

## Emotional Disability Days: Prevalence and Predictors

### ABSTRACT

This study considered days missed from work or usual activities for emotional reasons associated with a range of specific psychopathologic disorders, psychosocial distress, and persons found to be asymptomatic. Analyses were performed with the presence or absence of emotional disability days as the dependent variable using logistic regression. The effects of specific mental disorders were compared with the effects of chronic physical conditions for labor force participants and for the total population. The odds ratio (and 95% confidence interval) for subjects with major depressive disorder was 27.8 (6.93, 108.96); for panic disorder, 21.1 (2.25, 198.44); and for schizophrenia, 17.8 (1.73, 182.99). Workplace adjustments for persons with psychopathology are encouraged. (*Am J Public Health*. 1994;84:1304-1307)

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### Introduction

Beyond the immediate tragedy of emotional or mental illness is associated impairment as measured by days lost from work, disability, a reduced sense of well-being, and the need for health care. Functional status—that is, the capacity to perform tasks and activities—is a primary concern of patients, their families, and physicians. Restricted activity days experienced by persons in a year is an important measure of functioning status and well-being.<sup>1-4</sup>

Previous studies have focused on estimated associations of various measures of functioning with specific chronic medical conditions; few associations have been made with patients experiencing distress or psychopathology.<sup>5</sup> Wells et al.<sup>6</sup> and Broadhead et al.<sup>7</sup> have shown that depression and disability from work are related. A positive relationship has been found between physical illness and depression or psychological distress in some<sup>8-14</sup> but not all studies.<sup>15,16</sup> Thus, depression might be related to disability because it is associated with nonpsychiatric medical conditions.

In this research report, we consider days missed from work or usual activities for emotional reasons (“emotional disability days”) associated with a range of specific psychopathological disorders and psychosocial distress. We assess and adjust for the influence of sociodemographic characteristics on these relationships, and we compare subjects who are in the labor force full time with the total population.

### Methods

#### Study Sample

The study sample was drawn from the Eastern Baltimore Mental Health

Survey conducted during 1981 as part of the National Institute of Mental Health (NIMH) Epidemiologic Catchment Area Program.<sup>17-20</sup> It has recently been reported that East Baltimore has the highest rates of premature disability and death in the state.<sup>21</sup> This paper reports analyses from The Johns Hopkins University site of the NIMH program, which included three contiguous mental health catchment areas with an adult population of approximately 175 000. The data include information on 3481 individuals originally identified through a probability sample of adult household residents. The response rate was 78%.<sup>22</sup> Details concerning the characteristics of this population have been presented elsewhere.<sup>17,18</sup>

#### Measurement

Each participant in the survey underwent a 90-minute interview that included the NIMH Diagnostic Interview Schedule (DIS), which was scored to reflect diagnoses from the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, 3rd edition (DSM-III) (hence the label “DIS/DSM-III disorder”).<sup>23</sup> Symptoms were counted only if they met the severity criteria of the DIS and were not explained by physical illness, medications, alcohol, or other drug use. This report focuses on disorders reported as present within the 6 months prior to interview.

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The Baltimore site included the General Health Questionnaire to measure distress that might not be connected to a specific mental disorder.<sup>24</sup> The standard threshold of four or more was used to define those in the sample considered to be at "high distress."

Specific physical health conditions included asthma, high sugar or diabetes, heart trouble, high blood pressure, arthritis or rheumatism, and trouble breathing. Respondents were also asked if they had ever had a stroke and/or cancer.<sup>25</sup>

Respondents in the interview were asked, "During the last three months, were there any times when you were kept from your work, school or usual activities for at least one whole day because of an injury or because you weren't feeling well?" Those responding affirmatively were asked, "Were you kept from your usual activities because of an illness or physical condition? an emotional problem or trouble with your nerves?" For this study, days missed from work because of emotional problems and physical illness were analyzed separately. As in the Health Interview surveys, 3 months was selected as our recall period, a compromise offering an adequate number of responses and necessary recency.

Full-time employment status was ascertained by asking respondents what they were doing during most of the previous week (as in the Labor Force surveys). Analyses reported in the tables below focus on the 1463 respondents in the labor force at the time. Weighted data are used in our analyses and reported in the text and tables owing to the multistage sampling procedures of the Epidemiologic Catchment Area Program.<sup>26,27</sup>

## Results

There is no striking variation according to sociodemographic variables in the percentage of respondents with emotional disability days (Table 1); however, it is notable that those with the least education and those without private insurance have the most absences from work—about 5%. After adjusting for all the personal characteristics, the odds of having an emotional disability day are presented in the far right column of Table 1. However, these were not significant. Household income was entered in regression analyses, but it is not included in the model in Table 2 because it was not significant and because more than 10% of the respondents failed to answer this item.

**TABLE 1—Predictors of Emotional Disability Days: Estimates for the Labor Force Population of East Baltimore**

	Sample, % (n = 1463) <sup>a</sup>	% Having Emotional Disability Days	Adjusted Odds of Having Emotional Disability Days	95% Confidence Interval
<b>Sex</b>				
Male	49	3.0	1.00	
Female	51	4.5	1.54	0.66, 3.60
<b>Age, y</b>				
18–29	35	2.8	1.00	
30–44	35	4.2	1.49	0.49, 4.50
45–64	26	4.0	1.23	0.38, 3.99
65+	4	4.2	1.20	0.08, 18.91
<b>Education</b>				
Beyond high school	28	2.3	1.00	
High school	36	3.0	1.23	0.35, 4.32
9th to 11th grade	23	5.2	2.14	0.61, 7.51
8th grade or less	13	5.1	2.11	0.48, 9.35
<b>Race</b>				
White and other	67	3.6	1.00	
African American	33	3.8	0.88	0.30, 2.58
<b>Marital status</b>				
Not married	59	3.9	1.00	
Married	41	3.3	0.84	0.32, 2.04
<b>Health insurance</b>				
No insurance	27	4.9	1.00	
Insurance	73	3.2	0.72	0.29, 1.79

<sup>a</sup>Data were required to be complete for age, sex, and race. For other variables, the total does not always equal 1463 owing to missing data.

**TABLE 2—Disability Days for Emotional Reasons, by Psychopathology: Estimates for the Labor Force Population of East Baltimore**

Type of Psychopathology <sup>a</sup>	Percentage with 1+ Disability Days <sup>b</sup>	No. in Sample with Psycho- pathology	Adjusted Odds Ratios <sup>c</sup>	95% Confidence Interval
<b>DIS/DMS-III</b>				
Major depressive disorder	44	34	27.8	6.93, 108.96
Alcohol abuse/dependence	16	82	10.9	3.42, 34.91
Drug abuse/dependence	8	36	2.5	0.38, 16.80
Panic disorder	44	10	21.1	2.25, 198.44
Schizophrenia	40	11	17.8	1.73, 182.99
Obsessive-compulsive disorder	11	25	3.5	0.48, 25.98
Phobic disorder	8	174	2.5	0.86, 7.14
Any DIS/DSM-III disorder	11	312	6.6	2.71, 16.28
High General Health Questionnaire score <sup>d</sup>	15	178	8.2	3.32, 20.01

Note. DIS/DSM-III = Diagnostic Interview Schedule/Diagnostic and Statistical Manual of Mental Disorders, 3rd ed.

<sup>a</sup>In prior 6 months.

<sup>b</sup>In prior 3 months.

<sup>c</sup>Adjusted for age, education, marital status, race, sex, and health insurance.

<sup>d</sup>In prior several weeks.

Table 2 presents the percentage of those with at least 1 disability day for emotional or mental reasons by type of psychopathology, and the association of psychopathology with emotional disability. The comparison groups for the spe-

cific psychiatric disorders were those not meeting criteria for that specific disorder only. Persons with no DIS/DSM-III disorder were the comparison group for those with any DIS/DSM-III disorder.<sup>28</sup>

The most notable finding is the large percentage of subjects with DIS/DSM-III depressive disorders and panic disorders who reported a disability day owing to emotional reasons (44% each). Closely following are those with schizophrenia (40%). In contrast, among those who did not meet the criteria for any DIS disorder, only 2% reported an emotional disability day.

As the number of disability days was highly skewed, analyses were performed using logistic regression, with the presence or absence of disability days as the dependent variable.<sup>29,30</sup> The association of type of psychopathology with emotional disability is also shown in Table 2. Subjects suffering from major depression had the greatest odds of missing work (odds ratio [OR] = 27.8; 95% confidence interval [CI] = 6.93, 108.96). This was closely followed by those with a panic disorder (OR = 21.1; 95% CI = 2.25, 198.44). Schizophrenics had 18 times the odds of missing work for an emotional problem (OR = 17.8; 95% CI = 1.73, 182.99) compared with those without such a disorder. Those with an alcohol diagnosis were 11 times as likely to miss work at least 1 day (OR = 10.9; 95% CI = 3.42, 34.91). The crude odds ratios differ trivially. The large confidence intervals caution us regarding the possible stability of these findings.

The mean days absent from work for an emotional reason range from 3.2 to 9.4. Depression is associated with the greatest number of absences ( $\bar{X}$  = 9.4 days, SD = 6.74), followed by high distress ( $\bar{X}$  = 7 days, SD = 6.40). The mean for depression is greater than that owing to all conditions except cancer and cardiovascular problems.

The association of psychopathological disorders with absences from work owing to emotional reasons for the entire population was also examined. The odds ratios for those with panic disorders were 27 times greater, followed by only 9 times greater odds for major depressives. The pattern of other results was similar for the labor force group and the total population.

## Discussion

Mental disorder has a strong association with missing days from work among

those in the labor force. Subjects experiencing a major depressive disorder had the strongest association with disability as they showed a 27 times greater likelihood of being disabled from participating in work activities. Subjects with a diagnosis of panic disorder followed closely. The effects of sociodemographic characteristics are not critical to an understanding of the determinants of work absences.

Nagi differentiated the vocationally disabled from the vocationally nondisabled in that the latter were able to make job adjustments either on their own or with their employers.<sup>31</sup> Given the high prevalence of emotional disorders, greater concern, a more "reasonable accommodation,"<sup>32,33</sup> and continuous supportive employment services may be warranted.<sup>9</sup> Rising costs of services for morbidity and associated disability have focused attention on disabilities and the quality of life at the middle and later stages of life.<sup>34,35</sup> Our results point to the possibility of making adjustments for the emotionally handicapped as is currently done for the physically handicapped.<sup>36,37</sup> □

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## The Prevalence and Demographic Predictors of Illicit and Licit Drug Use among Lesbians and Gay Men

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### Introduction

Early research on illicit and licit drug use by homosexuals has primarily examined the prevalence of alcohol use and abuse using small, opportunistic samples.<sup>1-13</sup> Only within the last decade have studies begun to report both drug and alcohol use among larger and more representative samples.<sup>14-19</sup> However, most of this research has excluded lesbians, employed limited drug use measures, and been conducted in large cities known for their large homosexual populations (e.g., San Francisco). Little is known about the full extent of illicit and licit drug use among gay men and lesbians living in smaller cities.

This paper presents selected data from the Trilogy Project, a study of self-reported illicit and licit drug use among homosexuals of both sexes from two metropolitan areas in a southern state. Two issues are examined: (1) lifetime, past-year, and past-month age-specific prevalence of use of six illicit and

two licit "recreational" drugs (alcohol and cigarettes) as well as the nonmedical use of four psychotherapeutic drugs by age; and (2) demographic predictors of reported frequency of use over the past year of marijuana, alcohol, and cigarettes—the three drugs most commonly used by both lesbians and gay men. Further data are reported elsewhere.<sup>20</sup>

### Methods

#### Sample and Procedures

Respondents were self-defined homosexuals living in and around the two

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*Note.* The content, interpretations, and conclusions expressed in this paper are exclusively those of the author.

## ABSTRACT

Studies on illicit and licit drug use among homosexuals of both sexes have focused primarily on gay men, used limited drug measures, and been conducted in cities known for large homosexual populations. This paper examines (1) the prevalence of 12 illicit and licit drugs by sex and age group and (2) the demographic predictors of past-year frequency of marijuana, alcohol, and cigarette use. Organizational mailing lists were used to collect self-report data on 455 homosexuals living in a southern state. Differences were found between gay men and lesbians in the use of specific substances and in the demographic predictors of drug use. (*Am J Public Health*. 1994; 84:1307-1310)