Ethnic Differences in Psychiatric Diagnosis among Asian American Adolescents

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This is the first investigation of the psychiatric diagnosis of Asian American adolescents using data from the Los Angeles County Department of Mental Health. It was hypothesized that Asian American adolescents receive different diagnoses than Caucasian adolescents, and furthermore, that there are intra-Asian differences in diagnosis among the Asian subgroups. Asian American adolescents were categorized in the following subgroups: Chinese, Japanese, Korean, Filipino, Vietnamese, and other Asians (i.e., Southeast Asians and Pacific Islanders). Separate comparisons were made for male and female adolescents. The findings strongly support the presence of ethnic differences between Asian and Caucasian adolescents and also among Asian subgroups in both male and female groups. In the Asian-Caucasian comparison, Asian males and females received significantly more nonpsychiatric diagnosis than Caucasians. Asian males were more often diagnosed with nonpsychiatric disorder and less often with affective disorders than Caucasian males. Asian females were more frequently diagnosed with major depression and nonpsychiatric disorder than Caucasian females. Among Asian American adolescents, Chinese and Japanese adolescents received similar diagnoses while Korean and Vietnamese also showed similar patterns in diagnosis. The implications of intra-Asian differences are discussed.

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The issue of children's mental health has become more prominent in the nation's policy agenda. Several technical reports have identified severe gaps in our knowledge of children with severe emotional and behavioral problems (Knitzer, 1985; Office of Technology Assessment, 1986; Stroul and Friedman, 1986). They consistently document that a large proportion of children with severe emotional problems do not receive treatment. When they do receive treatment, services are inappropriate, fragmented, and inadequate (Katz-Leavy et al., 1987; Stroul and Friedman, 1986). Despite these general findings, very little is known about the distribution of mental health problems among children (Institute of Medicine, 1989). This is particularly true for minority children, especially Asian Americans. The following areas have been identified as high priority by the National Plan for NIMH-sponsored child and adolescent mental disorders research: a) epidemiology, b) assessment, diagnosis and treatment, and c) prevention and special populations.

The paucity of research on the Asian American population is alarming given the recent demographic trends. According to the 1990 census, Asian and Pacific Americans comprise only 3% of the total population in the United States. However, such figures are grossly misleading, given that Asian and Pacific Americans are the fastest growing minority group in the United States. The Asian American population has doubled each decade since 1970 and is now near 7.2 million (U. S. Bureau of the Census, 1989; U. S. Bureau of the Census, 1991). In states such as California and Hawaii, Asian and Pacific Americans constitute a major portion of the population. A large percentage (28.6%) of Asian Americans who are currently residing in the United States are under the age of 18, slightly above the national average, which stands at approximately 25%.

Not only is the Asian American population the fastest growing minority group in the United States, but it is also the most diverse in terms of cultural background, country of origin, and circumstances for coming to the United States. In the past, researchers have often overlooked the unique qualities that distinguish one Asian ethnic group from another because of their seemingly homogeneous external appearance. However, placing Asian Americans into a single group disguises their heterogeneity and diversity. More than 20 different ethnic groups and over 30 different types of languages are represented in the Asian American category. Currently, the three largest groups are the Chinese, Japanese, and Filipino; but the number of Korean, Southeast Asians

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(e.g., Vietnamese, Cambodians, Laotians, and Hmong), and Pacific Islanders (e.g., Hawaiian, Samoan, and Tongan) is growing rapidly and may soon surpass the larger groups.

This paper assesses the diagnosis of Asian American adolescents when they enter community mental health clinics. An examination of Asian Americans in clinical settings provides some baseline information from which to compare prevalence rates derived from future community epidemiological surveys. In addition, if ethnic differences are found, the findings will support the need to consider sociocultural factors in the planning and design of mental health treatment for different minority groups (Gibbs and Huang, 1989).

There is evidence to suspect that Asian American adolescents will differ from Caucasian adolescents in the types of mental health problems seen in outpatient clinics. First, Asian American adolescents underutilize community mental health clinics in comparison to Caucasian adolescents (Bui and Takeuchi, in press). Utilization of community mental health centers may vary for minority groups due to factors such as accessibility of appropriate resources, cultural and language barriers, and conceptions about mental illness and/or mental health treatment (Sue and McKinney, 1975). These contextual differences may be reflected in the types of mental health problems of Asians and Caucasians in mental health settings. Second, studies on adults show that some ethnic minority groups tend to receive more severe diagnosis than their Caucasian counterparts. For instance, African Americans and Asian Americans are more frequently diagnosed as psychotic than Caucasians and Mexican Americans (Flaskerud and Hu, 1992). This study also showed that Korean, Filipino, and Southeast Asian adults received the psychotic diagnosis more frequently than other Asian groups, such as the Chinese and the Japanese.

The present study represents the first analysis of the psychiatric diagnosis received by Asian American adolescents receiving mental health services in a large metropolitan area. A common problem with race and ethnic comparisons in previous mental health research has been the small sample sizes of minority groups. A unique advantage of our investigation is that the dataset contains a substantial number of Asian American adolescents. In addition, the dataset allows us to make some initial comparisons between specific Asian American ethnic groups. The goals of this study were to examine, first, the racial differences between Asian and Caucasian adolescents and, second, the ethnic differences among Asian groups in psychiatric diagnoses. Male and female adolescents are analyzed separately to control for possible gender biases found in earlier studies on psychiatric diagnosis (Almqvist, 1986).

Method

Data

The data for this study come from Automated Information Systems, which is a computerized data file maintained by the Los Angeles County Department of Mental Health. It is used primarily for the purpose of clinical management, revenue collection, and monitoring clients with the potential for research. The data were collected between January 1983 and August 1988 by trained therapists and professionals using the Diagnostic and Statistical Manual of Mental Disorders, 3rd ed (American Psychiatric Association, 1980). The original dataset contains over 600,000 unduplicated cases. An unduplicated case refers to the first treatment episode from the time of admission until the time of termination. It does not include those clients who later return for follow-up treatment. Information is collected routinely on each client entering the Los Angeles County Mental Health System. The data collected for each client include client information (e.g., age, sex, income, ethnicity, etc.), therapist information, type of treatment received as well as service provider informa-

Los Angeles County uniformly verifies all information related to fiscal matters and assures validity by carefully monitoring operations for mistakes in data entry. Before conversion into Statistical Analysis System format, the information contained in the dataset had been audited by state and county agencies that periodically conduct program evaluations to check for out-of-bound values and inconsistent data.

In examining the diagnoses of minority adolescents in the Los Angeles County Mental Health system, the present study has limitations associated with archival data. Since the data are drawn from treatment records, it is not feasible to examine the reliability and validity of diagnoses or of the other variables that may be associated with ethnicity (e.g., social class and English language proficiency). However, these types of data have proven useful in the past to explore minority health issues in geographic settings other than Los Angeles, especially when more reliable data are simply unavailable (Chung and Snowden, 1990; Hu et al., 1991; O'Sullivan et al., 1989; Snowden and Chung, 1990; Sue and McKinney, 1975). This study is also important in documenting in some depth the diagnosis that Asian Americans receive at the time of admission to the community mental health clinics. Similarly, while adolescent mental health services have been examined for Caucasians, and to a lesser extent for African Americans, the present study examines interethnic differences among Asian Americans. Thus, future studies can build upon baseline information provided in this paper to examine more fully the issue of mental health problems among Asian Americans.

Sample

Due to the disproportionately small number of Asian Americans in the dataset, a random sample of Caucasians was drawn to match the sample size of the Asian population. The sample sizes comprised 529 Asian males and 425 Asian females and 576 Caucasian males and 471 Caucasian females. In both racial groups, 55% of the clients were male and 45% were female.

Asian groups were separated into: Chinese, Japanese, Korean, Filipino, Vietnamese, and other Asians. The last category is composed of Southeast Asians (e.g., Cambodians, Laotians, and Hmongs) and Pacific Islanders (e.g., Hawaiians, Samoans, and Tongans) due to the small numbers in each of the individual groups. For males, there were 90 Chinese, 63 Japanese, 43 Koreans, 77 Filipinos, 43 Vietnamese, and 182 other Asians. For females, there were 56 Chinese, 47 Japanese, 33 Koreans, 103 Filipinos, 63 Vietnamese, and 123 other Asians. Males were slightly more represented in all the groups except for the Filipino and the Vietnamese groups, who had more females than males. Over 75% of the clients in the dataset are poor as determined by their eligibility for Medical (Sue et al., 1991).

Results

The DSM-III served as the diagnostic criteria for assessing the mental health of the clients. In this study, affective disorders refer to bipolar disorder and cyclothymia, while the category of major depression includes dysthymia. A test of proportions was used to determine significance at the .05 level for pairwise comparisons on both gender and ethnic differences in diagnosis. To prevent chance effects due to multiple comparisons, we applied a Bonferroni correction for the intra-Asian comparisons (Neter et al., 1985); this set the alpha at .002.

Our analysis confirmed the presence of gender differences found previously in the literature. Gender differences within Asian groups were significant. Asian males were diagnosed more often with conduct disorder and nonpsychiatric disorder, while females were diagnosed more frequently with affective disorders and major depression. There was a greater tendency for Asian males than females to be diagnosed with nonpsychiatric disorders. On the other hand, affective disorders occurred with greater frequency in the Asian females than in the Asian males. Differences were also found between the males and females in the Caucasian sample, with a greater proportion of the males being diagnosed with conduct disorder than the females. Thus, all subsequent analyses examining ethnic differ-

ences in psychiatric diagnoses are conducted separately with respect to gender.

Comparison of Diagnoses Between Asians and Caucasians by Gender

As shown in Table 1, the most frequently reported diagnosis for Asian and Caucasian males was adjustment disorder, followed by conduct disorder. Asian and Caucasian males showed significant differences in two of the six types of psychiatric diagnoses. A significantly greater proportion of Asian males were diagnosed with nonpsychiatric disorder, while a greater proportion of Caucasian males were diagnosed with affective disorders.

Also shown in Table I, in both Asian and Caucasian females the most frequently reported diagnosis was adjustment disorder. Affective disorder was the second most frequent category for Asian females, while for Caucasian females it was conduct disorder. In addition, Asian females were more often diagnosed with major depression and nonpsychiatric disorder than Caucasian females. Caucasian females were treated more frequently for adjustment and conduct disorder than Asian females.

In sum, analyses revealed more ethnic differences in the female group than in the male group. Ethnic differences were found in both males and females on nonpsychiatric disorder. However, only the comparison between Asian and Caucasian males differed in the percentage of those suffering from affective disorders, while differences on adjustment, conduct disorder, and major depression pertained to females only. Thus, the nonpsychiatric disorder emerged as the only shared difference between males and females while the other four diagnoses mentioned above were more gender specific.

TABLE 1 Comparison of Diagnoses Between Asian and Caucasian Adolescents

	Males			Females	
Diagnosis*	Asians	Caucasians	Asians	Caucasians	
Adjustment Disorder	30.1	32.3	29.2	37.8*	
Affective Disorder ^b	7.2	13.5*	15.1	10.4	
Conduct Disorder	21.2	25.0	11.1	15.1*	
Major Depression	5.3	3.8	9.7	5.7*	
Nonpsychiatric disorders	8.5	1.2*	12.9	3.8*	
Other Adolescent Disorder	3.3	6.6	3.2	6.4	

All figures reflect percentage for that diagnostic category.

*Includes affective disorders other than major depression and dysthymia.

Includes academic and interpersonal problems, malingering, and bereavement.

Includes oppositional disorders, eating disorders, and identity disorders.

*p < .05. The Asian group was compared with the caucasian group. A test of proportions was used to determine significance at .05 level.

Comparison of Diagnoses among Asian Groups

Table 2 illustrates the distribution of psychiatric diagnosis in the specific Asian male groups. With the exception of two Asian male groups, adjustment disorder and conduct disorder were the two most frequent diagnoses. The two exceptions were the Korean and Vietnamese, who were most frequently diagnosed with major depression and nonpsychiatric disorder, respectively. Significant differences in the rates of various psychiatric diagnoses were in the proportion of Korean, other Asian, Vietnamese, and Filipino males diagnosed with major depressions, and also in the proportion of nonpsychiatric diagnosis among Korean, Vietnamese, and other Asian males. Chinese and Filipino adolescent males were diagnosed more frequently with other adolescent disorders (e.g., oppositional and/or eating disorders) than any of the other Asian groups.

Table 3 illustrates the distribution of the six most common psychiatric diagnoses in the six Asian female groups. As table 3 indicates, the most frequently reported diagnosis, with the exception of Korean females, was adjustment disorder. Korean females were most frequently diagnosed with affective disorder, a pattern similar to that observed in the Korean males. The second most common diagnostic category was conduct disorder, with the exception of the Chinese and Vietnamese females. Nonpsychiatric diagnosis was the second most common diagnosis for the Chinese and Vietnamese.

Significant ethnic differences emerged on three of the six psychiatric diagnoses in the Asian female sample. Most notably, there was a significantly lower proportion of adjustment disorder in Koreans when compared with other Asian groups. Second, a greater proportion of Vietnamese were diagnosed with nonpsychiatric disorder. Finally, there was a greater proportion of Koreans diagnosed with other adolescent disorder than Vietnamese, although the percentages represented in this diagnostic category for either group were small. In this second set of analyses comparing the Asian subgroups, differences were found in both males and females. Male and female groups alike showed differences on adjustment, nonpsychiatric, and other adolescent disorders, but the males, in particular, differed from one another on major depression in that Korean males were more depressed than any of the other Asian subgroups.

Discussion

This study supports the presence of ethnic differences in psychiatric diagnosis. Asian Americans and Caucasians differed in the rates and types of diagnosis, and these differences were more prominent in female than in male samples. Differences in diagnosis between Asians and Caucasians were most pronounced in nonpsychiatric disorder. This may be due to the fact that the Vietnamese adolescents, both male and female, were very frequently diagnosed with nonpsychiatric disorder. There was also a tendency for the diagnosis received by Asian females to be more affect laden than those for the Caucasian females, who were diagnosed more often with the behavioral-type disorders. We speculate that some of the cultural norms of behavior fostered in Asian societies may have contributed to the asymmetry in this diagnostic category.

The comparison among the various Asian groups elucidates the heterogeneity of the Asian population. In both male and female comparisons, Chinese and Japanese groups seemed very similar in their presenting complaints and problems. These groups were comparable in the percentage of people represented in each of the six diagnostic categories, with no significant differences on any of the diagnoses. Similarly, Koreans and Vietnamese presented a diagnostic picture that was somewhat distinct from the other Asian groups in that Korean males as well as the Vietnamese males and females were diagnosed more often with nonpsychiatric disorder.

Thus, our findings may be tapping into differences

TABLE 2 Diagnoses of Asian Adolescent Males

Diagnosis	Ethnic Groups						
	Chinese (N = 90)	Japanese (N = 63)	Korean (N = 43)	Filipino (N = 77)	Vietnamese (N = 43)	Other Asians (N = 182)	Inter-Asian Difference
Adjustment	30.0	27.0	11.6	35.1	12.2	40.7	7.70
Affective	8.9	7.9	2.3	7.8	4.1	8.2	0/P, > K
Conduct	4.4	28.6	25.6	18.2	23.0	21.4	
Major Depression	4.4	6.4	20.9	2.6	2.7		11 12 12 12 12 12 12 12 12 12 12 12 12 1
Nonpsychiatric	6.7	4.8	18.6	7.8	21.6	3.9	K > O/P, V, P
Other Adolescent	11.1	11.1		13.0		3.3 5.0	V, K > O/P P > K, V; C > K, V; O/P > V

[&]quot;The abbreviations correspond to the first letter of each of the Asian ethnic groups. A test of proportions was used to determine inter-Asian differences at .05 level.

TABLE 3 Diagnoses of Asian Adolescent Females

	_	Ethnic Groups					
Diagnosis	Chinese (N = 56)	Japanese (N = 47)	Korean (N = 33)	Filipino (N = 103)	Vietnamese (N = 63)	Other Asians (N = 123)	Inter-Asian Difference
Adjustment	23.2	21.3	6.1	32.0	33.3	36.6	
Affective	7.1	8.5	18.2	12.6	4.8		O/P > K
Conduct	3.6	17.0	18.2	13.6	1837	11.4	
Major Depression	12.5	12.8			6.4	10.6	
Nonpsychiatric	19.6		9.1	13.6	7.9	4.9	
		6.4	12.1	6.8	30.2	8.9	V > O/P, P, T
Other Adolescent	10.7	12.8	15.2	2.9	_	7.3	K > V

"The abbreviations correspond to the first letter of each of the Asian ethnic groups. A test of proportions was used to determine inter-Asian differences at .05 level.

not only in ethnic heritage and language, but also in the degree of migrational stress and acculturation. Not only must newer immigrants struggle with intergenerational conflict and racial discrimination, but they must also cope with the added stress of learning a new language and adjusting to a new culture (Sluzki, 1979; Tobin and Friedman, 1984). It is reasonable to assume, then, that Asian Americans with longer histories in the United States, such as the Chinese, the Japanese, and the Filipinos, will share more in common than the Koreans and the Vietnamese, comprised primarily of more recent immigrants and refugees. As an example, the Vietnamese war experience may act as an additional source of stress to their already difficult period of adjustment. Finally, there is the issue of the level of acculturation within the specific Asian-American groups. For example, Asian American adolescents who are foreign born are qualitatively different from those who are American born. Unfortunately, the dataset did not have an adequate variable to assess the level of acculturation. Nevertheless, length of time in United States serves as an adequate measure of acculturation that the three groups, Chinese, Japanese, and Filipino, would be considered more similar than the Korean and Vietnam-

Information on psychiatric diagnosis provides valuable insight into the mental health status of the Asian American adolescent population. Diagnosis may yield adequate approximations of prevalence rates among those seeking mental health treatment in the community mental health setting and of whether assessment is culturally sensitive toward Asian American clients. The high prevalence of the nonpsychiatric disorder diagnosis among certain Asian groups may be explained by the fact that newer immigrants may be subject to even more pervasive and chronic stressors which can in turn influence diagnosis. For instance, the DSM-III states that the adjustment disorder diagnosis must be assigned within 3 months of the precipitating stressor. If the stressor has been chronic and the onset preceded the specified period, then, according to the criteria, the client must be given another diagnosis. For this reason, diagnosis may also depend on sociocultural factors, such as circumstances for coming to the United States, length of stay in the United States, and ethnic background.

The two major implications of this study are the need to address cultural sensitivity in the provision of mental health services for Asian American adolescents and the need to emphasize the importance of examining psychiatric diagnosis. Differences in the types of mental health problems should be addressed with changes in the delivery of mental health services. This includes increasing cultural sensitivity by the hiring of bicultural and/or bilingual staff, designing culturally sensitive assessment tools, and implementing therapeutic strategies that are consonant with the cultural norms of the population. To illustrate, a recent study by Sue and colleagues (1991) has found that for ethnic minority adult clients, ethnic match between therapist and client was a significant predictor for success of treatment. Second, psychiatric diagnosis warrants investigation because it provides some measure of the mental health status of those utilizing mental health services in the community. An accurate diagnosis also has important implications for determining the course of psychiatric treatment and the prognosis of clients. (Flaskerud and Hu. 1992).

There are some precautions to keep in mind when working with a cross-ethnic sample, as in this study. First, Weisz (1987) found evidence for cultural, as opposed to ethnic, differences in the internalizing and externalizing dimensions of childhood mental disorders. They found that children in Thailand were more often referred to clinics for internalizing problems than were Thai children in the United States, who were more often referred for externalizing problems. Weisz suggests that this may reflect, in part, nationality differences in referral patterns as well as prevalence of these types of problems. These data support a suppression-facilitation model of cultural influence, whereby cultural factors such as values and childrearing practices

may discourage or suppress the development of some problems while facilitating the development of others. Studies that have found cultural differences in the "perception" of behavioral problems lead us to hypothesize that there would also be ethnic differences in these disorders. Clinicians must remember, then, to take into account cultural differences in order to avoid misinterpreting normative behavior as pathological (Lopez and Hernandez, 1986). It is not uncommon for Asian clients to be treated for anxiety and depression, which coincides with the common stereotype that Asian Americans tend to internalize their feelings. Furthermore, the language barrier between the client and the therapist can also impede the diagnostic process (Hsu et al., 1985; Leong, 1986; Shon, 1980; Sue, 1988). These processes may contribute to magnifying ethnic differences between Asian Americans and Caucasians.

Some limitations of this study deserve mention here. First, the data were collected prior to 1988. Thus, recent changes in the mental health system, such as the addition of ethnic therapists and mental health facilities designed to serve ethnic minorities, are not taken into account. Second, the dataset is limited in that it excludes those individuals who do not seek mental health services. Nevertheless, findings from this dataset can serve as a valuable resource for important information, such as type of diagnosis, characteristics of the sample, and treatment outcome of ethnic minority clients in community mental health settings in a large metropolitan area. In the future, a community epidemiological investigation should be conducted to provide a more accurate mental health profile of Asian American adolescents.

This study confirms both gender and ethnic differences on mental health diagnoses and it can be safely concluded that there are important differences not only between Asian Americans and Caucasians, but also among Asian American adolescents. Further research should be directed toward determining those factors that could provide clues for assessment and treatment to expand the current knowledge base about the prevalence rate of mental disorders in the Asian American adolescent population. Ethnic differences found here among Asian Americans and Caucasians and those differences between the specific Asian American ethnic groups provide some insight to explain differential diagnosis.

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