

Patterns of Mental Health Utilization Among Island Puerto Rican Poor

ABSTRACT

Background: This paper describes utilization of mental health services by poor Puerto Ricans living on the island. It examines the utilization rates, within health sectors, and settings for the provision of mental health services.

Methods: Data are based on an islandwide probability sample of 18- to 64-year-old respondents living in low socioeconomic areas. We assessed need with the Psychiatric Symptom and Dysfunction Scales.

Results: Approximately one-third of our study population (31.5%) met criteria for need. Of these, only 32% had received any mental health care in the past year. Need was significantly associated with use of physical or mental health services for mental health problems. We found those who needed services to be five times more likely than those who did not need services to have used one or both sectors of care at least once in the past year. Among the first group 21.8% used the physical health sector to deal with mental health problems in contrast with 17.9% who sought care in the mental health sector. In the physical health sector, subjects used the public and private settings equally. In the mental health sector, 70% of subjects used the public setting.

Conclusions: This suggests the nonpsychiatric physician as a main provider for mental health treatment. (*Am J Public Health*. 1991;81:875-879)

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Introduction

We report the distribution of mental health services provided by the medical (physical) and mental health sectors to low income people living in Puerto Rico. The relation of sociodemographic characteristics with utilization of mental health services is examined. Utilization data obtained in this study provide information on the gap between the need for and provision of mental health care.

Researchers have studied the use of mental health and health services by various ethnic minorities.¹⁻⁷ Some studies have found underutilization of mental health services by Hispanics,²⁻⁵ while others question this underutilization.⁶⁻⁷ Discrepant findings have been attributed to treatment surveys versus community surveys, to the criteria used to define Hispanics, and to differences in the need for mental health services.

Previous studies⁸⁻¹⁰ indicate that persons of lower socioeconomic status (SES) have a low rate of mental health service utilization. A recurring argument is that the poor hold attitudes and ideologies dissonant with scientific medicine.^{11,12} Hoppe and Heller¹³ suggest that lower-class populations distrust those outside of their circle of family and friends, having heavy involvement in familial and peer relationships. Differences in values and priorities placed on health across socioeconomic groups may better explain observed differences in the use of mental health and physical health sectors. For example, Ware and Young¹⁴ reported that persons of lower SES value their physical health more than their mental health. Johnston and Ware¹⁵ report that SES appears associated with somatization, rec-

ognition of illness symptoms, and behaviors in response to illness. Consistent evidence has shown that a substantial proportion of persons with emotional problems and mental disorders are treated in the physical health sector.¹⁶⁻²⁰ Hough, *et al*,²¹ found that although Mexican Americans made fewer visits to mental health providers than their non-Hispanic counterparts, they did not differ in the proportion of visits to a physical health provider for mental health reasons.

This study concentrates on the population in the lowest socioeconomic strata since there is evidence to suggest this group is greatly exposed to economic strains, physical illness, and disabilities, known risk factors for mental health needs.^{22,23} Little is known to explain the use of mental health services for individuals that belong to the lowest income strata.²⁴ In this paper, we examine the utilization of mental health services by this population on the island of Puerto Rico.

Methods

The target population of this study included the civilian, noninstitutionalized residents, ages 18 to 64, living in low so-

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cioeconomic areas of Puerto Rico. The population was sampled using a two-stage stratified cluster sample of the island. The strata were urban and rural, which economically defined sub-strata. The sub-strata or segments were classified as economically depressed based on an index of media house rent, family income, and house value. These segments were divided into clusters from which 178 were selected for our sample. The list of clusters defined a survey area which contained about 57 percent of the total island population living in poverty. The nonpoor living in these areas were surveyed but excluded from the analyses reported here. The poor people living in nonpoor areas were also excluded from the sample. The sample for this study was obtained using the sampling frame prepared by the Department of Labor and Human Resources, and based on the 1980 Census of Population and Housing as updated by new housing developments in 1986.

The probability sample of clusters yielded 2,682 housing units. Of these, 27.9 percent (748 housing units) were not eligible. Reasons for ineligibility included vacancies (292) and noneligible residents (456) 18 to 64 years of age.

One respondent in each household was randomly selected from among those eligible. The noninterview rate was 8.1 percent distributed as: 2.5 percent refusals; 5.4 percent persons unable to be contacted after three callbacks; and 0.3 percent other breakoff. A total of 1,777 respondents were successfully interviewed during February to October 1989, yielding a completion rate of 91.9 percent. We constructed a poverty indicator based on size of family and number of related children according to the criteria of the Department of Commerce, Bureau of the Census.²⁵ Of those respondents living in poor areas, 73.6 percent were assessed to be in poverty status according to the 1989 Census definition. Our analyses are limited to this subpopulation.

All analyses incorporate the underlying survey design. Estimation and testing was performed using the program PC Carp.²⁶ Group differences in sociodemographic characteristics for utilizers of the physical health sector and the mental health sector for mental health services were tested using Z scores without multiple comparison adjustments. Sociodemographic differences with regard to service sectors used were tested with analyses of variance. Differences are not discussed unless the p value was less than 0.05. In all comparisons we will discuss the weighted

sample so our inferences will apply to the Puerto Rican poor population residing in low socioeconomic status areas.

Measures

Respondents were interviewed by lay interviewers who gathered data on sociodemographics, psychiatric symptomatology, physical health, and utilization of physical health and mental health services. Questions on utilization of physical and mental health services for treatment of mental health problems were based on those of the National Institute of Mental Health (NIMH) Epidemiologic Catchment Area studies.²⁰ For the purposes of this paper, health care use will be limited to the formal system of care, recognizing that the informal system of care (e.g. clergy, friends, family) may also be an important link for explaining how Puerto Ricans cope with their emotional problems.

A mental health care visit is defined as a contact with any type of formal health care provider for a mental health problem. Included in the definition are visits to any type of formal health facility, such as a community health center, or to a physical health provider to deal with mental health problems. The mental health related contacts are examined in the physical health sector and the mental health sector. The physical health sector represents visits to a non-psychiatric physician for mental health problems. The mental health sector corresponds to visits to psychiatrists, psychologists, or any mental health treatment program regardless of whether there was a mental health reason for the visit.

Psychiatric symptomatology was assessed by the Psychiatric Symptom and Dysfunction Scales (PSDS). It consists of five subscales: anxiety, depression, psychosocial dysfunction, cognitive impairment, and general psychopathology. The items for these subscales were selected from the psychiatric, epidemiologic, and clinical research literature for the Florida Health Study.²⁷⁻³⁰ Psychiatric symptoms and nondiagnosed psychiatric disorder were the criteria employed to determine need for mental health services. The scale provides a normative distribution of psychiatric symptomatology and dysfunctions in the population. They do not diagnose individuals. The PSDS has been found to be a valuable and adequate measure to identify differential levels of mental health need within the general and patient populations, including Hispanics and other ethnic groups on the mainland.^{28,29} Persons scoring with moderate or high symptoms on 3 to 5 scales are included in

the need category² for mental health services and are termed "needers."

These scales were adjusted for number of chronic illnesses, since some PSDS scores increased with the number of chronic illnesses. Specifically, psychosocial dysfunction, anxiety, and depression scores were reduced two, two, and three points, respectively, for every chronic health illness reported by the respondent. Cognitive impairment and general psychopathology scores were reduced by one point for each chronic physical illness. The actual construction of the scale permits no probing to differentiate whether the apparent psychiatric symptom (e.g. sweaty hands) has some physiological origin. Therefore, adjusting the scales in this respect reduces the upward bias due to poor physical health.

Results

The sociodemographic characteristics of respondents who utilized the mental or physical health sectors for mental health reasons are presented in Table 1. In general, utilization of physical health services did not vary with age. Use of mental health services was significantly higher for those 45-54 years old ($p < .05$) compared to those 18-24 and 35-44 years of age. A higher percentage of respondents with less than 10 years of school education than those with higher scholastic achievement reported use of physical health services for mental health reasons during the last year. Use of mental health services was significantly lower among respondents with some college education ($p < .01$) in comparison to those with a lower educational level. The retired or incapacitated were more likely than others to use the mental health sector or both sectors to deal with emotional problems. Sex, marital status, insurance, and zone of residence did not show a statistically significant association with health services sectors used for mental health reasons.

The utilization of the health and mental health care sector for mental health reasons during the previous year is shown in Table 2. As expected, needers are five times as likely to use one or both sectors of care at least once in the past twelve months for mental health problems (31.5 vs 5.8 percent). This discrepancy is even greater when we consider the use of the general health sector at least on one occasion (21.8 vs 3.7 percent) during the last year. These visits were identified by the respondents as health encounters to deal with mental health problems. The utiliza-

tion of the mental health sector showed a higher prevalence of mental health visits by needers than by non-needers (17.9 vs 2.3 percent). Among users, the intensity varied by sector and need status. Needers averaged 7.3 (± 0.9) visits to the physical health providers while non-needers averaged only 3.5 (± 0.6) visits ($p < 0.001$). In contrast, there were no significant differences in the mental health sector utilization visits by needers (9.6, ± 1) versus 11.1 ± 2.7 visits by non-needers ($p > 0.25$).

Nearly 13.6 percent of needers of mental health services are receiving care exclusively in the physical health sector (row 4, Table 2). Furthermore, there is a small group of needers who use both sectors for mental health reasons (8.2 percent). This dual usage of mental health services in both the physical and mental health sector rarely occurs among non-needers (0.3 percent).

Table 3 presents the utilization during the last year of the public and private settings for a mental health problem by need status. Utilizers of exclusively the physical health sector were equally likely to choose a private or public setting for mental health care. In contrast, utilizers of exclusively the mental health sector employed by a 3 to 1 margin the public over the private setting. Approximately one-half of the users of public mental health services reported using mental health centers (data not shown).

Discussion

In contrast to other studies,^{18,31,32} poor women in our sample were as likely to receive mental health care as men; elevated rates of unemployment (38 percent) among the poor may be a contributing factor to this finding. Unemployment also may be related to diminished social standing and vulnerability to psychological distress in men, leading them to seek mental health services.

Insurance did not appear to facilitate entrance into mental health care. This could be an artifact of Medicaid eligibility, since it was reported by our respondents as noninsurance. Medicaid operates as a centrally administered program by the Department of Health, whereby participants have free access to public health facilities. Public health and mental health services have an open door policy which may render those services accessible to the "uninsured."

Total mental health visits among poor Puerto Ricans (31.5 percent in our study sample) were twice as high as those re-

TABLE 1—Sociodemographic Characteristics of the Sample Below Poverty Level by Health Sector Utilized for Mental Health Reasons During the Last Year

Sectors: Population N Sample n	Utilizers of Services for Mental Health Problems			
	Physical Health	Mental Health	Both	Non-users
	46,980 96	31,590 59	19,710 42	609,390 1,111
	% (S.E.)	% (S.E.)	% (S.E.)	% (S.E.)
Age (years)				
18–24	16.7 (5.0)	12.0 (3.9)	5.5 (3.3)	25.9 (1.5)
25–34	17.2 (3.6)	21.4 (5.2)	12.3 (4.4)	26.2 (1.5)
35–44	21.3 (4.7)	16.2 (5.0)	24.7 (7.7)	21.0 (1.4)
45–54	25.9 (5.3)	32.5 (7.4)	28.8 (8.2)	13.2 (1.2)
55–64	19.0 (4.0)	17.9 (5.7)	28.8 (6.9)	13.6 (1.2)
Education (years)				
0–6	33.9 (5.6)	35.9 (7.6)	41.1 (9.3)	24.7 (1.4)
7–9	26.4 (6.0)	15.4 (5.0)	23.3 (7.1)	20.4 (1.2)
10–11	10.9 (3.3)	18.8 (5.8)	2.7 (1.9)	9.9 (1.0)
12	16.7 (4.3)	25.6 (6.4)	17.8 (6.2)	28.0 (1.4)
13+	12.1 (4.3)	4.3 (2.4)	15.1 (5.8)	17.0 (1.3)
Sex				
Male	33.9 (5.5)	41.9 (1.1)	57.5 (1.2)	39.8 (1.5)
Female	66.1 (5.5)	58.1 (7.6)	42.5 (8.4)	60.2 (1.5)
Marital Status				
Not Married	43.1 (5.8)	46.2 (6.8)	37.0 (7.6)	40.4 (1.8)
Married	56.9 (5.8)	53.8 (9.6)	63.0 (1.1)	59.6 (1.8)
Employment				
Employed	30.1 (6.1)	11.5 (4.3)	12.5 (7.1)	40.7 (2.0)
Unemployed	39.1 (7.0)	22.1 (5.9)	9.4 (3.7)	34.1 (1.9)
Retired or Incapacitated	21.1 (4.9)	56.7 (8.1)	71.9 (8.2)	10.0 (1.1)
Student	9.8 (5.7)	9.6 (3.9)	6.3 (4.0)	15.3 (1.5)
Insurance				
No	85.6 (3.9)	84.6 (7.3)	69.9 (1.1)	87.6 (1.3)
Yes	14.4 (3.9)	15.4 (5.2)	30.1 (7.9)	12.4 (1.3)
Zone of Residence				
Urban	46.6 (5.6)	57.3 (7.0)	53.4 (9.1)	55.7 (1.9)
Rural	53.4 (5.6)	42.7 (10.0)	46.6 (1.3)	44.3 (1.9)

TABLE 2—Utilization in the Past Year of Physical Health and Mental Health Services for Mental Health Reasons

Respondents with one or more visits to:	Population N Sample n	Total Sample	Needers	Non-needers
		707,670 1,308	222,750 413	484,920 895
		% (S.E.)	% (S.E.)	% (S.E.)
Any Sector		13.9 (1.1)	31.5 (2.6)	5.8 (0.8)
Physical Sector ⁺		9.4 (0.9)	21.8 (2.4)	3.7 (0.6)
Mental Health Sector ⁺		7.3 (0.8)	17.9 (1.9)	2.3 (0.5)
Only the Physical Health Sector		6.6 (0.7)	13.6 (2.0)	3.5 (0.6)
Both Physical Health and Mental Health Sector		2.8 (0.5)	8.2 (1.5)	0.3 (0.2)

Numbers in parentheses indicate standard errors.
⁺ Does not exclude the use of other sectors.

ported in the ECA sites.²⁰ Economic factors and impoverished social conditions may contribute to a higher need for mental health services.

The finding that almost 22 percent of the needers went to professionals who are

not specialists in mental health suggests a possible link between mental health disorders and physical illness, or difficulties in discriminating psychiatric symptoms from somatic complaints as a cultural expression of discomfort. Findings by

TABLE 3—Utilization of the Physical Health and Mental Health Sectors by Setting and Need Status (previous year) for the Sample Below Poverty Level

Sector		Total	Needers	Non-needers
All Sectors	Population N	98,280	70,200	28,080
	Sample n	197	137	60
	% (S.E.)	% (S.E.)	% (S.E.)	% (S.E.)
Private setting*		51.1 (3.9)	52.3 (4.7)	48.1 (7.5)
Public setting		48.9 (3.9)	47.7 (4.7)	51.9 (7.5)
Physical Health	Population N	46,980	30,240	16,740
	Sample n	96	59	37
	% (S.E.)	% (S.E.)	% (S.E.)	% (S.E.)
Private*		55.7 (5.8)	53.6 (7.5)	59.7 (8.9)
Public		44.3 (5.8)	46.4 (7.5)	40.3 (8.9)
Mental Health	Population N	31,590	21,600	9,990
	Sample n	59	40	19
	% (S.E.)	% (S.E.)	% (S.E.)	% (S.E.)
Private setting*		30.8 (6.5)	32.5 (8.0)	27.0 (10.5)
Public setting		69.2 (6.5)	67.5 (8.0)	73.0 (10.5)
Both Physical and Mental Health	Population N	19,710	18,360	1,350
	Sample n	42	38	4
	% (S.E.)	% (S.E.)	% (S.E.)	% (S.E.)
Private*		72.6 (7.8)	73.5 (8.0)	60.0 (24.0)
Public		27.4 (7.8)	26.5 (8.0)	40.0 (24.0)

Note: Numbers in parentheses indicate standard errors.
*Private includes both private and combined settings.

Wells, *et al*,²² suggest that mental health visits to general health providers commonly involve the treatment of both physical and mental health symptoms. An alternative explanation of this phenomenon is that contacts with the general health sector fulfill additional treatment needs, including social support and advice.

Patients' ambiguous definitions of psychiatric symptoms mixed with physical ailments may deter early diagnoses of mental health symptoms by the nonpsychiatric doctor or lead to misdiagnosis. Our study sample may reflect a tendency toward somatization. Economic strains combined with frequent unemployment as well as constant exposure to crime and violence make more flexible community standards of what constitute mental health problems. Such conditions could legitimize feelings of anxiety, depression, or sadness. The social acceptance of psychiatric symptoms may deter family, friends, and health professionals from referring needers to specialized mental health services.

This may be a consequence of the nonpsychiatric physician being gate-keepers of mental health care. Less than one-sixth (15 out of 103) of the specialty con-

tacts were actually referred by physical health providers. Lack of referrals by nonpsychiatric physicians may be a major barrier to access to mental health services. Limited training in recognizing mental health symptoms by nonpsychiatric physicians or a negative attitude toward mental health care may impede referral.

Limitations of this study should be noted. The population surveyed cannot be assumed to be representative of all poor respondents in Puerto Rico or poor Puerto Ricans in the mainland. Poor persons not residing in low income areas of the island, as well as those in institutions (such as prison) or living in the streets, were excluded from this study. These findings cannot be extrapolated to poor Puerto Ricans in the mainland. Regional differences in Medicaid benefit coverage or local availability of services may influence the utilization rates for mental health services. Language barriers may also prevent access to services outside the island.

We cannot confirm self-reported utilization information provided by our respondents, therefore the validity of the information is not measured. It is probable that our measure of need (PSDS) identifies only certain areas of need for mental

health services by the poor. We found that the PSDS scales do not detect as needers a high percentage of individuals who fulfill DIS criteria for alcohol abuse and dependence. However, we found a high concordance in the identification of needers by the CES-D, self-perception of mental health, and the PSDS.

Finally, we made empirical adjustments for the upward bias of poor physical health on the PSDS scale scores, although such empirical adjustment could underestimate actual need for mental health services among the poor. In our estimates of need, we sought to identify need for mental health services not due to physical health problems. The reliability of utilization data could be affected by elapsed time between actual use of services and the interview. Data from Kelly, *et al*,³³ suggest that reliability of medical information was not materially affected by the time interval between interviews. However, it was generally better when the time elapsed was less than one year, as was the case in our study.

In summary, the high utilization rate identified in our study group might be related to the organization of the public health care delivery system. The system in Puerto Rico is a vehicle of access to care for all in need, thus the coverage of the population is not constrained by the Medicaid income threshold standards as in the mainland United States. This broader coverage could be instrumental in explaining utilization patterns of Puerto Rico's low income population when compared to their counterparts on the mainland. Such comparisons can help assess the effects of organizational factors that influence or inhibit contact between low socioeconomic groups and mental health professionals. □

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