who used outpatient mental health services are excluded due to missing values in one or more of the predictor variables.

Persons with both mental disorder and physical illness are more likely to use outpatient mental health services (26%) than persons with mental disorder only (13%). The crude odds ratio is 2.36; $p \leq 0.0001$; 95% CI: 1.62 to 3.45.

The results from the multivariate model for use of outpatient mental health services are shown in Table I. The association between physical health complaints and the use of outpatient mental health service is only present among women and among urban dwellers. Among these groups, the odds of use for those with physical health complaints are about two to three times greater compared to those without physical health complaints.

In contrast, among those who have made at least one outpatient mental health visit, physical complaints are *not* associated with volume of use (crude OR: 1.17; 95% CI: 0.52 to 2.67; $X^2=0.14$, 1 df; $p=0.17$). Of persons with physical health complaints, 51% made more than five visits compared to 47% of those without such complaints. The association remained non-significant in the multivariate analyses (Table II).

DISCUSSION

Because physical health complaints are related to use (not volume of use) and only among specific subgroups, they may serve largely as a means of accessing services. As women use medical services more than men,²² stigma about seeking help for mental health problems may be reduced for women with physical health problems seeing their family doctor. For those who live in urban areas, an increased availability of services may translate into greater opportunities for treatment of physical and mental health problems.

Several limitations must be considered. The temporal sequence of physical and mental illness, and the use of outpatient mental health services are unknown. The results from this study are best used to identify associations for future analytic studies. It is possible that more severe or chronic physical conditions are associated with greater volume of use. Such an association may have been masked by our broad definition of physical illness. Some non-responders may have been too physically ill to use outpatient services. Their inclusion may result in a smaller association between physical health complaints and use.

This study raises questions about whether access to outpatient mental health services for those with mental disorders is too restricted to medical services. Interventions targeted toward community and social services might help broaden avenues of access for men and those living in rural areas.

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