Validating a Psychiatric Self-Report Screening Form for Homeless Medical Patients

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The present study examined the validity of a screening instrument to identify homeless medical patients in need of psychiatric services. A self-report screening instrument was developed and completed by 64 participants using the medical services offered at a free health clinic. We examined 2 approaches, a statistical deviation approach and a clinical judgment approach, in order to determine the criteria for specifying caseness. Caseness is defined as those participants in need of mental health evaluations. A criterion group composed of clinic medical patients presently using their mental health services was used as the standard to define caseness. Results showed the statistical deviation approach identified 100% of the criterion group, whereas the clinical judgment approach identified only 57% of the criterion group. Both approaches had similar false positive rates of 25%. Our findings support the validity of the client self-report measure as a screening tool to identify patients in need of mental health evaluations.

In recent decades, American society has witnessed unprecedented growth in its homeless population (Link et al., 1994). More alarmingly, much of this increase involves mentally ill individuals (Morse & Calsyn, 1986; Sachs-Ericsson, Ciarlo, Tweed, Dilts, & Casper, 1994; Tessler & Dennis, 1989). This latter trend is due, in part, to the deinstitutionalization of the mentally ill that took place in the 1960s. The number of chronically ill psychiatric inpatients was reduced from approximately 560,000 to fewer than 130,000 by the 1980s (Surber, Dwyer, Ryan, Goldfinger, & Kelly, 1988). This move from institutions to community-based mental health services has, unfortunately, failed many of those most in need. State and federal support formerly allotted to inpatient psychiatric facilities was intended to follow patients into the community mental health system, but this progression often did not occur. Without a proper community support system, many of these former psychiatric inpatients have been forced to live on the streets, where their physical and mental health deteriorate further (Jones, 1983).

Studies have found prevalence rates for psychiatric disorders among the homeless ranging between 25% and 45% (Dattalo, 1990; Morse, Calsyn, Allen, Temperhoff, & Smith, 1992; Tessler & Dennis, 1989). Many of these homeless people have serious, debilitating psychiatric disorders. Complicating the problems associated with these psychiatric disorders, studies have indicated that between one fourth and one third of homeless individuals were abusing alcohol, other drugs, or both (Bachrach, 1984; Farr, Koegel, & Burnam, 1986; Fischer, Shapiro, Breakey, Anthony, & Kramer, 1986; Morse & Calsyn, 1986; Mulkern, Bradley, Spence, Allein, & Oldham, 1985; Roth, Bean, Lust, & Saveanu, 1985; Sachs-Ericsson et al., 1994).

Unfortunately, many homeless people with serious psychiatric problems currently are not receiving mental health services. They live on the streets and are either unaware or incapable of obtaining the treatment available to them. Until the 1960s, these individuals would have likely been admitted to an institution for treatment. Specifically, Tessler and Dennis (1989) estimated that 64% of the homeless mentally ill (HMI) were not receiving needed mental health services.

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However, there is an emerging consensus that HMI persons are difficult to engage in services because they tend to prioritize their needs differently from traditional mental health clients (Farr, 1985; Sachs-Ericsson et al., 1994; Tessler & Dennis, 1989). For the homeless, the basic need of food, clothing, and shelter take priority over clinical treatment and psychiatric services (Tessler & Dennis, 1989). If acceptability of psychiatric services for the HMI are going to increase, strategies that address the basic needs of these individuals must be a primary component.

There are many barriers to mental health treatment for the HMI, including lack of transportation, lack of awareness of services, the nature of their psychiatric disorder, and previous unpleasant experiences with mental health services (Morse & Calsyn, 1986). Some HMI individuals do not receive treatment because they are withdrawn, unresponsive, or do not cause disturbances that may draw attention to themselves (Morse & Calsyn, 1986). An additional barrier is the concern among the HMI that they will not be treated with respect when receiving services (Sachs-Ericsson et al., 1994).

Studies have shown that HMI individuals who received treatment improved their quality of life, provided that the treatment was accessible, consistent, and effective (Dixon, Friedman, & Lehman, 1993; Morse et al., 1992). Early psychiatric intervention may assist individuals in making a transition from homelessness to residing successfully within the community.

Research has shown that successful treatment programs for the HMI need to provide community-based assistance and support. Tessler and Dennis (1989) suggested that nontraditional mental health services are needed to attract and retain the homeless. Moreover, they stressed that clients' perceptions of their own needs and priorities must be incorporated into service planning in ways that are meaningful to them. Community-based mental health programs should directly address the needs of the HMI (Morse & Calsyn, 1986). Psychiatric services offered in a medical setting may be most acceptable to the homeless (Linn, Gelberg, & Leake, 1990), and these services should be provided from a location close to where the homeless congregate.

Availability of health care for the homeless differs for each community (e.g., there are often fewer resources available to the homeless in relatively smaller communities). Use of hospital emergency rooms for nonemergency problems by the homeless is common (Jahiel, 1992; Salit, Kuhn, Hartz, Vu, & Mosso, 1998). Emergency rooms are costly and cannot provide the homeless with the monitoring of ongoing medical or psychiatric problems. As an alternative, some communities have developed local, free, drop-in health clinics. In one such community in Tallahassee, Florida, medical needs of the homeless are being met, in part, by Neighborhood Health Services (NHS), a free clinic designed specifically for the homeless. The goals of NHS are to provide early medical intervention, administer immediate care, and refer patients to the appropriate site if further evaluation or treatment is necessary. Also, medications are provided without charge. A comprehensive discussion of the health clinic and the medical problems represented in the clinic's population can be found in Sachs-Ericsson, Wise, Phillips-Debrody, and Bradley-Paniucki (in press).

In addition to medical treatment, mental health services are also offered to clients at NHS. The mental health clinic now being developed will provide psychiatric medications, crisis intervention, and support, as well as appropriate referrals to other established community services. However, the clinic's resources are limited. Services are often provided to more than 20 patients in a 3-hr period. Although the staff wants to identify patients who will benefit from a psychiatric evaluation, there is neither sufficient time nor expertise to determine if a patient seeking medical care is also in need of mental health services. Hence, the clinic requested that a self-report screening form be developed to identify patients with mental health problems who may benefit from a referral to a mental health facility. Given the limited resources of NHS, the administration of the screening form needed to use little staff time, require no clinical expertise to administer, and be respectful to homeless individuals seeking medical services. The purpose of this study was to develop and evaluate the validity of a client self-report form for identifying NHS medical patients in need of psychiatric services.

Assessing Mental Health Need

Evaluation of mental health functioning requires careful measurement of the client's strengths and weaknesses and how they affect lifestyle (Pokorny, 1991). Assessment should be obtained from the perspective of the clinician *and* the client. There are many scales developed to evaluate psychiatric functioning, but reliability and validity for most of these measures are not well established. However, the reliability and validity of one instrument, the Colorado Client Assessment Record (CCAR; Ellis, Wackwitz, & Foster, 1991; Ellis, Wilson, & Foster, 1984; Sachs-Ericsson & Ellis, 1994; Wackwitz & Ellis, 1995) and its more recent version, the Functional Assess-

ment Rating Scale (FARS; Dow et al., 1996; Ward et al., 1995), have been well documented. The FARS is essentially the same instrument as the CCAR with only minor additions (see Dow et al., 1996). Their use has facilitated clinicians' understanding of the clients' psychiatric needs and has resulted in more effective treatment programs. The clinician-FARS is completed by an experienced clinician after an extensive interview with the client, thus the evaluation is expensive, requires a trained clinician, and is completed based on the clinician's perspective.

In the past decade, there has been increased emphasis on the centrality of patients' participation in assessing their own individual needs. Clients are in a position to judge whether they are achieving an effective life. Moreover, a clinical assessment is costly and not always practical. Therefore, the client-FARS was developed based on the clinician-FARS (Sachs-Ericsson, 1996). Because the consumer completes the client-FARS, ratings reflect the consumer's perceptions rather than the clinician's assessment. Although the client-FARS covers the same areas as the clinician-FARS, the client form is more concise and is relatively simple to complete. Despite its brevity, preliminary research has shown that this measure has adequate validity. Specifically, there is a strong correlation between mental health patients' self-ratings on the client-FARS and the clinician's ratings on the FARS (Sachs-Ericsson, 1996).

A shortened version of the client-FARS was adapted for the specific needs of the homeless population and evaluated in the present study. We examined the completed self-report forms of patients using the medical services offered through the NHS. The goals of this study were to:

1. Identify criteria to define caseness on the client self-report scale.
2. Compare two different approaches to define caseness, the statistical deviation approach and the clinical judgment approach.
3. Determine which approach more accurately identifies medical patients in need of mental health evaluations.
4. Assess the validity of the scale for identifying medical patients in need of mental health services.

Method

Participants

Participants included all medical patients using NHS during a 1-month period. Participants were required to complete the self-report form upon arrival at the clinic. Sixty-four patients (32 men, 30 women, 2 did not report sex) completed forms (response rate 84%). Twelve patients did not complete the form due to time limitations. No data were available on the patients who did not complete the form. Among the 64 participants, 7 individuals (10%) were using mental health services at the NHS clinic, and thus comprised the criterion group ($n = 7$). We obtained no other demographic characteristics.

Instrument

The client-FARS (Sachs-Ericsson, 1996) is a brief rating scale that asks clients to evaluate how they are functioning in different areas, including mood (depression, anxiety, anger, and suicidal feelings), family life, work/school, interpersonal functioning, substance abuse, and physical/sexual abuse. We adapted the client-FARS for use with the homeless population seeking medical treatment. We altered and shortened the client-FARS to a version that the NHS staff thought was more sensitive to the needs of the population they served. We eliminated items pertaining to family functioning and work/school functioning. Because of the high frequency of alienation from family and the high rate of unemployment among the homeless, these items were not as likely to discriminate between homeless individuals who do and do not need mental health services. Moreover, we removed the items assessing homicide, suicide, and sexual/physical abuse due to concerns about the clinic's liability. The final version consisted of 12 items (see Table 1). Negatively endorsed items were coded 0 (*no*) and positively endorsed items were coded 1 (*yes*). Hence, the sum of the items could range from 0 to 12.

Determining Caseness

We defined caseness as an individual in need of mental health services. We used two approaches to identify caseness: the clinical judgment approach and the statistical deviation approach. The clinical judgment approach involved establishing specific a priori criteria for caseness (Sachs-Ericsson & Ciarlo, 1992). Specifically, clinicians identified critical items in which the patient's endorsement would indicate need for mental health evaluation. Without viewing participants' responses, a psychologist evaluated each item and selected two items indicative of caseness. These two items were, "Sometimes I see and hear things others don't" and "I feel I have nothing to look forward to." These items suggested psychosis or depression, respectively, and if either item was endorsed, the patient was considered in need of a mental health evaluation.

The statistical deviation approach determined caseness based on the distribution of scores in the

TABLE 1

The Client Self-Report Form and Item Endorsement (*N* = 64)

Item	Yes (%)
1. I am sad.	21.9
2. I get angry easily.	26.6
3. I often feel anxious or nervous.	42.2
4. I argue a lot with others.	6.3
5. I feel I have nothing to look forward to.	8.8
6. I have a hard time remembering things.	25.0
7. I am scared.	15.6
8. I have a problem with alcohol or drugs.	12.5
9. I am often hungry.	34.4
10. Sometimes I see or hear things that others don't.	14.1
11. I need information to help me with some of these difficulties.	32.8
12. I would like to talk with someone about my answers to these questions.	28.1

population. In this approach, a decision is made as to what constitutes a substantial and sufficient deviation from the population norms (Sachs-Ericsson & Ciarlo, 1992). The distribution of scores in the sample was positively skewed, and at four or more items the distribution became most skewed. Therefore, using the statistical deviation approach, we selected four or more positively endorsed items to be the cutoff score for caseness.

A criterion group was used to determine the validity of the two approaches. NHS patients who were using mental health services at NHS at the time of the study were included in the criterion group.

Results

On average, participants said "Yes" to at least two items. The mean number of positively endorsed items was 2.8 (SD = 2.7), whereas the median was 2.0 and the modal response was 0 (or "No"). The differences among the three measures of central tendency indicated a positively skewed distribution. Table 1 describes the 12 scale items and the percentage of participants who endorsed them.

Criterion Group

After the study was completed, we examined the participants' charts. If participants had been using mental health services at NHS at the time of the study, they were classified as a member of the criterion group. The NHS staff did not view any participant's responses on the client self-report scale. Thus, a participant's use of mental health services was not based on the participant's responses on the self-report scale. Among the sample, there were 7 participants in the criterion group. Their scores on the self-report form ranged from 4 to 7, with a mean of 5.14 (SD = 1.1), and a median and mode of 5. If responses on the scale discriminated homeless individuals who needed mental health services from persons who did not, we would expect the average score of the criterion group participants to be higher than the average score of the noncriterion group participants. The average difference (2.65) between the criterion group and the noncriterion group participants was significant, $t(62) = 2.59$, $p = .012$.

Statistical Deviation Method

Using the statistical deviation approach, we selected four or more positively endorsed items to be the cutoff score for caseness. Based on the cutoff score of 4, 21 individuals (32.8% of the sample) were identified as in need of mental health services. This method identified all 7 of the criterion group participants and 14 additional participants not in the criterion group who were identified as cases or false positives.

We then examined the correlation between whether a participant was in the criterion group and scored 4 or higher on the self-report form. Because the variables were dichotomous, a phi coefficient was used. The relationship was significant, $r(62) = .50$, $p = .001$. The significant relation indicates that the statistical deviation approach is an acceptable method to determine caseness.

Clinical Judgment Method

Eighteen individuals (28% of the sample) endorsed one or both of the items that were preselected by the clinician. Among the 18 individuals, only 4 were in the criterion group. Thus this method correctly

identified only 57% of the criterion group and inappropriately identified 25% of the sample as cases. There was a false negative rate of 43%. Again, using a phi correlation, we examined the relation between those participants identified by the clinical judgment approach and the criterion group. The correlation was not significant, $r(62) = .23$, $p = .07$.

Comparison of Approaches

We used Williams's T_2 test (as cited in Steiger, 1980) to determine whether the difference between the correlation for the statistical deviation approach and the correlation for the clinical judgment approach ($r = .50$ and $r = .23$, respectively) was significant. We found the difference between the correlations to be significant, $t(62) = 2.50$, $p < .01$.

Discussion

In the present study, we developed a screening scale to identify homeless medical patients who needed psychiatric services. We then compared two approaches to determine caseness, the statistical deviation approach and the clinical judgment approach. A mental health criterion group was used to assess the concurrent validity of the two different approaches to defining caseness.

Results showed that the criterion group's average score was significantly higher than the average score of the noncriterion group. Moreover, results showed that the statistical deviation approach identified 100% of the criterion group, and the correlation between cases identified by the statistical deviation approach and the participants in the criterion group was significant. In contrast, the clinical judgment approach identified only 4 of 7 (57%) of the criterion group, and the correlation between the clinical judgment method and the criterion group was not significant. Moreover, there was a significant difference between the two approach's correlations with the criterion group. Thus, the statistical deviation approach appears to be a more valid method for identifying individuals needing mental health assessment.

The criterion group may have sought treatment for any type of mental health problem. Perhaps the statistical deviation approach performed better than the clinical judgment approach because this method identified individuals in general need of mental health services, whereas the clinical judgment method only identified individuals with possible psychosis and/or depression.

The small number in the criterion group may have contributed to a lack of stability in the results. The false positive rate was high for both approaches, 25%, and the two methods agreed on 9 (64%) of the false positive cases. The actual false positive rate may be lower than calculated for either approach. Participants identified as false positive may be in need of mental health services but were not receiving treatment due to any number of reasons. The number of homeless patients identified as cases by the statistical deviation approach and the clinical approach (33% and 28%, respectively) was consistent with prevalence rates from previous studies.

The study's methodology does not permit an adequate assessment of the actual false negative rate. The self-report form may not have identified all participants in need of mental health services. Patients may fear that they will not be treated with respect if they indicate they have a mental illness (Sachs-Ericsson et al., 1994). Thus, some people who reported no symptoms on the self-report scale may have mental health problems. A full psychiatric evaluation of each patient would provide a more thorough assessment of the validity of the self-report form. In future studies, the validity of the scale can be further evaluated by performing an extensive psychiatric evaluation on many participants who have also completed the self-report form. This procedure would allow for possible changes in the scale items or a recalibration of caseness in a manner that increases the scale's validity.

Conclusions

An adequate screening scale must have a reasonable balance between accurate identification of cases and noncases and an acceptable rate of false positives and false negatives. Our results have shown that the adapted client-FARS self-report screening scale using the statistical deviation approach to define caseness provides a useful psychiatric screening tool. The self-report form provides a nonintrusive and inexpensive way to identify homeless medical patients in need of mental health services.

The HMI often lack sufficient health care needed to lead a productive life. Although communities have the potential for providing services to the homeless (Bachrach, 1984), community-based programs are difficult to maintain due to lack of funds, resources, and technology (Surber et al., 1988). Mentally disabled homeless persons often recognize a need for services and are often willing to accept help, although not necessarily traditional mental health services. Programs must be easily accessible, affordable, and sensitive to the needs of the homeless. Providing appropriate mental health services to the homeless is challenging. However, communities have an obligation to meet this challenge by integrating social

science research that has identified effective ways to address the needs of the HMI.

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