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Underrepresented Populations

Ethnic Minority Adolescents and the Use of Community Mental Health Care Services[1]

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Examined the utilization rates, treatment dropout rates, and length of treatment for minority adolescents in the mental health care system. Data from the Los Angeles County Department of Mental Health from 1983 to 1988 were used. Ss were 853 African Americans, 704 Asian Americans, 964 Hispanics, and 670 whites. Analyses showed that Asian Americans and Hispanics are underrepresented in existing public mental health facilities while African Americans are overrepresented. For dropout rates, no ethnic differences are found between minority groups and whites; but, for length of treatment, Asian Americans tend to stay longer in treatment while African Americans tend to stay in treatment for a shorter period of time than whites. African Americans also have more outpatient episodes than whites. Implications of the results are discussed, and recommendations for future research are suggested.

Approximately 12–15% of the children under 18 years of age in the United States have a serious emotional or behavior problem (Office of Technology Assessment, 1986). Studies have consistently documented that a large proportion of these children do not receive treatment (Knitzer, 1982). When they do receive treatment, services are inappropriate, fragmented, and inadequate (Joint Commission on Mental Health of Children,

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1970; Stroul & Friedman, 1986). Some investigators note that the mental health system may be especially unresponsive to the needs of ethnic minority children and adolescents (see Gibbs & Huang, 1989). Inaccessible mental health services, biased assessment techniques, cultural and language barriers, and the lack of minority mental health professionals are some factors that have been implicated in deterring minorities from using mainstream mental health services (Cross, Bazron, Dennis, & Isaacs, 1989). In general, however, our knowledge of minority children with emotional or behavior problems is extremely limited (Institute of Medicine, 1989). Much of what we know about minority children is inferred from research on minority adults. Even when these research literatures are compiled together, the body of research is small.

Inquiries over the past decade have found repeatedly that adults from some ethnic minority groups are reluctant to seek professional help for their mental health problems. If minorities do decide to seek help, they often delay contact with professionals, perceive more barriers to service use, and are less likely than whites to use specialty mental health services or to complete treatment (Acosta, 1979; Broman, 1987; Brown, Huang, Harris, & Stein, 1973; Leong, 1986; Lopez, 1981; Neighbors, 1985; Sue, 1977; Sue & McKinney, 1975; Takeuchi, Leaf, & Kuo, 1988; Tracey, Leong, & Glidden, 1986). While recent research suggests that improvements have been made in the delivery of mental health services to minority adults (O'Sullivan, Peterson, Cox, & Kirkeby, 1989), some differences in utilization still remain between some ethnic minorities and whites (Hu, Snowden, Jerrell, & Nguyen, 1991; Scheffler & Miller, 1989; Sue, Fujino, Hu, Takeuchi, & Zane, 1991).

Minority children also show patterns of utilization different from that of white children (Berlin, 1983; Chin, 1983; Shore, 1978). In a study on characteristics related to admissions to selected mental health facilities, Rosenstein and Milazzo-Sayre (1981) found that in comparison to their respective populations white children had 505.6 admissions to outpatient psychiatric services per 100,000 population while minority children had a higher rate of 719.5 per 100,000. It is unclear, though, which specific ethnic group, if any, was overrepresented in the cluster of minority children because all non-white children were grouped into one category, "all other races." Investigations on minority adults suggest that the grouping of different minorities into one category may disguise some important interminority differences in the use of mental health services (Snowden & Cheung 1990; Sue et al., 1991).

We know very little about how specific groups of minority children differ from white or other groups of minority children in their service utilization patterns. Researchers have noted barriers that apply to all minority

children in their receiving mental health services, such as parents' negative perceptions of mental health and mental health services and the lack of minority mental health professionals (Cross et al., 1989). In addition, there are some barriers that only apply to specific ethnic groups. For example, many Hispanics and Asian Americans do not speak English as their primary language and, therefore, are reluctant to use services where only English is spoken. This factor may lead to underutilization of services by Hispanics and Asian Americans with mental health problems.

Recently, however, the government has sought to improve the delivery of mental health services to emotionally disturbed children. In its efforts, the Federal government, through the Child and Adolescent Service System Program (CASSP), has recognized that the problems of minority children need to be met with culturally responsive services. A number of initiatives have been implemented to achieve this goal such as requiring each state that receives a CASSP grant to develop a minority objective and providing technical services to assist states in meeting this objective (see Katz-Leavy, Lourie, & Kaufmann, 1987). Despite these initiatives, it is unclear whether some minority children in comparison to white children still underutilize mental health services. Closely related to the question of utilization rates are the issues of treatment dropout and length of treatment. This study begins to fill the gap in our understanding of a subgroup minority children (adolescents) who enter the community mental health system. This study explores whether minority groups differ from whites in the following: (a) utilization of outpatient mental health care, (b) premature termination, (c) frequency of use of outpatient care, and (d) length of treatment. We recognize that adolescents who have mental health problems may receive help from various systems besides the mental health sector (e.g., social, educational, health, recreational, juvenile justice). However, we chose to focus on mental health services. Such a focus provides information on the vast majority of severely emotionally disturbed youth in the community of mental health care services (Stroul & Friedman, 1986).

This study adds to the empirical literature on minority adolescents who use community mental health services by analyzing data on three different minority groups. A common problem with race and ethnic comparisons in previous mental health research is the small samples of minority groups. A unique advantage of our investigation is that the data set contains a substantial number of adolescents from four ethnic groups: Asian American, African American, Mexican American, and white. While adolescent mental health services have been examined primarily for whites, and occasionally for blacks, our study sheds light on the utilization pattern of two understudied groups, Asian Americans and Mexican Americans. In addition, this data set enables us to examine ethnic differences in utilization

variables while controlling for the effects of sociodemographic characteristics, diagnosis, and referral source.

METHOD

This study is limited to adolescents between the ages of 13 and 17 who used outpatient services at a mental health facility in Los Angeles County between January 1, 1983 and December 31, 1988. The original data set is restricted to this 5-year period because of inconsistent data definitions and diagnostic criteria for children's disorders prior to 1983. Because the total population of adults and children entering the mental health system during this time period is quite large (over 100,000 episodes), sampling was initiated to make the data set more manageable. A similar number of episodes (adults and children) from each ethnic group (except Asian American) was randomly drawn from the original data set. All Asian Americans were included in the study because they comprise only a fraction of the total client population. For the other three ethnic groups, a simple random quota sample was selected. The total number of adults and children sampled from each of the three ethnic groups roughly matched the total for Asian Americans. The final sample of children approximates the proportion of youth in the total population of episodes.

The following exclusions were made to the data set: (a) children who used inpatient services, continuous care, day treatment, or emergency services; (b) American Indian and non-Mexican Hispanic (e.g., mainland Puerto Rican) children; and (c) any client case that had missing values for any of the measures used in this study. American Indian and non-Mexican Hispanic children were excluded because of their small numbers in the data set. The unit of analysis for this study was a client or an episode depending on the research question that was addressed. A *client* refers to a person receiving community mental health services. An *episode* is a unit of services provided to person from entry until termination from outpatient care. Thus, a client may have more than one episode in this data set. After all of the exclusion criteria were made, the final samples for clients were African Americans, 853; Asian Americans, 704; Mexican Americans, 964; and whites, 670. These client samples represent the following number of episodes: 1,291 African Americans; 907 Asian Americans; 1,249 Mexican Americans; and 985 whites. Only 66 client cases were eliminated due to missing values.

We recognize that the Asian American category comprises unique ethnic groups (Japanese, Chinese, Filipino, Southeast Asian, Korean, and Pacific Islander) that are quite diverse in terms of their immigration patterns to the United States, cultural values, socioeconomic status, and ethnic identity. However, analyses of specific Asian American ethnic groups would reduce the sample sizes for individual groups and make it difficult to make meaningful comparisons. Despite this limitation, this is one of the first studies to provide data on Asian American adolescents in the mental health system.

Measures

Three utilization variables are examined in this study: dropout rates, level of outpatient care usage, and length of treatment. The length of treatment variable indicates the total number of 15-minute sessions across different types of treatment (assessment, collateral, crisis, group, individual, medical, and miscellaneous). Dropout rate is the percentage of clients who failed to return to the mental health facility after one session. Level of use of outpatient services is measured as the number of episodes of outpatient care that an adolescent receives during the 5-year period.

The following control variables are used in this study: age, poverty status, referral source, and diagnosis. Age is a continuous variable with a range of 13 to 17. Poverty status is measured by the adolescent's eligibility for Medi-Cal, which is determined by the amount of gross family income adjusted for the number of dependents in the adolescent's household. For those eligible for Medi-Cal, the State of California pays for their use of health and mental health services; accordingly, these adolescents are coded as being in poverty. Adolescents who do not qualify for Medi-Cal are considered as not in poverty. Referral source is also included as a control variable because it may have implications for length of treatment and dropout rate. Referrals are made by (a) the family or a relative, (b) the school system, (c) a social or legal agency, or (d) a health or mental health professional. Psychiatric diagnosis is based on DSM-III criteria. The diagnoses are presented in broad diagnostic categories: adjustment, conduct, affect, schizophrenia, and other diagnoses.

RESULTS

Client Characteristics

Table I presents the ethnic breakdown of the 57,497 children and adolescent clients seen at public mental health facilities (outpatient, inpatient, continuous care, or day treatment) in Los Angeles County between

1983 and 1988. It also shows the 1985 census estimates of the population of children under age 18 in L.A. County (Los Angeles County Department of Health Services, 1988). Population statistics are selected for 1985 because it is a reasonable midpoint for the period we are examining (1983–1988).

During the 5-year period, the ethnic breakdown for clients in the mental health system were 12,788 African Americans (22.2%); 1,554 Asian Americans (2.7%); 20,488 Hispanics (35.6%); 20,207 whites (35.1%); and 2,460 others or unknown (4.3%). A comparison of these proportions to the population estimates shows that Asian Americans and Hispanics are underrepresented whereas African Americans are overrepresented in the mental health system. The data can also be examined using crude annual utilization rates. On the average, during the 5-year period, African Americans had the highest annual utilization rate among the four ethnic groups (791/100,000 population), followed by whites (548/100,000), Hispanics (447/100,000), and Asian Americans (138/100,000). Although it is best to exercise caution in interpreting this usage pattern among ethnic groups in the absence of other data regarding the need and demand for psychiatric services (Cleary, 1989), these data are useful in generating hypotheses for future research, a point we return to in the discussion. Similar comparisons to establish the relative use of mental health services have been used in studies of adult ethnic populations (Snowden & Cheung, 1990; Sue, 1977; Sue et al., 1991; Sue & McKinney, 1975).

Related to overall use is the type of mental health services that children and adolescents are most likely to use (e.g., continuous care, day treatment, inpatient, or outpatient). Table II shows the distribution of the ethnic groups among the four treatment settings in the original data set. Most first episodes for all ethnic groups during the 5-year period appear in outpatient clinics; the range is between 94% (whites) and 98% (Hispanics). The majority (53%) of children who use outpatient services are between the ages 13 and 17 (data not shown). Thus, the remainder of this paper focuses on the highest using age group, adolescents, for the most commonly used type of service, outpatient care, in the Los Angeles County mental health system.

Table I. Utilization Patterns in Los Angeles County[a]

Group	Clients in L.A. mental health system		1985 L.A. County census estimates[b]	
	n	%	*n*	%
African American	12,788	22.24	323,471	14.69
Asian American	1,554	2.70	224,519	10.19
Hispanic	20,488	35.63	916,623	41.62
White	20,207	35.14	737,989	33.51
Other/unknown	2,460	4.28	—	—
Total	57,497	99.99	2,202,602	100.01

[a]Client figures were compared with the 1985 L. A. County census estimates of the population under 18 years of age. Chi-square comparisons for client figures versus census estimates yielded p values less than .0001 for each group.
[b]For the 1985 census estimates, the Asian category includes all other groups besides blacks, Hispanics, and whites (e.g., Native American), and Hispanics include non-Mexican Hispanics (e.g., Puerto Ricans).

Table II. Percentages of Each Ethnic Group in Four Treatment Settings[a]

Treatment setting	African American (n = 12,788)	Asian American (n = 1,554)	Hispanic (n = 20,488)	White (n = 20,207)
Continuous care	0.73	0.64	0.49	1.86
Day treatment	1.37	1.80	0.92	2.38
Inpatient	1.06	1.16	0.70	1.64
Out patient	96.84	96.40	97.88	94.12

[a]Client population sizes are for first client episodes during 1933–1988 for clients under 18 years of age.

Table III presents the sociodemographic characteristics, diagnosis, and referral source of each ethnic group. Comparisons are made between each ethnic minority group and whites to note differences among the adolescents seen in outpatient clinics. Differences are apparent on all variables, except for age. African Americans have a significantly lower proportion of females, and they have a higher percentage in poverty than whites. They have a higher percentage diagnosed with adjustment disorder; but, like Asian Americans, they have a lower percentage diagnosed with conduct disorder. Asian Americans have a higher percentage diagnosed with other disorders (organic brain syndromes, drug problems, cognitive impairments, nonpsychiatric disorders, or deferred diagnosis). African Americans have a lower proportion referred to mental health services by their family and health/mental health professionals, but they have a much higher proportion referred by social agencies than whites. Asian American and Mexican Americans have a lower percentage referred by social agencies but a higher percentage referred by schools.

Frequency of Outpatient Use

A critical question in the provision of public mental health care is the identification of the high users of outpatient services. In this particular

Table III. Sociodemographic Characteristics, Diagnosis, and Referral Source by Ethnic Group[a]

Variable	African American	Asian American	Mexican American	White
Sample size (episodes)	1,291	907	1,249	985
Gender (%)				
Female	29.98*	43.99	43.55	44.47
Male	70.02	56.01	56.45	55.53
Age (*M*)	15.28	15.28	15.16	15.19
Poverty status (%)				
Poverty	89.16*	74.64	80.70	76.55
Nonpoverty	10.84	25.36	19.30	23.45
Diagnosis (%)				
Adjustment disorder	41.75*	30.10	31.63	34.62
Conduct disorder	23.47	16.98	18.82	20.30
Affective disorder	8.75*	8.05*	11.85	14.42
Schizophrenia	1.08	2.95	1.92	1.02
Other diagnosis[b]	24.94	41.90*	35.79	29.64
Referral source (%)				
Family/relatives	17.66*	27.56	28.98	23.65
Social/legal agency	71.96*	45.87*	49.32*	58.58
School	4.65	12.35*	11.85*	7.41
Health/mental health	5.73*	14.22	9.85	10.36

[a]Each ethnic minority group was compared to the white group. For variables testing proportions as denoted by (%), test for significance of difference between two proportions is used. To control for simultaneous alpha rate, $p < .001$ is used as the significance criterion. For age, a Duncan procedure for pairwise comparison with $p < .05$ is used to reduce the possibility of making Type I errors. Significant differences are indicated by an asterisk.
[b]Other diagnosis includes organic disorders, drug and alcohol problems, cognitive impairments, nonpsychiatric disorders, and deferred diagnosis.

instance, we are particularly interested in whether some minority groups use outpatient care more extensively than whites. As a measure of use, the total number of episodes is computed for each client during the 5-year period. The mean number of episodes per client for each ethnic group are African American, 1.51; Asian American, 1.29; Mexican American, 1.30; and white, 1.47. A Duncan procedure for pairwise comparison with $p < .05$ indicated that the means are not statistically different from one another.

We then conducted multiple regression analysis to examine whether ethnic differences in total number of episodes would arise when controlled for demographic characteristics (gender, age, and poverty status), diagnosis, and referral source. Table IV displays the results of this analysis. The models show an ethnic difference; African Americans have more episodes than whites. Other significant predictors of total number of episodes are gender, poverty status, and referral source. Clients who are male, poor, and referred by their family rather than a social agency tend to have more episodes.

Dropout Rates

Dropout or premature termination is defined as the failure to return for treatment after one session. This definition is consistent with other research that examines ethnic differences in premature termination (O'Sullivan et al., 1989; Sue et al., 1991; Sue & McKinney, 1975). The definition also makes intuitive sense since the first session represents the adolescent's initial contact with the mental health professional. Failure to return after this session may reflect a dissatisfaction with services. On the other hand, it may reflect the adolescent's (and family's) perception that the goals for treatment were met despite the mental health professional's recommendation that treatment should have continued. Dropout rates for the first client episodes are as follows: African American, 18.29% (156 dropouts/853 episodes); Asian American, 19.46% (137/704), Mexican American, 17.53%

Table IV. Multiple Regression Model Estimating the Effect of Ethnicity on Total Number of Episodes

Variable	Standardized β	*t*
Gender		
Female	−.047	−2.95[c]
Male (baseline)	—	—
Age	.018	1.18
Poverty		
Poverty	.040	2.55[b]
Nonpoverty (baseline)	—	—
Diagnosis		
Conduct disorder	.003	.17
Affective disorder	−.020	−1.19
Schizophrenia	−.022	−1.42
Other diagnosis[a]	−.027	−1.55
Adjustment disorder (baseline)	—	—
Referral source		
Social/legal agency	−.039	−2.02[b]
School	−.003	−.21
Health/mental health	.022	1.29
Family (baseline)	—	—
Ethnicity		
African American	.043	2.19[b]
Asian American	.029	1.54
Mexican American	.037	1.92
White (baseline)	—	—

[a]Other diagnosis includes organic disorders, drug and alcohol problems, cognitive impairments, nonpsychiatric disorders, and deferred diagnosis.
[b]$p < .05$.
[c]$p < .01$.

(169/964); and white, 18.81% (126/670).[3] Comparisons of dropout rates between ethnic minority groups and whites using the test of significance between two proportions yield no ethnic differences for either all episodes or first client episodes only.

A logistic regression analysis was conducted to test the possibility that ethnic differences in dropout rates may arise when other related variables are controlled. The predictor variables included ethnicity, gender, age, poverty status, diagnosis, and referral source. The logistic model estimated the impact of each individual predictor variable, controlling for the effects of all other variables, in distinguishing between dropout after one treatment session versus continuation of treatment beyond one session. Only the first client episodes were included. In this analysis, dropout was coded as 1 and nondropout was coded as 0. The logistic regression coefficients were converted into odds ratios. The odds ratio is read as the expected odds of dropping out after one treatment session. An odds ratio greater than 1 indicates that a variable increases the odds of dropping out, and a ratio of less than 1 decreases the odds.

The logistic regression model confirms that minority adolescents are similar to whites in terms of dropout rates even when controlled for selected sociodemographic factors and diagnosis (see Table V). Instead of ethnicity, factors predictive of dropout are age, poverty status, referral source, and diagnosis. Adolescents who are older, poor, referred by health/mental health professionals (rather than the family), and diagnosed with other disorders (rather than one of the other broad diagnoses) are more likely to dropout of treatment.

Although not part of our original research questions, we were curious whether adolescents who terminated prematurely on their first episode returned for subsequent outpatient services. Of the 588 adolescents who dropped out, 266 (45%) of them returned for services. The return rates by ethnic group are as follows: African Americans, 35% (48 returned/156 dropouts); Asian Americans, 57% (89/137); Mexican Americans, 41% (69/169); and whites, 48% (60/126). Comparisons of return rates between ethnic minority groups and whites using the test of significance between two proportions yielded no ethnic differences.

Length of Treatment

A final set of analyses is conducted on adolescents who did not prematurely terminate from treatment. For these adolescents the mean number of 15-minute treatment sessions are as follows: African American, 41.40; Asian American, 51.64; Mexican American, 57.16; and white, 57.52. A Duncan procedure for pairwise comparison with $p < .05$ yields no ethnic differences in length of treatment for clients who did not dropout in their first episode. A multiple regression model was used to determine whether ethnic differences would arise when related variables are controlled for. Since the distribution of length of treatment was highly positively skewed, the natural logarithm of total number of 15-minute sessions was used as the dependent variable in the regression model. The results are displayed in Table VI. Asian Americans tend to stay in treatment longer than whites. African Americans, however, tend to stay in treatment for a shorter length of time than do whites. The control variables are also predictive of length of treatment. Adolescents who are female, younger, not poor, diagnosed with conduct disorder (rather than adjustment disorder), and referred by the family (rather than social agencies) tend to stay in treatment longer.

[3]We also conducted analyses of dropouts for all client episodes and the results were similar to the analyses for the first client episode. Thus, we decided to present the analyses for only the first client episode.

Table V. Multiple Logistic Regression Models Estimating the Effect of Ethnicity on Dropout for First Episodes

Variable	Odds ratio
Gender	
Female	1.03
Male (baseline)	—
Age	1.20[d]
Poverty	
Poverty	1.70[c]
Nonpoverty (baseline)	—
Diagnosis	
Conduct disorder	1.28
Affective disorder	0.82
Schizophrenia	1.42
Other diagnosis[a]	1.35[b]
Adjustment disorder (baseline)	—
Referral source	
Social/legal agency	1.12
School	0.67
Health/mental health	2.96[d]
Family (baseline)	—
Ethnicity	
African American	0.92
Asian American	0.93
Mexican American	0.89
White (Baseline)	—

[a]Other diagnosis includes organic disorders, drug and alcohol problems, cognitive impairments, nonpsychiatric disorders, and deferred diagnosis.
[b]$p < .01$
[c]$p < .001$.
[d]$p < .0001$.

DISCUSSION

In this study, minority adolescents show a pattern of utilization of mental health services different from that of whites. Our findings indicate that the ethnic pattern of mental health service utilization found among adults is evident for children. African Americans are overrepresented whereas Asian Americans and Mexican Americans are underrepresented in the population that uses mental health services. These findings suggest that generalizations about the utilization behavior of minority children based upon one non-white category are inappropriate.

However, it is not possible to move beyond our data to suggest reasons for the ethnic differences. Two competing hypotheses have been advanced to explain ethnic differences in utilization rates. Some researchers argue that some minority groups have higher or lower rates of psychopathology than whites. Others speculate that minority groups have a higher or the same rate of psychiatric problems as whites, but culture-specific help-seeking behaviors operate to reduce hospital admissions (Sue & Morishima, 1982). Support for either argument is built on a shaky foundation since most studies compare utilization of mental health services between whites and minority groups, as we do in this paper, without establishing the psychiatric need for treatment. Without data on the mental health needs of the ethnic minority populations, we cannot know if achieving parity in service utilization ensures equitable distribution of services to these populations (Meinhardt & Vega, 1987). Accordingly, more community studies that oversample ethnic minority children and adolescents are needed to document the mental health problems and help-seeking behaviors in these communities.

Table VI. Multiple Regression Model Estimating the Effect of Ethnicity on Length of Treatment for Clients Who Did Not Dropout on the First Episode

Variable	Standardized β	*t*
Gender		
Female	.082	4.12[d]
Male (baseline)	—	—
Age	−.040	−2.06[b]
Poverty		
Poverty	−.051	−2.54[b]
Nonpoverty (baseline)	—	—
Diagnosis		
Conduct disorder	.061	2.81[c]
Affective disorder	.028	1.32
Schizophrenia	.003	0.18
Other diagnosis[a]	.035	1.57
Adjustment disorder (baseline)	—	—
Referral source		
Source/legal agency	−.124	−5.17[d]
School	−.023	−1.08
Health/mental health	−.034	−1.63
Family (baseline)	—	—
Ethnicity		
African American	−.070	−2.80[b]
Asian American	.053	2.18[b]
Mexican American	−.013	−0.52
White (baseline)	—	—

[a]Other diagnosis includes organic disorders, drug and alcohol problems, cognitive impairments, nonpsychiatric disorders, and deferred diagnosis.
[b]$p < .05$.
[c]$p < .01$.
[d]$p < .001$.

Minority adolescents who receive mental health care differ considerably from white clients on sociodemographic characteristics, diagnosis, and referral source. These results are consistent with prior findings that children who receive treatment tend to be male, poor, and referred by social agencies (Canino, Gould, Prupis, & Shaffer, 1986; Costello & Janiszewski, 1990), but this is especially true for African Americans in comparison to whites. In fact, the group that differs the most from the remaining three groups is African American. They have the highest proportion of males in treatment, highest proportion in poverty, highest proportion referred by social or legal agencies, and the lowest proportion referred by the family or school.

Although ethnicity is predictive of some utilization variables, the consistent predictors are poverty status and referral source. Poverty status is associated with higher number of episodes, dropping out, and shorter length of treatment. This finding has rather negative implications for African Americans because nearly 90% of African American youth who enter the community mental health system are poor. Moreover, African Americans may have a greater likelihood of entering mental health treatment given that one third of the African American population is poor, which is three times the rate for whites (O'Hare, 1989). Future studies can examine whether African Americans in comparison to other ethnic groups fare worst in the mental health system in terms of treatment outcome (mental health improvement due to treatment).

Referral source is also a consistent predictor of utilization variables. Referrals from social and legal agencies result in lower number of episodes and shorter length of treatment, and referral by a health/mental health professional is associated with dropping out. It is difficult to interpret whether these patterns are necessarily negative or positive for the adolescent. On the one hand, an external agency is generally involved with other social

and health agencies and may use this network for alternative mental health services for the adolescent. On the other hand, an external agency may not be able to provide adequate support and supervision to monitor the adolescent's mental health care which in turn results in premature termination and shorter treatment sessions. More investigations are needed to monitor the intricacies of the relationship between referral source and utilization patterns and treatment outcomes.

Our paper assesses whether minority groups differ from whites on a number of utilization variables. It does not evaluate whether the mental health system is adequately serving children and adolescents since other information not available in this data set is needed. In other words, the discussion in this paper centers primarily on parity in the utilization of services rather than parity in the quality of services. The present study suggests that some ethnic groups are more likely than whites to underutilize these services. A critical issue for policy makers is whether a change designed to increase the utilization rate for some groups is possible given the current lack of financial resources available to mental health programs. California, like some other states, is undergoing severe financial problems, and mental health services are often targeted for budget cuts. Given this current trend, we are likely to witness even more children and adolescents who are unable to receive adequate help for their problems, and this may be especially true for poor and ethnic minority children and adolescents.

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