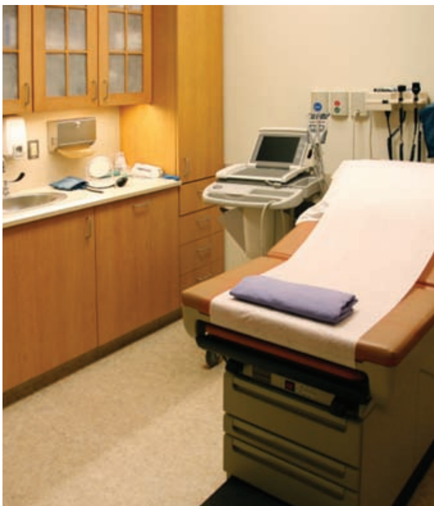

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ORIGINAL RESEARCH

The Relationship Between Mental Healthcare Utilization and Criminal Behaviors Among Internal Medicine Outpatients

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ABSTRACT

Background. According to the scant empirical literature, largely in studies of offenders, there appears to be a general but diffuse relationship between various psychiatric disorders and criminal behavior. In this study, we examined mental healthcare utilization, a general measure of psychiatric dysfunction, in relationship to a history of criminal behavior in a sample of internal medicine outpatients.

Method. In a consecutive sample of 376 internal medicine outpatients being seen predominantly by resident providers, we examined the relationship between 27 illegal behaviors (charges, not convictions) as delineated by the Federal Bureau of Investigation's crime cataloguing schema and four items related to mental healthcare utilization (i.e., ever been seen by a psychiatrist, ever been hospitalized in a psychiatric hospital, ever been in counseling, ever been on medication for your "nerves").

Results. Twenty-two percent of the sample reported a history of having been charged with at least one criminal behavior. With the exception of ever having been on "nerve" medication, the remaining mental-healthcare-utilization variables demonstrated statistically significant relationships with the number of illegal behaviors reported. However, overall correlations were relatively weak.

Conclusions. Using both a sample and methodology that is unique to the current literature, we found relationships between past mental

health treatment and history of criminal behavior.

INTRODUCTION

There appears to be a general yet diffuse association between psychiatric disorders and criminality. For example, according to data assembled by 57 prison monitoring boards in the United Kingdom, 90 percent of inmates have at least one diagnosable Axis I and/or Axis II psychiatric disorder.[1] In addition, 68 percent of youth adjudicated in adult criminal court suffer from at least one psychiatric disorder.[2] In a Canadian study from 1992, investigators found that men and women with mental disorders were 2.5 times and five times, respectively, more likely to be registered for a criminal offense.[3] With regard to the nature of the crime, Tehrani et al[4] reported that individuals with psychiatric disorders tend to be at an increased risk for committing violent offenses.

According to existing data, the specific mental disorders associated with criminal behavior extend beyond the traditional prison personality (i.e., antisocial personality disorder) and schizophrenia, and may include borderline personality disorder (BPD)[5] as well as mania.[6] In those with psychiatric disorders, concurrent substance abuse appears to be a potential mediating variable, doubling the probability of having a criminal record.[7] Given this identified yet diffuse relationship between psychiatric disorders and criminal behavior, we hypothesized an association between a history of mental healthcare and criminal behavior and explored this possible relationship in a consecutive cohort of internal medicine outpatients.

METHOD

Participants. Participants were men and women being seen at an outpatient internal medicine clinic for nonemergent medical care. This outpatient clinic, staffed predominantly by residents in the Department of Internal Medicine, is located in a mid-sized, mid-western city in the United States. We excluded individuals with compromising medical (e.g., pain), intellectual (e.g., mental retardation), cognitive (e.g., dementia), or psychiatric (e.g., psychotic) symptoms that would preclude the candidate's ability to successfully complete a survey.

At the outset, 471 individuals were approached and 417 agreed to participate, for a participation rate of 88.5 percent. Of these, 376 completed all of study measures used in the current analyses. These 129 men and 247 women ranged in age from 19 to 97 years (M=50.33, SD=15.44). Most respondents (88.0%) were white, followed by African-American (7.7%), other (2.1%), Hispanic (1.3%), and Asian (0.8%). All but 6.2 percent of respondents reported having at least attained a high school diploma; 14.8 percent reported a bachelor's degree, and 14.0 percent a graduate or professional degree.

Procedure. During clinic hours, one of the authors (C.L.) positioned herself in the lobby of the outpatient internal medicine clinic, approached incoming patients, and informally assessed exclusion criteria. With potential candidates, the recruiter reviewed the focus of the project and invited each to complete a five-page survey. Participants were then asked to place completed surveys into sealed envelopes and into a collection box in the lobby.

The survey consisted of three core sections. The first section was a demographic query. The second section consisted of a 27-item, author-developed, yes/no criminal behavior questionnaire that was based upon the crime-cataloguing schema used by the Federal Bureau of Investigation.[8] Specifically, participants were queried about whether they had ever been *charged* with, not necessarily convicted of, crimes such as aggravated assault, arson, simple assault, burglary, and disorderly conduct, and most items were accompanied by a brief definition of the offense.[8] The third section of the survey consisted of a brief four-item yes/no query about general mental healthcare utilization (i.e., the type of general inquiry deployed in typical psychiatric evaluations): "Have you ever been seen by a psychiatrist?," "Have you ever been hospitalized in a psychiatric hospital?," "Have you ever been in counseling?," and, "Have you ever been on medication for your nerves?"

Participants were informed on the cover page of the survey that the completion of materials functioned as implied consent. This project was reviewed and exempted by the institutional review boards of the affiliated hospital and local university.

RESULTS

Of the 27 listed illegal behaviors, the number endorsed by each respondent ranged from 0 to 13 (M=0.56, SD=1.63), with most participants (78.0%) reporting 0 of the listed behaviors. Six respondents endorsed seven or more illegal behaviors; therefore, there was the possibility that these few relatively extreme respondents might have an undue influence on the results of subsequent analyses. To correct for this possibility, scores on the measure of illegal behaviors were truncated at 7 (for those 6 respondents who endorsed 7 or more behaviors).

With regard to mental healthcare utilization, 132 respondents (35.1%) reported having ever been seen by a psychiatrist, 60 (16.0%) reported having ever been hospitalized in a psychiatric hospital, 173 (46.0%) reported having ever been in counseling, and 154 (41.0%) reported having ever been on medication for their "nerves." Of the four different forms of mental healthcare utilization, 153 repondents (40.7%) reported none, 69 (18.4%) reported one type, 53 (14.1%) reported two types, 60 (16.0%) reported three types, and 41 (10.9%) reported having experienced all four types. The number of different forms of mental healthcare utilization reported correlated weakly with the score on the truncated measure of illegal behavior (r=0.15, p<0.01).

Because the preceding correlation was small, it seemed likely that the

TABLE 1. Mean scores on the truncated measure of illegal behaviors as a function of mental healthcare utilization

QUESTIONS ASKED OF PARTICIPANTS	NO		YES		*F*	*p*<
	M	(*SD*)	*M*	(*SD*)		
Have you ever...						
Seen a psychiatrist?	0.37	(1.20)	0.77	(1.47)	7.98	0.01
Been psychiatrically hospitalized?	0.43	(1.23)	0.93	(1.60)	7.66	0.01
Been in counseling?	0.38	(1.17)	0.65	(1.45)	3.97	0.05
Been on medication for nerves?	0.43	(1.26)	0.62	(1.38)	1.81	0.20

Note: *df*=1,374 for *F* tests.

statistical relationship was driven by the difference between those with any form of mental healthcare utilization versus none, rather than multiple forms of mental healthcare utilization being predictive of increasingly greater criminal behavior. To test this possibility, we also correlated a dichotomous measure of mental healthcare utilization (denial of all 4 forms=0, endorsement of one or more forms=1) with scores on the truncated measure of illegal behavior. Interestingly, the resulting correlation coefficient was identical to that found when a continuous index of mental healthcare utilization had been used (r=0.15, p<0.01).

Last, we considered the number of illegal behaviors endorsed as a function of each form of mental healthcare utilization, and the results from these analyses are presented in Table 1. Note that compared to those who did *not* endorse a specific item of mental healthcare utilization, those who did consistently demonstrated higher means regarding the number of illegal behaviors charged with, with the first three items demonstrating statistically significant relationships.

DISCUSSION

Using a very different methodology and a unique sample to this literature, we found that internal medicine outpatients seen in a resident-provider internal medicine clinic evidenced statistically significant relationships between most measures of mental healthcare utilization (but not psychotropic medications) and number of criminal charges for illegal behavior. However, correlations between summed scores and dichotomous scores of mental healthcare utilization, and illegal behaviors, demonstrated positive but relatively weak correlations. These findings further augment the data demonstrating mild linkages between psychiatric dysfunction and criminal behavior.

Clinically, the present findings suggest that individuals who have been seen by a psychiatrist or have been hospitalized in a psychiatric facility *may* have greater likelihoods of criminal behavior. Compared to the remaining two items, "been in counseling" and "been on medication for nerves," the preceding two items, "seen a psychiatrist," and "been psychiatrically hospitalized," may imply greater degree of impairment or more severe psychiatric dysfunction. If these impressions are valid, individuals with more rigorous treatment histories for psychiatric dysfunction may be more likely to have histories of criminal behavior. The potential social, legal, and personal implications of such histories are evident.

This study has a number of limitations, including the self-report nature of the data and participants' willingness to disclose sensitive personal information. However, the sample was consecutive and reasonably large in size; the inventory for illegal behaviors was thorough; and we are not aware of any prior studies examining this relationship in a clinical population (i.e., prior studies have examined the relationship between psychiatric disorders and criminal behaviors among various types of offenders). Findings suggest that treatment providers need to be aware of *possible* criminal histories in individuals with complex treatment histories for psychiatric disorders.

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