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DRUG ABUSE AMONG ETHNIC MINORITIES

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The editors take sole responsibility for organizing and summarizing the papers that were originally prepared for a workshop on drug abuse research priorities for ethnic minority populations sponsored by the National Institute on Drug Abuse. In preparing the report every effort was made to include the findings that best captured the ethnic minority research of recent years. If any drug abuse researchers feel slighted because their work was not reported or was not reported in greater detail, we extend our apologies.

Opinions expressed herein are those of the authors and do not necessarily reflect the official position of the National Institute on Drug Abuse or any other part of the U.S. Department of Health and Human Services.

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FOREWORD

The National Institute on Drug Abuse is committed to ensuring that the needs of ethnic minority populations are appropriately examined and that interventions are developed to prevent and to treat drug abuse among these groups. As part of the Minority Research Program, NIDA supports research, knowledge transfer, and training in response to the needs of minority researchers and the minority community.

In the past, NIDA has supported a number of research projects aimed at deterring or halting drug abuse among ethnic minority populations. Among the most significant are efforts to prevent the spread of drug abuse among American Indians in the Pacific Northwest; development of new treatment protocols for inner city blacks in the Baltimore/Washington, D.C. area; and etiologic research that examined the antecedents of drug abuse among Hispanic families living in South Florida.

At the present time, NIDA, in collaboration with the Office of Juvenile Justice and Deliquency Prevention, US Department of Justice, is supporting a research grant announcement for "Research on the Etiology of Drug Abuse Among Ethnic and Minority Juvenile Populations." Through this and other efforts NIDA hopes to reduce the burden of drug abuse among American Indians, Asian Americans and Pacific Islanders, Black Americans, and Hispanic Americans.

Finally, it is worth noting that this volume is appearing during a time of particular emphasis on understanding, preventing, and treating drug abuse. NIDA is encouraging submission of research grants in critical areas; significant among these is drug abuse among ethnic minority populations.

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PREFACE

Public concern over increased drug abuse among ethnic minority populations has stimulated a major effort on the part of researchers and clinicians to identify effective ways of intervening in this behavior. Although major strides have been taken in the areas of prevention and treatment research, these efforts have focused, in large part, on studies that examine drug abuse among white, middle-class people. Only limited information is available on the prevalence of drug abuse among ethnic minority populations, as well as etiologic and developmental factors that may play a role in determining their vulnerability to drug abuse.

The scarcity of such research is of particular concern since epidemiologic survey data compiled through NIDA's Drug Abuse Warning Network (DAWN) and Client Oriented Data Acquisition Process (CODAP) systems indicate that adult members of specific population subgroups (i.e., blacks and Hispanics) are overrepresented in alcohol and drug treatment programs and drug-related emergency hospital admissions, as well as in selected criminal justice actions. Furthermore, the data indicate an increasing trend in drug abuse among ethnic minority populations.

This present volume is a summary and an update of papers and discussion originally presented at a NIDA Technical Review held in the summer of 1983. Drs. Trimble and Padilla integrated these earlier presentations and have provided a state-of-the-art review of drug abuse research among ethnic minorities. Each section presents an overview of minority-specific trends and patterns of use and clinical research. Moreover, this volume provides a strong rationale for supporting additional research on drug abuse issues among ethnic minority populations.

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Introduction and Overview

The problems of drug abuse among this country's ethnic minorities and the need for ways to assess, treat, and prevent drug abuse are becoming increasingly evident and pressing. Yet despite the increasing visibility of the problems, drug abuse research for ethnic minorities remains a relatively low priority.

This is particularly unfortunate since a review of the extant literature indicates that we lack even the basic and essential information necessary to understand the rate and extent of drug abuse among ethnic minority groups and individuals. Moreover, little is known concerning etiological factors which may play a role in the initiation and maintenance of drug abuse.

In an effort to focus attention on drug abuse problems among ethnic minorities, the National Institute on Drug Abuse (NIDA) organized a workshop in the summer of 1983. Twelve ethnic minority researchers were invited to attend and present a state-of-the-art paper on epidemiology, treatment, and/or prevention research priorities for their respective populations. In essence, three papers were presented for each of the American Indian, Asian American, black, and Hispanic groups.

This report is an abridged summary of the literature reviews presented by participants at the conference from each of the four ethnic minority groups. Characteristics of each group are identified, followed by a synthesis of the major findings surrounding substance abuse in each ethnic community.

Out of this brief review of current issues in ethnic minority drug and alcohol abuse, several common themes readily emerge. Despite the diverse geographic and cultural backgrounds of these groups, repeated identification of certain core problems associated with integration into majority Western culture helps to indicate research needs.

A basic core of knowledge now exists with respect to the four ethnic groups. This body of knowledge points to the need for more current and systematic data in all areas of epidemiology, treatment, and prevention. At best the literature review points to an unevenness in the amount of information currently available on the topic. The abridged review does show that all groups emphasize the need for more culturally sensitive designs and measures, which entails an appreciation for within-culture factors rather than those considered by broad "white" versus "non-white" population comparisons. As these groups expand away from their traditional regional homes and become integral to all segments of contemporary society, the usefulness of findings from a small segment within a limited geographic area is reduced. Likewise, the validity of data based on public records of arrests and involvement in treatment programs becomes questionable with increasing private and "hidden" forms of drug abuse. Further, the pressures of acculturation in changing environmental contexts may predispose individuals of varying ages and socioeconomic statuses to drug abuse in previously unconsidered ways.

Various subgroups at risk, adolescents in particular, have been identified

as they are affected by conflicts between norms of the community, school, peers, and the family. Much remains to be learned as to the effects of these conflicts as they impinge upon individuals striving for identity and competence, and how they affect propensity for drug use. Useful as it is, this knowledge may not be generalizable to other identified subgroups such as the elderly, women, refugees, and newly successful young professionals. For these recently identified groups, prevention and treatment strategies remain in their early stages, with the most positive results being obtained from the involvement of the family and community systems.

From these common issues which identify the salient pressures of acculturation related to factors of age and sex, geographic and economic mobility, and family and community conflicts, recommendations for subsequent research can be made.

American Indian Drug Abuse Issues

In the United States today there are about 1,500,000 persons of American Indian descent. They belong to hundreds of tribes representing many distinct cultural traditions dating back deeply into the history of this continent. Despite considerable social change since the coming of the Europeans, Indians persist both as heterogeneous cultural groups and as a separate segment of American society (McNickle, 1973). Roughly half of todays's Indians remain on reservations, largely in rural areas; the other half live in cities, primarily in the West and Midwest.

Although alcohol and drug abuse is believed to be a significant problem among American Indians, very little is known about the correlates and consequences of such use/abuse (Indian Health Service Task Force, 1970; Segal, 1975). Some research on Indian substance abuse has been conducted on reservations, particularly in the Southwest, but practically none has been done in the cities to which Indians have been migrating in increasing numbers and where they face conditions quite different from reservation life.

Current research suggests that American Indian alcohol use is a very complex phenomenon. Historically, only a few tribes north of Mexico consumed alcoholic beverages (Driver, 1969) and most Indian drinking behavior that emerged after contact with European traders probably was patterned after the comportment of the Europeans (MacAndrew and Edgerton, 1969). Later, the numerous and varied tribes adapted alcohol to their particular cultures (Berreman, 1956; Devereaux, 1948; Lemert, 1958). Cross-cultural comparisons suggest that, among those tribes whose adaptations involve frequent drunkenness, the heavy drinking pattern may be associated with anxiety (Horton, 1943), dependency conflict (Bacon, 1974), feelings of powerlessness (McClelland et al., 1966), an economy based on hunting and gathering (Field, 1962), and a relatively low degree of societal complexity (Schaefer, 1976). The consequences of drinking tend also to be associated with increased aggression, according to findings "based on both anecdotal and statistical evidence, that alcohol involvement tends to be more pronounced in homicides than in suicides" (Leland, 1980, p. 10). Next to gender and age, alcohol use is the strongest predictor of police arrest for Indians in Seattle (Williams et al., 1980).

Alcohol remains the sbustance of choice. By their ninth birthday, 12 percent of Indian children regularly drink beer, wine, or distilled spirits; 97 percent use alcohol by the 11th grade (Oetting and Goldstein, 1979, 1980). The drinking habits of preteen Indians are not observed in the majority culture until the mid- to late teens. In any two-month period, 35 percent of Indian and 21 percent of non-Indian high schoolers have been drunk (Oetting et al., 1980a).

> By the time both of these groups, the Indians and the non-Indians, are seniors, a very high proportion of both groups have tried alcohol . . . The proportion who have gotten high or drunk during the last two months, however, is quite different. Only 45 percent of non-Indian seniors have used enough alcohol to get high, while 67 percent of the Indians seniors have done so. Only about a fourth of the non-Indians seniors got drunk enough to stagger, fall, or black out, while 46 percent of Indian seniors have been this drunk. (Oetting et al., 1980b, p. 20).

Heavy drinking is the main reason about one in two Indian students never finishes high school (Royce, 1981).

The most extensive study on Indian substance use and abuse was conducted by Oetting and his associates (1983) between 1975 and 1981. With survey data collected on over 9,000 Indian youth, the Colorado-based research team found that alcohol was clearly the predominantly abused drug; marijuana, cigarettes, inhalants, stimulants, cocaine, ranked among the next most used drugs. Some of their more distinct findings show that: (1) 75 percent of Indian youth beyond the 6th grade have tried marijuana, compared with 30 percent of non-Indian youth, (2) 30 percent of Indian youth have tried inhalants, compared with 10 percent of non-Indians, (3) one in 20 Indian youth is exposed to heroin, compared with one in 200 for non-Indians, and (4) Indian youth may be exposed to stimulants, cocaine, sedatives, and tranquilizers at younger ages than non-Indian youth. One of the more salient findings from the Oetting research clearly demonstrates that drug use among Indian youth has steadily increased since 1975, with the greater increases coming in the later years of the study. In short Oetting et al. maintain "that drug involvement among Indian youth is very high, particularly for marijuana," (1980a, p. 5) but alcohol continues to be the major drug of choice.

Oetting and Goldstein's (1978) survey research bears out the importance of intrapsychic and interpersonal factors in drug experimentation and habituation. A poll of thousands of Indian teenagers shows that young people take drugs to "feel better" and "to get along with friends." Self-esteem and social skills are inversely correlated with drug use, with data from polydrug users validating this linear equation. Youths concurrently abusing several drugs had abysmal concepts of themselves and were socially dysfunctional. Oetting and Goldstein posit that young Indians' drug abuse responds to anxiety, blame, rejection, and alienation. Summarizing determinants of substance abuse by Indian youths, the scientists conclude, "It appears that greater use of drugs is associated

with greater social-personal problems. Thus drug abuse by these adolescents may be one facet of a general response to an underlying social and personal malaise" (pp. 437, 439).

The preceding review of the literature, focusing on the major and most relevant works, reveals that despite the important work that has been done, several critical gaps in our knowledge remain. These gaps make it extremely difficult to assess the validity of the competing explanations of Indian substance abuse, much less the efforts to prevent use and abuse.

First, the major works have focused primarily upon the Southwest and the Navajo. This emphasis no doubt stems from the large population of Indians in the region and their relative isolation from outside influences. These same Southwestern features also make it somewhat unrepresentative of the country as a whole and suggest that future research needs to focus on other areas that are demographically, culturally, and geographically different.

Second, there are no quantitative studies of urban Indian alcohol and drug abuse that utilize measures other than arrest for public drunkenness in analyzing drinking behavior. Graves' (1974) use of arrest statistics in studying Navajo migrants' drinking in Denver is very useful but it fails to consider public and private drinking. Burns et al. (1974) did survey 552 Indians in Los Angeles concerning the nature and levels of alcohol abuse. Results are similar to the findings of Hill (1978) and Cahalan (1976) in other urban areas.

The absence of information on urban Indian alcohol and drug abuse is even more serious in view of the steadily increasing migration of Indians into cities such as Los Angeles, Chicago, Minneapolis, and Seattle during the past 25 years (Officer, 1971). Research on Indians in major metropolitan areas suggests that they maintain reservation ties and a sense of Indian identity (Ablon, 1964). At the same time, they come into daily contact with non-Indian life styles in the city and are likely to feel the force of acculturation more strongly than on the reservation. Indians in cities reportedly experience a wide range of problems in adjusting to urban life (Garbarino, 1971). Indian organizations stressing pan-Indian identity have brought together people from different tribal groups in response to these shared problems. Alcohol and drug abuse is generally believed to be prevalent among Indians in cities, but it has never been investigated systematically.

Third, as Leland (1978) has pointed out, research on Indian substance abuse has focused primarily on males, and there is very little data on problem drinking and drug use among Indian women. Differences in rates and patterns of alcoholism between the sexes has been found among non-Indians (Gomberg, 1976; Waller and Lorch, 1978). Leland's (1978) account of separate male-female characterizations of drinking styles in a Nevada Indian community and Shore and von Fumetti's (1972) findings that women in the Nevada Intertribal Council's Alcoholism Treatment Program were rated clearly improved almost twice as often as men are preliminary indications that Indian men and women may differ in the way that they use alcohol. Any theory that seeks to provide explanations of Indian alcohol abuse, for example, must take into account the drinking patterns of both men and women. Propositions about Indian male and female sex roles, their

patterning by tribal culture, and their modification by acculturation into white society must be integrated into the theoretical framework. Further exploration of male-female differences in Indian substance abuse and treatment outcome will contribute to this process of theory building.

Fourth, although the number of federally funded Indian substance abuse programs is decreasing, the literature nonetheless reveals very little about the evolution, operation, and effectiveness of these programs. The available material is marked by a lack of detail and inconclusiveness that precludes its use as evidence bearing upon the relationships between substance abuse, treatment outcome, psychosocial problems, and tribal background. In addition to being inadequate for theoretical purposes, the available material is also inadequate for practical purposes. There have been no published accounts of Indian alcoholism treatment programs that would permit other Indian groups establishing new programs to learn from the successes and failures of their predecessors.

As is true for any group, there are no universal and all-encompassing explanations for drug and alcohol abuse among American Indians, much less for developmental life stages within a group. Continuing, Westermeyer (1972) argues that there is considerable variation in solitary drinking behavior even within one group of Indians. "Given the known complexity of behavior associated with alcohol use," a government report asserts, "it is likely that physical, social, and cultural factors all play a role in determining the particular form of drinking adopted by groups and by individuals of Indian descent" (Noble, 1978, p. 57).

The significant lack of specific studies on alcohol and drug abuse among Indian adolescents extends to the area of substance abuse prevention. Many experimental alcohol prevention programs targeted for youth in general are still in varying stages of development. Most focus on testing alcohol education models (Blane, 1976; Blane & Hewitt, 1977; Goodstadt, 1976). While some of the educational efforts are demonstrating effectiveness among non-Indian youth, there is little evidence that educational strategies are effective with Indian youth regardless of tribal affiliation or residential status (i.e., urban, reservation, or rural).

In summary, the knowledge gaps itemized above portray a grim picture. It is clear that alcohol and drug abuse is considered by many to be the number one mental health problem among American Indians. The few substance abuse studies typically emphasize incidences of alcohol and drug use (e.g., Kaufman, 1973) in different communities. Swanson and colleagues (1971) consider alcohol use to be the most researched area among American Indians; however Dinges et al. (1979) conclude that the research literature tends to emphasize adults and not adolescents and that "we are left a patchwork picture without significant connecting links . . . in our image of Indian adolescence in general" (p. 51). The greatest value of our knowledge of existing alcohol abuse may be in directing treatment and prevention efforts toward the young Indian who is just developing these abusive patterns.

Asian and Pacific American Drug Abuse Issues

The phrase "Asian and Pacific Americans" is actually a contraction of two terms, "Asian Americans" and "Pacific Island Peoples." It is borrowed from

the convention developed by the Special Population Subpanel on the Mental Health of Asian and Pacific Americans of the President's Commission on Mental Health (1978). There certainly is not universal acceptance of this labeling convention, but for practical purposes it has been adopted frequently, with occasional variations (for example, "Asian/Pacific Americans," "Pacific/Asian Americans"). It represents the self-designation preferred by many Asian and Pacific people in the United States, particularly in preference to "Oriental."

"Asian and Pacific Americans" refers to a constellation of people from a number of ethnic and cultural backgrounds who had, in the past, been designated simply as "other" (Yoshioka et al., 1981; Wong, 1982). At least 32 distinct ethnic and cultural groups might meaningfully be listed under this designation: Bangladeshi, Belauan (formerly Palauan), Bhutanese, Burmese Chamorro (Guamanian), Chinese, Fijian, Hawaiian, H'mong, Indian (Asian or East Indian), Indonesian, Japanese, Kampuchean (formerly Cambodian), Korean, Laotian, Malaysian, Marshallese (of the Marshall Islands, which include Majuro, Ebeye, and the U.S. missile range, Kwajalein), Micronesian (of the Federated States of Micronesia, which include Kosrae, Ponape, Truk, and Yap), Nepalese, Okinawan, Pakistani, Filipino, Saipan Carolinian (or Carolinian from the Commonwealth of the Northern Marianas), Samoan, Singaporian, Sri Lankan (formerly Ceylonese), Tahitian, Taiwanese, Tibetan, Tongan, Thai, and Vietnamese (Wong, 1982).

The ethnic differences among these 32 or more Asian and Pacific groups are complex. In addition, individuals within these groups themselves differ in a vast number of ways. It is important to recognize the full extent of these differences, since any particular constellation of factors defines a specific subpopulation with its own needs for service. Dimensions of difference include: (1) area of residence in the United States, (2) generational status in the United States (first, second, third generation, and so on), (3) degree of acculturation, (4) native-language facility, (5) degree of identification with the "home" country and/or region of self or parents' origin, (6) education (number of years in Asia, in the United States and elsewhere), (7) age, (8) family composition and degree of family intactness/dispersion with accompanying motivation for the particular family constellation, (9) social-political identification, (10) embeddedness in the local formal network (such as family associations, churches) and informal network (such as Saturday night mahjong get-togethers), (11) religious beliefs and value orientations, (12) economic status and financial standing, (13) comfort and competence with the English language, and (14) perception of choice in emigrating to the United States.

Diversity between ethnic groups with vast within-group variation adds complexity to any drug abuse research effort. With the Asian and Pacific American population, these complexities are compounded by a unique phenomenon of growth and of a high-risk and vulnerable population. The Asian and Pacific American population has grown dramatically in recent years. Between 1970 and 1980 this group increased by 128 percent, from 1.5 million to 3.5 million (Kim, 1981). This represents the largest proportional increase of any ethnic minority population in the United States during that period. For example, Asian and Pacific Americans constitute 25 percent of the population of San Francisco, 17 percent of Los

Angeles, 17 percent of San Jose, 13 percent of San Diego, 12 percent of New York City, 10 percent of Denver, 9 percent of Chicago, 9 percent of Seattle, and 7 percent of Philadelphia.

A large segment of this population is made up of recent immigrants or refugees. A total of 98 percent of all Indochinese, 90 percent of all Koreans, 70 percent of all Filipinos, and 60 percent of all Chinese residents of the United States have been in the United States for less than ten years and face language barriers, culture shock, unemployment and underemployment, role and status reversal, intergenerational conflicts, and lack of community support systems. Compounding these problems unique to the immigrants are the general sources of emotional distress and concern affecting other Americans.

Contrary to the "model minority" image that is usually portrayed and perceived by the majority group, the little data or information that we do have indicate that substance abuse is a serious problem in the Asian community. And it is not getting any better. A report issued by the Seattle-King County Drug Commission stated:

> The evidence presented . . . suggests that drug use within the Asian youth community is much more serious than what is recorded by law enforcement agencies or indicated by the policies of drug treatment programs . . . Asian youth appear to use drugs at a level equal to if not higher than the national average . . . known users tend to begin use of drugs earlier and continue in a manner and extent far above the national average. Heroin was used by at least 40% of this group and appeared to be continuing (Washington State Commission, 1983, p. 115).

A California study in the 1970s revealed that of the approximately 1,000 Asian inmates in that State's correctional institutions, roughly 90 percent were there for drug-related crimes. In Los Angeles, the drug overdose rate among Japanese American youth was shockingly disproportionate to that of the entire population in Los Angeles County.

Although there has been no official follow-up to these isolated data recorded several years ago, the incidence and prevalence of the substance abuse problem are evidenced in the concern expressed in the following testimony at a public hearing conducted by the Washington State Commission on Asian American Affairs:

> As the economy worsens and more Asians become unemployed, stresses mount which create emotional, familial and social problems in our community. These problems have manifested themselves in a number of ways, ranging from an increase in family conflicts, child abuse, and alcoholism to more serious areas of emotional dysfunction such as suicide, depression and psychosis . . . One of the most seriously affected populations is the

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> Indochinese refugees . . . the stress placed on this group is enormous. Faced with cutbacks . . . many of these refugees see no hope for the future . . .other Asian Pacific groups are facing similar difficulties (Washington State Commission, 1983, p. 115).

And in New York City, according to preliminary data and information collected and compiled by the local police precincts, community organizations, social service agencies, and local community boards, youth gang activities in the Greater Chinatown area are on the rise. But while drug-related arrests are up among youths, the incidence of reported drug overdose and emergency visits is down.

At present the most vulnerable and high-risk Asian immigrants are Indochinese refugees. Yet, they are only part of a larger whole. Asian and Pacific Americans continue to be visible and distinct because of commonalities in culture, life experience and racial background, but despite these similarities, even larger differences exist within this group because of national background and adaptation, assimilation, and community development in the United States.

With such diversity and complexities existing within the Asian and Pacific American population, any drug abuse research endeavor must take into consideration the particular subpopulations for which its findings have applicability. Clearly, findings from a Japanese American sample (with individuals who have lived in the United States for several generations) will be very different from those obtained from a sample of recently immigrated Korean Americans. Likewise, findings obtained from a relatively homogeneous sample of Asian American college students in a large university will be very different from findings obtained from a group of young men of similar age who arrived in the United States as refugees from Southeast Asia. Unfortunately, as we reviewed the existing drug abuse literature, interpretations of such differences that take into account diverse ethnic groups and vast within-group variations were not made. Rather, most findings were applied to the total group "Asian and Pacific Americans" as a homogenous entity. We will now turn to a review of that body of literature, keeping in mind the problem of viewing those findings for Asian and Pacific Americans as one total and unique collection.

First of all a marked lack of generation information exists. No study provides national or regional drug abuse prevalence and incidence data on the Asian and Pacific American population group. Studies like the Johnston (1973) national panel study of "Drugs and American Youth" do not exist for Asian and Pacific Americans. Such studies are vitally needed for an understanding of the nature and extent of drug abuse for these populations.

Survey studies of selected Asian and Pacific American populations do exist. Nakagawa and Watanabe (1973) surveyed the Asian student population from Seattle, Washington, junior high schools and two high schools on personal usage of hard drugs (excluding marijuana and alcohol). Among the 339 males and 367 females surveyed, 12 percent of the males and 17 percent of the females were classified as "users." By ethnic groups, 49 percent of "other Asians," 45 percent of Filipino, 29 percent of the Japanese, and 22 percent

of the Chinese had some experience with "hard" drugs. These included amphetamines, barbiturates, psychedelics, cocaine and heroin (in descending order of frequency of use). Kandel and her colleagues (1976) in a study of drug use in New York City high schools, with responses from 7,530 participants, showed that Asian and Pacific Americans have the lowest level of use when compared to American Indians, blacks, Hispanics, and whites. Porter et al. (1973) surveyed all students in grades 6 through 12 in Anchorage, Alaska. Of the 15,634 students surveyed, 0.6 percent were Asian and Pacific Americans. Similar to the Kandel et al. (1976) study, Asian and Pacific American students were found to report the lowest use of "at least one drug" (26%) when compared to Native Alaskans (43.5%), whites (35.7%) and blacks (32.2%). Strimbu et al. (1973) surveyed college students in a large southeastern state. Usable data on drug use history, ethnicity, and other relevant information were voluntarily provided by 20,547 respondents to the survey; one percent of the sample of respondents was classified as Asian and Pacific Americans. Asian and Pacific Americans ranked lowest on tobacco and alcohol use, second lowest on marijuana and strong stimulants, and third of all other substances investigated when compared to the American Indian, black and white samples. Unfortunately for many of the surveys of general populations, Asian and Pacific Americans were not considered as a subsample (or were not partialed out for reporting) (Johnston, 1973; Chambers & Inciardi, 1971; Lukoff & Brook, 1974; Kleinman & Lukoff, 1975; and Robins & Murphy, 1967). Johnson and Nishi (1976) concluded that very little is known about the background characteristics of Asian Americans who are drug users.

Second, institutionalized patient data and prevalence rates of drug abuse based upon treated cases provide another source of epidemiologic knowledge. However, as Johnson and Nishi (1976) have noted, some of the early focus on opium abuse among the Chinese in the early 1900s may have been a result of anti-Chinese and anti-criminal sentiments and prejudices. As such, many of the institutionalized individuals may have been the "victims" of drug enforcement efforts motivated by racial, political, social, and stereotypic concerns (Musto, 1973). For example, Chinese Americans have been burdened with stereotypes that associate them with the use of opium, gambling, prostitution, and "tong" wars. Hill (1973) cites the example of labor leader Samuel Gompers in his racist opposition to hiring non-union Chinese laborers as saying, "There are hundreds . . . thousands, of our American girls and boys who have acquired this deadly habit (opium smoking) and are doomed, hopelessly doomed, beyond the shadow of redemption." Some studies show that the Chinese were overrepresented among addict populations for a period of time stretching from 1920 through 1962 (Ball and Lau, 1966; Treadway, 1930). Ball and Lau describe the profile of the typical Chinese addict: An immigrant from China, English-limited facilities, mean age of 53, a social isolate with a lack of social, recreational, and spiritual outlets. They concluded that the Chinese narcotic addicts were persons who were not well integrated into American society as a result of societal discrimination and society's lack of acceptance of their different modes of behavior. Ball and Lau noted that Chinese narcotic addicts constituted less than 3 percent of the 32,209 male addicts treated at the U.S. Public Health Service Hosptial at Lexington, Kentucky. However, the Chinese were overrepresented to the extent that they comprised less than one-fifth of one percent of the U.S. male population at that time. Ball and Lau did conclude that opium addiction among the Chinese American population

appeared to be predominantly an event of the past.

More recent data from drug abuse treatment populations provide another source of current data on Asian and Pacific American populations. The Micronesian Case Registry of Mental Illness for 1978 and 1979 provides figures of combined diagnostic categories of "Drug Abuse and Alcoholism" for 53 out of a total 429 cases requiring medical attention (Trust Territories of the Pacific Islands, 1979). Rates per thousand of persons over age 15 for "drug abuse and alcoholism" for each of the Micronesian Islands are Marshalls (.89), Kosrae (.39), Ponape (.49), Kapingamarangi (.97), Truk (.32), Yap (1.6), and Palau (2.7). As another example statistics for Asian and Pacific Americans in San Francisco admitted for drug abuse treatment in 1981-82 show this group as comprising 3.32% of all admissions. This has been interpreted as an underutilization of services, since Asian and Pacific Americans constitute 21.6 percent of the city's population. Likewise, Asian, Inc. (1978), using a key informant need assessment methodology, indicated that the prevalence level of Chinese American and Filipino American drug use is lower than that of the general population and that Japanese American drug use is estimated to be the same as that of the general population. Although the extension of treated case data for estimates of prevalence data is fraught with difficulties, error and interpretation biases, such estimates provide yet another source of drug abuse epidemiologic data for research.

In particular, three classes of problems and unresolved issues are revealed in this review of the general drug abuse literature: (1) problems of theoretical framework and conceptualization, (2) problems of methodology and drug use measurement, and (3) problems arising from research interpretation and subsequent utilization (Berg 1970; Braucht et al., 1973). Existing studies of Asian and Pacific American drug abuse certainly reflect all of these problems. Improvement in drug abuse research methodology would include the following: (1) appropriate sensitivity of data-gathering methods for cultural norms and behaviors, (2) behavior-anchored operational specification of drug use, (3) improved quantification of use and abuse, (4) time-specific anchoring to describe use and abuse, (5) greater range in the use continuum, (6) greater specification of use and abuse patterns--dosage, state of use, and poly-drug use, (8) improved sampling techniques, (9) use of longitudinal designs, (10) use of control groups, (11) more replicated studies, and (12) studies of drug use and abuse in a normal population.

Theoretical, conceptual, and methodological problems and issues reflect the state of the art and are correctable. Problems of research interpretation and subsequent use of research data appear more troublesome in the research enterprise for Asian and Pacific Americans. Issues of interpretation and use of research data include the following: (1) limited data base, (2) reinterpretation of inaccessible studies, (3) inaccuracies from key informant need assessment data, (4) inacurracies from prevalence estimates based on treated cases, and (5) lack of documentation of client's drug abuse concerns because of overshadowing immediate client crises.

Aside from the problematic interpretation and application issues noted above for Asian and Pacific American drug abuse research, two other considerations stand out as pivotal in such endeavors. The first has to do

with the mind set of the research investigators, providers, or administrators of service, rèsearch and training programs. Simply put,if the mind set of these individuals was the stereotypic one that "Asian and Pacific Americans do not have problems with drug abuse," then the resulting behaviors would include: (1) not evaluating for such occurrences; (2) not documenting such problems; (3) not collecting information relative to frequency and extent of such events; (4) not considering such issues to warrant investigation, funding, and research. The second consideration has to do with having sensitive, culturally aware, and skillful bicultural/ bilingual funded investigators providing drug abuse epidemiologic and other research in Asian and Pacific American communities. According to our review of NIDA-funded research programs within the past 10 years, NIDA has not funded any program with a major or minor emphasis on Asian and Pacific Americans during that time. It would be critical that such research support be provided for useful and relevant drug abuse research for the Asian and Pacific American communities.

Black American Drug Abuse Issues

While it seems that much is known about blacks and drug abuse in the United States (Austin et al., 1977), we still lack comprehensive basic epidemiological information. As used here, epidemiology is defined as the study of the distribution and determinants of health and disease in human populations (Morris, 1967). Much of the epidemiological research that has been conducted concerning drug abuse among blacks has employed a descriptive strategy. Epidemiology's descriptive role entails comparing the frequency of epidemiologic phenomena in different population groups or subgroups according to certain characteristics of person, time, and place.

The research issues described by investigators are varied (Table 1). Some examples include the study of: Illicit drug involvement among white and non-white activist students (Bailey & Koval, 1972); the extent and nature of drug use and characteristics of different drug users in an inner-city black youth population (Brunswick, 1979); the magnitude of the drug abuse problem "inherited" by the military from the civilian population (Callan and Patterson, 1973); the changes in the female addict population between 1961-1967 (Cuskey et al., 1971); black heroin addicts in various stages of treatment or non-treatment (Halikas et al., 1976); the self-reported drug use and criminal involvement in a sample of black female heroin users (Inciardi et al., 1982); the presence of narcotics in a population of homicide victims (Monforte and Spitz, 1975); the nonmedical use of psychoactive drugs among young men in the U.S. (O'Donnell et al., 1976); the drug abuse patterns of black and white Navy enlisted men (Nail et al., 1974); the influence of race among female emergency room admissions for acute drug reactions (Peterson, 1974); death rates and causes of death among opioid addicts (Watterson, 1975); and the study of female addicts in terms of certain social and geographic traits (Williams and Bates, 1970).

Out of this sample and critique of research that has been carried out involving blacks and drug abuse (Table 1), certain research issues emerge which deserve priority attention.

With the exception of the studies that involved an analysis of all-black populations, all of these studies stemmed from a race difference tradition

(Text continues on page 20)

TABLE 1

SUMMARY OF STUDIES REVIEWED, 1963-1982

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
Bailey & Koval (1972)	Is there a difference in the illicit drug involvement among white activist than among nonwhite activists college students?	Cross-sectional/ Descriptive	Black (49%), White (37%); Puerto Rican (13%); other (1%) Sex: Both male and Female	Age not specified; Sampling strategy not specified; Analysis was based largely on percentage differences.
Brunswick (1979)	To describe the extent and nature of drug use and characteristics of different drug users in an inner-city Black youth population.	Prospective	Black adolescents ages 12 to 17; Sex: Both male and Female	Analysis was based largely on percentage differences.
Ball (1965)	To investigate the changes in narcotic addiction over a 25-year period.	Cross-sectional/ Descriptive	Black; White; Asian; Mexican-American and Puerto Rican adults Sex: Both Male and Female	Clinic-base sample; analysis based largely on percentage differences.
Ball & Bates (1966)	To determine if narcotic drug addicts come from migrant or mobile families and if they become transients after the onset of addiction.	Cross-sectional/ Descriptive	Black (N=493); American Indian (N=1); Asian (N=3); and White (N=428) Adult inpatients Sex: Both male and Female	Clinic-base sample; analysis based largely on percentage differences.
Bates (1966)	To investigate North-South, Black/ White differences in narcotic ad-	Cross-sectional/ Descriptive	Black (N=20,300); White (N=73,300) adult inpatients Sex: Male Only	Clinic-base sample; analysis based largely on percentage differences.

TABLE 1 (continued)

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
Blum (1972)	The extent that families influence illicit drug use by their children, and the possibility of predicting such drug use.	Cross-sectional/ Descriptive	20 Black blue collar families Sex: Both male and Female	Age not specified; nonprobability sample.
Callan & Patterson (1973)	To assess the magnitude of the drug problem "inherited" by the military from the military from the civilian population.	Cross-sectional/ Descriptive	Black (7%); American Indian (1%); Hispanic (4%); White (84%); and (3%) new male inductees Sex: Male Only	Age not specified; nonprobability sample; analysis based largely on percentage differences.
Chambers (1974)	To provide national data pertaining to the onset of opiate abuse, including race/ ethnicity differences, that will benefit both behavioral and social policymakers.	Cross-sectional/ Descriptive	Black (44%); Hispanic (19.5%); White (35%) and Other (2%) Sex: Male and Female	Age not specified; clinic-base sample; analysis based largely on percentage differences.
Chambers & Inciardi (1971)	To assess the prevalence, incidence, frequency and situational content of all types of drug use within the general population of New York.	Cross-sectional/ Descriptive	7,378 Black; Puerto Rican; and White adolescents and adults from the general population of New York Sex: Male and Female	Sampling design not specified; analysis based largely on percentage differences.
Chambers et al. (1970)	To determine differences in social, addiction, and deviancy background of addicted women admitted to the USPHS Hospital at Lexington, Kentucky	Cross-sectional/ Descriptive	Black (N=57); White (N=107); Puerto Rican (N=4) adult females Sex: Female Only	Clinical-base sample; analysis based largely on percentage differences.

TABLE 1 (continued)

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
Curtis & Simpson (1976)	To describe patient traits in relation to pretreatment usage combinations of eight classes of illicit drugs in relation to age, sex, and race/ethnic status of patient admitted to the DARP during 1969-1971.	Cross-sectional/ Descriptive	Black (51%); White (30%); Puerto Rican (11%); Mexican American (7%) Sex: Male and Female	Age not specified; clinic-base sample; analysis based largely on percentage differences.
Cuskey et al. (1971)	To examine the changes within the female addict populaiton between 1961-1967.	Cross-sectional/ Descriptive	Black (N=218); White N=239 Adults Sex: Female Only	Clinic-base sample; analysis based largely on percentage differences.
Duvall et al. (1963)	To assess the social characteristics and addiction status of treated narcotic addicts after five years.	Follow-up	Black (N=165); White (N=236); Puerto Rican (N=52) Adults Sex: Male and Female	Clinic-base sample; analysis based largely on percentage differences.
Edmundson et al. (1972)	To determine the possible epidemiological determinants of drug abuse as they relate to the increase in drug abuse in general, and criminal activity in particular.	Cross-sectional/ Descriptive	Black (N=283; White (N=187) adolescents and adults who were inmates Sex: Male and Female	Non-probability sample; analysis based largely on percentage differences.
Glasser et al. (1969)	The extent that marihuana use leads to heroin use, the extent that adolescent herion use is continued in adulthood, and the extent that adolescent nondrug delinquency is followed by heroin addiction.	Follow-up	Black; Puerto Rican; White adolescent males from New York City Sex: Male Only	Non-probability sample; data obtained from official records.

TABLE 1 (continued)

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
Globetti & Brigance (1974)	The extent and prevalence of rural drug usage among a group of Black and White high school students in a small Mississippi community.	Cross-sectional/ Descriptive	Black (N=208); White (N=250). adolescents in high school Sex: Male and Female	Non-probability smaple; analysis based largely on percentage differences.
Halikas et al. (1976)	A study of Black herion addicts in various stages of treatment or non-treatment.	Cross-sectional/ Descriptive	192 Adult Black Males Sex: Male Only	Non-probability sample; analysis based largely on percentage differences.
Inciardi et al. (1982)	The study focuses on the self-reported drug use and criminal involvement in a select population of Black female heroin users in Miami, Florida.	Cross-sectional/ Descriptive	63 Black adult females	Non-probability sample; analysis based largely on percentage differences.
Kleinman & Lukoff (1975)	To demonstrate that social structural statuses and cultural values, including socialization values and practices, are related to drug use.	Cross-sectional/ Descriptive	Black, White, Puerto Rican; British West Indian Black Adults Sex: Male and Female	Analysis based largely on percentage differences.
Kleinman & Lukoff (1978)	The study focuses on use of six illicit drugs in a ghetto sample of American Blacks, West Indian Blacks, and Whites.	Cross-sectional Descriptive	Black (N=534); West Indian Blacks (N=200) White (N=69) Adults Sex: Male and Female	

TABLE 1 (continued)

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
Lipscomb (1971)	In an attempt to make a more reliable assessment of ghetto drug use, ghetto residents selected for a work training program sere studied.	Cross-sectional/ Descriptive	Black; Mexican American adolescents and adults Sex: Not Specified	Non-probability sample; analysis based largely on percentage differences.
Monforte & Spitz (1975)	A study of the presence of narcotics in a population of homocide victims.	Cross-sectional/ Descriptive	Black (N=185); White (N=22) Adults Sex: Male and Female	Clinic-base sample analysis base largely on percentage differences.
Nail et al. (1974)	Drug abuse patterns of Black and white navy enlisted men were compared.	Cross-sectional/ Descriptive	Adult military Black (N=69); White (N=764) Males Sex: Male Only	Non-probability sample; analysis base largely on percentage differences.
Nurco et al. (1975)	To determine changing patterns of addictions, especially as these relate to age of onset, first identification by police, and current addiction status.	Historical Cohort	Black (N=175); White (N=174) Adults Sex: Male Only	Institutional base sample; analysis base largely on percentage difference
Nurco & Lerner (1972)	To study the characteristics of drug abusers in a correctional system.	Cross-sectional/ Descriptive	Black (70%); White (29%)); Other (1%) Adult Males Sex: Male Only	Institutional-base sample; analysis based largely on percentage differences.

TABLE 1 (continued)

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
O'Donnell et al. (1976)	To investigate the nonmedical use of psychoactive drugs among young men in the U.S.	Cross-sectional/ Descriptive	Black; white; other adult males Sex: Male Only	Analysis base largely on percentage differences.
Peak et al. (1982)	To extend research on ethnic MMPI differences from herion addicts and chronic alcoholics to polydrug abusers.	Cross-sectional/ Descriptive	Black (N=159); White (N=494) Adult Males Sex: Male Only	Clinic base sample
Petersen (1974)	To assess the influence of race among female emergency room admissions for acute drug reactions (overdoses).	Cross-sectional/ Descriptive	Black; white adolescents and adults Sex: Female Only	Clinic base sample; analysis based largely on percentage differences.
Platt et al. (1976)	To examine the social characteristics of successive sample of heroin addicts over time.	Historical Cohort	Black; white young adults Sex: Not Specified	Sex not specified; institutional base sample
Porter et al. (1973)	To gather baseline data on drug use in grades 6 through 12.	Cross-sectional/ Descriptive	Black; white; American Indian; Asian; Other Adolescents Sex: Male and Female	Analysis based largely on percentage differences.
Robins (1976)	To identify those subgroups of veterans whose risk of addiction after Vietnam was sufficiently high that intervention might have a reasonable payoff.	Cohort	Black; white adult male Vietnam veterans Sex: Male Only	Non-probability sample; analysis based largely on percentage differences.

TABLE 1 (continued)

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
Robins & Murphy (1976)	To describe drug use in a normal population, as ascertained by interview and record research.	Cross-sectional/ Descriptive	Adult Black males Sex: Male Only	Non-probability sample; analysis based largely on percentage differences.
Simpson et al. (1975)	To describe drug users in treatment: 1971-1972 DARP admissions.	Cross-sectional/ Descriptive	Black (46%); white (36%); Puerto Rican (10%); Mexican Ameircan (7%); Other (1%) Sex: Male and Female	Clinic base sample; analysis based largely on percentage differences.
Strimbu et al. (1973)	A comparison of patterns in drug use for two groups of Black students, one attending predominantly Black colleges and one attending predominantly white institution were made.	Cross-sectional/ Sescriptive	Black; white; Asian; American Indian; and other adults Sex: Not Specified	Sex not specified; non-probability sample.
Vaillant (1966)	This study was undertaken to test the hypothesis that the highest addiction risk in New York occurs not among urban immigrants, but among first generation adults in established minority groups.	Cross-sectional/ Descriptive	Black (N=171); White (N=187); Puerto Rican (N=130) adult males Sex: Male Only	clinic base sample; analysis based largely on percentage differences.

TABLE 1 (continued)

Author	Research Problem	Epidemiological Research Strategy	Population Sampled	Limitations of Methodology
Waldorf (1973)	To describe the life of herion users and their career in drugs.	Cross-sectional/ Descriptive	Black; white; Pureto Rican adults Sex: Male and Female	Clinic-base sample; analysis based largely on percentage differences.
Watterson (1975)	Death rates and causes of death among opioid addicts were compared for three consecutive years.	Cross-sectional/ Descriptive	Black (52%); White (27%); Puerto Rican (11%); Mexican American (8%); and other (1%) adults Sex: Male and Female	Clinic-base sample; analysis based largely on percentage differences.
Williams & Bates (1970)	Comparison of female addicts in terms of certain social and geographic characteristics.	Cross-sectional/ Descriptive	Black (N=58); White (N=114) adult females Sex: Female Only	Clinic-base sample; analysis based largely on percentage differences.

in which minority persons, especially blacks, were compared with whites. This has been a major shortcoming of the research involving drug abuse among blacks.

Although the literature on black-white comparisons would suggest strongly that the research community and policymakers would gain greatly if subgroups of blacks were investigated in terms of their values, norms and life conditions, their history and heritage, and the adaptive problems they face, still deeply ingrained is the assumption that the proper approach to the study of minority people is to compare them to whites. For example, two investigators compared two groups of black men in a study of the nature and determinants of personality competence in black youth. The report of the resulting findings was submitted to a major psychological journal and rejected. In the opinion of one consulting editor, the study was "previously flawed"--there was no white control group (Korchin, 1980). As Korchin (1980) has pointed out, if someone submitted a study identical in all respects except that all subjects were white, would it be criticized because it lacked a black control group?

Unfortunately, comparative research on blacks and whites in the United States has expanded greatly within recent years. Most of this research has been done within a normative framework, with the behavior of whites being the norm from which blacks deviated. Earlier research on this subject was directed primarily at attempts to measure and describe these deviations. Very early in this process, a frequent assumption was that of the genetic inferiority of the blacks. More recently, differences between races were interpreted within a social pathology framework. Differences between blacks and whites in such things as family structures, language, and the like, were seen as stemming from economic and social oppression. The assumption has been that if we could only alleviate these conditions, then blacks would become more like whites. Spread throughout the literature is evidence of a turn to another way of looking at differences. We now recognize that in spite of shared values, there are a number of very real cultural differences between blacks and whites, and that these differences cannot be equated with inferiority as they have been in the past (Miller and Dregner, 1973). Moreover, as papers by Brown (1980) and Kleinman and Lukoff (1978) suggested, there may be danger in combining other groups simply on the basis of race where there can be differing identifications within sub-groups of the same color. Therefore, it is recommended that racial comparison studies be supplemented by investigations on large representative black samples. More specifically, what is needed is a cross-cultural approach that views the behaviors of black individuals in terms of their meanings within particular subcultures and yet avoids the extremes of cultural relativisim (Korchin, 1980). That is, the customs of one culture cannot objectively or validly be judged superior to those of others.

Whatever questions are raised for investigation, we should not be narrow in our study of the epidemiology of drug abuse among blacks. For example, Jacobs (1975) pointed out that epidemiology can tell us how heroin spreads, and it can predict to whom and when it spreads; but it can never, in a large sense, tell us why it spreads. Furthermore, Jacobs (1975) asserted that it is scientifically and logically unjustifiable to make inferences concerning heroin law enforcement policy from narrow epidemiological models

because the models, by necessity, exclude reference to the major determinants of heroin use, such as cognitions, feelings, and emotions.

Other research issues identified by investigators that have relevance to those of us concerned with drug abuse among blacks include the following:

> Socioeconomic status as a separate factor has been little explored in studies done to date . . . Clearly, it behooves us to conduct further study to explore the significance of socioeconomic status for drug abuse vis a vis ethnicity and other factors . . .It will also be important to clarify the relationship between ethnicity and socioeconomic status and rates of entry and reentry into drug abuse treatment (Brown, 1981, pp. 12-13).
>
> Few studies have focused on drug-using behavior of the noninstitutionalized elderly as a specific population of concern (Brown, 1980, p. 13).
>
> A substantial amount of heroin use in a normal population of black youths, particularly males, which starts in adolescence terminates by the early twenties. This poses an important research challenge--to investigate the environmental, demographic, and/or psychosocial factors which support or encourage youngsters to discontinue heroin use. An equally important and challenging objective is to attempt to distinguish what accounts for the apparent greater resiliency in males who start drugs compared with females (Brunswick, 1979, p. 481).
>
> Generally, the need for more sex-specific investigations which include females as well as males seems clear. Clear also is the need for recognizing these sex differences when formulating policies and programs for drug prevention and treatment (Brunswick, 1979, p. 485).
>
> The present findings emphasize that the church remains a force to be reckoned with as an agency of social control in the American black community, even though it may well occupy a position of less centrality than it did in the rural South several generations ago (Kleinman and Lukoff, 1978, pp. 196-197).
>
> Religion seems to have had a deterrent effect on drug use in the case of blacks, but not for whites (Globetti and Brigance, 1974, p. 262).
>
> The findings also imply the need to study the social support systems available to addicts returning

> to their family environment after hospital treatment and the need to develop possible alternatives (Cuskey et al., 1971, p. 340).

As an alternative to the usual descriptive strategies, it is suggested that either the case control cohort or historical cohort epidemiologic research strategies need to be employed more widely if we are to gain keener insights into the etiology of drug abuse among blacks. Among analytic studies, case-control studies are usually the first approach to determining whether a particular personal characteristic or environmental factor is related to the occurrence of a disorder. On the other hand, cohort studies are generally thought to provide the most definitive information about the cause of a disorder. They do provide the most direct measurement of the risk of the development of a disorder. If carried out prospectively, however, they can be expensive and time-consuming, requiring a long-term commitment of funds and dedicated personnel.

The historical cohort type of study deserves mention here because it combines the advantages of both the case-control and cohort study designs. This type of study consists of the identification of a group at some point in the past and analysis of their subsequent morbidity or mortality experience. To conduct such a study, it must be possible to identify from records the membership of some previously existing group, such as all the employees of a given industry or all the students in a certain school at a specific date in the past.

Secondly, it is necessary that the factors of interest had been recorded adequately at that time, or can be constructed from other sources. Thirdly, it must be possible to obtain the needed information about outcome (i.e., disease or death) for almost all the cohort. This may be accomplished through routine records maintained by the organization itself. It may be possible to obtain the necessary follow up information through death certificates, hospital records, disability pensions, and so on (Mausner and Bahn, 1974).

In all, past epidemiological studies have tended to overlook the many complex characteristics within black communities which contribute to the etiology and maintenance of drug abuse. Recommendations have been made on the basis of a survey of these studies for future emphases to be placed on particular community influences and subgroups, which could be examined by more informative and relevant methods than have typically been used.

Hispanic American Drug Abuse Issues

With regard to the use and abuse of, or addiction to, controlled substances by Hispanics in the United States, Gomez (1976) reviewed a number of research studies and found that the Hispanic addict does not differ significantly from addicts of other ethnic backgrounds in terms of the psychogenic factors such as a deficient character structure that could possibly be part of a predisposition base. The difference, rather, between Hispanic addicts and non-Hispanic addicts rests primarily on sociocultural factors in which horizontal mobility (foreign or domestic migration) and/or vertical mobility (an upward or downward stress-producing move on a socioeconomic continuum) plays an important role. Added to acculturation,

or a forced change of cultural values, this mobility impinges upon the Hispanic's quality of life and affects essential areas such as health, employment, education, and housing. The resultant social whirlpool provokes a continuous, cumulative stress that is both precipitating and perpetuating, leading sometimes to escapism through the use and abuse of, or addiction to, controlled and illicit substances. All under the rubric "Hispanics," the Mexican American and Puerto Rican/Cuban American populations will be considered separately.

Mexican American

The earliest descriptive study of Mexican American addicts is by Chambers, Cuskey, and Moffett (1970) who described the characteristics of 271 Mexican Americans admitted to the U.S. Public Health Service Hospitals at Lexington, Kentucky, and Fort Worth, Texas, in 1961 and 1967. The picture drawn by Chambers et al. was that the Mexican American opioid user was more likely to be a high school dropout, to have begun opioid use earlier, to use heroin exclusively as opposed to other opioids, and to have been employed at the time of admission than a comparable sample of whites, blacks, and Puerto Ricans.

In a subsequent report utilizing data gathered on narcotic patients at the Fort Worth hospital facility, Crowther (1972) described Mexican Americans in her sample as "poorly educated, urban-ghetto" residents. Specifically, the sample of 223 Mexican American admissions to the hospital showed that none had fathers classified as professionals, 84 percent came from families with four or more children, 76 percent had parents with less than a high school background, only 9 percent of the users themselves had graduated from high school, 45 percent reported that they had not had a stable early home environment, and 36 percent indicated that their fathers were not regularly employed. Compared to Anglo Americans, the Mexican Americans also were found to have histories of more arrests, institutionalization, and deviant behavior other than drug use. Interestingly, Crowther also found that Mexican Americans, in comparison with Anglo Americans, showed a pattern of less experimentation with drugs, with a large proportion of Mexican Americans reporting no use of barbituates, tranquilizers, amphetamines, and hallucinogens.

Crowther also reported that the temporal sequence of drug use of Mexican Americans was more likely to be marijuana followed by heroin (78 percent) than was true for Anglo Americans (44 percent). This pattern was maintained even when a number of factors (e.g., father support, father professional, arrest before 16, arrest after drug use, etc.) were controlled for. Crowther concluded that

> It is possible that marijuana use among this group is considered as insignificant as tobacco use is in an Anglo subculture . . . If this thesis is correct, the interesting pattern of drug use is not the normative pattern from marijuana to heroin but the tendency to use heroin as their first and only opiate. (p. 646).

Several other studies in the literature (e.g., Moore et al., 1978; Sells et

al., 1973) report similar demographic characteristics of Mexican American drug users. As noted above, though, there are no epidemiological studies reporting on prevalence rates among adult users.

Because students in a sense are a captive population, it is no wonder that more drug use studies employ students than any other subgroup. The first study of the extent and prevalence of illicit drug use (Gossett, Lewis, and Phillips, 1971) among nearly 57,000 students in Dallas does not present a breakdown by ethnic group, but merely indicates that when schools are examined by the socioeconomic status of the surrounding community, the use of glue is more prevalent in poorer schools than in higher socioeconomic schools with primarily white students. The general conclusion reached by Gossett et al. is that overall "drug use is reported at higher rates in primarily Negro or Mexican American sections of the city" (p. 1470).

In a 3-year comparison study of marijuana use in Houston secondary schools, Bloom, Hays, and Winburn (1974) report that black and Mexican American students were underrepresented as marijuana consumers whereas Anglo students were overrepresented. Bloom et al. attributed the difference to the greater affluence, increased availability, and greater peer acceptance among the Anglo sample. The reported use of marijuana among Mexican American students varied between 23 percent and 36.5 percent whereas, among Anglos, rates varied from 25 percent to 52.5 percent.

In a series of studies by Guinn (1975, 1978, 1979), employing Mexican American students enrolled in high schools in the Lower Rio Grande Valley region of Texas, he reported that:

(1) Mexican American adolescent drug users, compared to nondrug users, had poorer grades in school, reported higher rates of absenteeism, and participated in fewer school activities. In addition, users appeared to come from higher socioeconomic level families (as indexed by educational level and occupation of fathers);

(2) adolescent users of marijuana also reported using a wide variety of other drugs, including stimulants, hallucinogens, barbiturates, solvents, and opiates or cocaine;

(3) nonusers described users as mixed up, insecure, or emotionally disturbed, while drug users perceived themselves as "doing just what they wanted to do"; and

(4) both users and nonusers indicated that although teachers knew more about drugs than their parents, teachers were trusted less.

In another study, Guinn and Hurley (1976) compared the use of drugs by students in the Lower Rio Grande Valley and in Houston. Students from the Lower Rio Grande Valley were all reported to be Mexican American while in Houston the ethnicities represented were: Anglo (50.5%), Mexican American (11.4%), black (31.5%), and other (6.6%). In comparing rates of drug use, all of the Houston students, irrespective of ethnicity, were compared with the Valley group. No difference was reported for alcohol consumption (64% reported use for both samples), but Houston students reported more use of marijuana (31% vs. 18%), stimulants (20% vs. 8%), barbiturates (17% vs.

6%), cough syrup (14% vs. 8%), hallucinogens (12% vs. 4%), solvents (11% vs. 8%), and opiates (9% vs. 3%). Although the report does not break out the findings by grade level or ethnicity (in the Houston sample), the results are interesting for what they reveal about rates of substance abuse among adolescents.

The use of solvents among Mexican American youths had also been reported by Press and Done (1967) and by Stybel, Allen, and Lewis (1976). These investigators report that low-socioeconomic Mexican American adolescents tend to engage in greater inhalant abuse than one would expect from their proportion in the general population.

In a study of inhalant, marijuana, and alcohol abuse among a sample of 457 male and female Mexican American children and adolescents between the ages of 9 and 17, Padilla and his colleagues (Padilla et al., 1979) report on the prevalence rates of respondents residing in housing projects located in East Los Angeles. Results indicated that, compared to a national sample, Mexican American adolescents were at least 14 times more likely to be abusing inhalants. The prevalence rate of marijuana was double the national rate, but the prevalence of alcohol was equal to that found nationally. A significant age trend was observed for all substances used, with increasing age and use of all substances covarying monotonically. A high rate of use was reported for males, but females also showed an increasing age by use relationship. It was also found that children and adolescents who reported heavy inhalant use were more likely to report heavy use of other substances. Finally, no use of barbiturates, stimulants, or hallucinogens was reported by this inner city sample.

In a follow-up study, Perez et al. (1980) surveyed a group of 339 adolescents living in the same housing projects as in the earlier study. When compared with the results of the first study, it was revealed that use of inhalants had declined markedly during the 2-year period between surveys. However, use of alcohol and marijuana had increased across all age and sex cohorts. Prevalence of PCP use, explored for the first time in this study, proved to be extremely high. The use of all drugs was generally predicted by age, sex, and number of peers reporting drug use.

The studies of Padilla et al. (1979) and Perez et al. (1980) are unique among epidemiological surveys involving adolescent respondents on two counts. First both studies surveyed non-school samples of youth in their natural home environment. The importance of this is that through community surveys the possibility of interviewing a more generalizable sample is apparent when we consider the high school dropout rate among this population as well as the greater school absenteeism rate among admitted drug users. Second, interviews were obtained by adolescents living in the same housing projects as the respondents. This strategy of peer interviewing (Bloom and Padilla, 1979) is believed to produce more reliable information concerning drug use since adolescents would be more reluctant to exaggerate their use of drugs to peers who might otherwise know when the respondent is falsifying his or her answers to the survey.

Because of the exceedingly high rate of inhalant abuse found among barrio children and adolescents by Padilla et al. (1979) the program involved the youth who served as peer interviewers and several concerned community

members. The peer interviewers held meetings in the various housing projects to report their findings, picketed against local merchants known to sell solvents to youth, and visited with city, county, and State officials to urge them to pass ordinances and laws against the sale of solvents to minors. Whether these actions were effective is not clear. However, as noted above, in a similar community survey 2 years later, Perez et al. (1980) found a sharp reduction in admitted inhalant use, but unfortunately, also found marked increases in alcohol and marijuana use as well as use of PCP, which was not available on the street at the time of the earlier study. On the basis of these data, we may conjecture that the focused action against the inhalant abuse was effective to curb the use of solvents, but had no generalized effect on the use of other substances and, in fact, led to elevations in the use of other drugs.

One of the earliest studies to report on the post-hospital treatment outcome of a Mexican American sample was by Maddux, Berliner, and Bates (1971). These investigators found that most Mexican Americans returned to their use of heroin following hospital discharge. Further, most addicts rejected nearly all post-hospital social casework services except crisis intervention in spite of the fact that these services were provided primarily by Mexican American caseworkers and were located in barrio facilities.

Two reports (Sing, 1977; McGlothlin, et al., 1977), using data from the California civil addict program, conclude that Mexican Americans are intermediate between whites and blacks in terms of percent successful discharge from the program. McGlothlin et al. also found that the Mexican Americans had significantly longer retention in the program than the other two groups.

Maddux and McDonald (1973) followed 100 heroin users for 1 year after admission to methadone maintenance in San Antonio. Of the 87 Mexican Americans included in the sample, it was found that they were more likely to remain in the program and to be employed at the end of the year. In a related study, Scott and colleages (1973) conducted a 3-year follow-up of the original 61 Chicano participants of a methadone maintenance program. Outcome data reveal that 39 (64%) Chicanos were still active in methadone maintenance treatment, 16 (26%) were discharged from the program, and six (10%) were deceased. The 16 discharged included two Chicanos who were free of drug use at the time of follow-up, 6 who returned to regular heroin use following discharge, and 8 who were imprisoned.

Scott et al. (1973) noted that alcoholism had become a significant problem for the 61 participants in the methadone maintenance program. For instance, alcohol was implicated in the deaths of 6 participants, another 7 had been hospitalized for alcoholism, and 27 had given evidence of alcoholic intoxication at some time during the morning dispensation of methadone. Scott et al. also report that Chicano addicts do not conform to the stereotype of being "unhealthy, debauched, fringe members of society, stripped of resources by the endless quest of heroin" (p. 360), nor do they present the array of psychiatric disorders found among middle-class Anglo youth in methadone programs. They also report that female addicts do not participate in prostitution to support their habit. Rather, Scott et al. state that Chicano addicts maintain and have available to them abundant

family resources. All but two of the participants lived with their families and were close to extended family members. Although addiction strained family relationships, resulting in addicts being briefly extruded from their parents' home or having their marriage dissolved, there always appeared to be family members who would come to the addict's aid.

In a more recent report, Savage and Simpson (1980) compared posttreatment outcomes of black, white, Mexican American, and Puerto Rican patients who had been in a methadone maintenance program between 1969 and 1972. These investigators report that both Hispanic groups had the highest rates of dropout and/or expulsion from treatment and the lowest rates for completion of the program. Mexican Americans were found to have the smallest reduction in opioid use from pretreatment levels, a higher rate of posttreatment arrest and incarceration, but a higher rate of employment than members of other ethnic groups. McGlothlin and Anglin (1981) also found that Mexican Americans had more arrests after admission to methadone treatment than whites and higher rates of narcotics use while participating in the program.

Judson and Goldstein (1982) interviewed patients of a methadone maintenance program after 5 years and reported that Anglos scored better on a measure of "global outcome" which was weighted heavily with items pertaining to daily heroin use and incarceration time. Overall, Anglo patients were found to be more frequently abstinent and to have had fewer arrests over the 5-year period than Mexican American patients.

In a 20-year follow-up study of 51 narcotic addicts, of whom 34 (67%) were Mexican American and the remainder were black, Yaqui Indian, or white, Harrington and Cox (1979) found that only one individual was drug free or abstinent. In addition, 23 were still addicted to heroin, and of these, 16 were in prison at the time of the follow-up; 7 were found to be addicted to methadone or alcohol; 13 were dead, and of these 10 were apparently addicted to heroin at the time of death; 2 were alcoholic, and 1 was possibly abstinent; 6 could not be located, but 4 were traceable into the mid 1970s through criminal records that were largely drug related. Although their sample is restricted in size, Harrington and Cox conclude that addiction among this population is not self-limiting as predicted by the "maturation" hypothesis which asserts that many addicts will spontaneously give up use of narcotics by age 40. Failure to confirm the "maturation" hypothesis was attributed to the impoverished backgrounds of the addicts and the inner city barrio community in which they continued to live long after they had begun their narcotic addiction 20 years earlier.

In another study of the "maturation" hypothesis, Desmond and Maddux (personal communication, 1983) report on a predominantly Mexican American sample of opioid users from San Antonio who were patients at a PHS hospital in 1966 and who had been continuously followed to 1983. Desmond and Maddux state that their Mexican American subjects began using heroin an average of 3 years earlier than members of other ethnic groups, waited longer to enter treatment after onset of addiction (7.5 years between first daily opioid use and first voluntary treatment vs. 6.2 years for blacks and whites), but over a 15-year period were abstinent somewhat longer (2.7 years) than other subjects (1.6 years).

Desmond and Maddux also observe that alcoholism is often substituted for opioid use among Mexican Americans. Fifty-eight percent of all Mexican Americans, regardless of whether or not they abstained from heroin, indicated that, at some time over the course of 15 years, they had had a problem with alcohol, including chronic alcoholism. The problem with alcohol may actually be even higher since some individuals maintained on methadone were also problem drinkers. Alcohol abuse among this subject population was noted to occur: (1) prior to resumption of daily opioid use; (2) during prolonged methadone maintenance; and (3) during periods of voluntary opioid abstinence.

Puerto Rican/Cuban American

According to one estimate, in 1977 there were 72,920 addicts in Puerto Rico, an island with a population of 3,320,000 people. Due to dissatisfaction with the accuracy of this estimate, the Puerto Rican Department of Addiction Services has begun its "Study of the Magnitude of the Drug Problem in Puerto Rico" (Gomez and Vega, 1981). According to Gomez and Vega, "From 1966 to 1972, Puerto Rico's major drug problem was definitely heroin addiction." However, from 1972 to the present, with slight variations, there has been a noticeable reduction in the use of heroin and a dramatic increase in polydrug abuse, with a special preference for marijuana, 7 percent of students having used it in their lifetime. Marijuana use is concentrated among the young. A study of public and private secodary school students in Puerto Rico in 1974-75 revealed that "private school students are the heavier users of both licit and illicit drugs: 51.8 percent cigarettes and/or alcohol and 16.6 percent illicit drugs, including illicit marijuana. Public schools' rates are 38.7 percent cigarettes and/or alcohol and 10.8 percent illicit drugs, including marijuana." This is apparently a function of financial resources. This study found a much higher rate of drug use among students who had ever lived in the United States. Return migration does seem to be related to an increasing prevalence of drug addiction. Another important and perhaps unexpected finding was that use of drugs by young women is approaching the rate of use by young men, especially in the private schools (Robles et al., 1979).

Langrod et al. (1981) note that in 1978 one out of every 14 persons of Spanish origin in the New York City metropolitan area was either a drug addict or a drug abuser. "While Hispanics represent only 12% of the entire population of New York City, they account for approximately 20% of the estimated 125,000 addicts in the area." The authors then point out that only a little more than half are in treatment and go on to describe ways in which some treatment programs are inappropriate for people brought up in the cultural norms and value systems of Hispanic tradition.

Puerto Ricans in New York consider drug abuse to be the most important health problem faced by their community. Alers (1982) notes that drug dependence was the second greatest cause of death (12 percent of all deaths among the Puerto Rican-born population of New York City, age 15 to 44). More specifically, the annual death rate due to drugs was 37.9 per 100,000 as compared to 23.2 per 100,000 for the total population.

Table 2 compares Puerto Ricans with other drug abusers admitted to

TABLE 2

Comparison of Cuban, Puerto Rican, and Mexican Abusers Admitted to Federally Funded Programs, CODAP Report, April-June 1976

	Hispanic American Group				
Primary Drug Problem	Cuban (n=139)	Puerto Rican (n=2483)	Mexican (n=3862)	Total Hispanic (n=6484)	Total Non-Hispanic (n=48,636)
Heroin/Opiates	42.4	77.1	81.3	78.6	62.7
Alcohol	4.3	2.3	1.9	1.9	7.8
Marijuana	23.7	7.9	5.4	6.5	9.2
Barbiturates/ Sedatives	12.9	2.5	2.4	2.5	5.0
Amphetamines/ Cocaine	6.5	2.3	1.9	3.5	6.1
Inhalants	2.2	1.8	4.6	3.3	.9
Other	9.9	6.1	2.6	3.9	8.1
% of all Spanish	2.14	38.29	59.56	99.9	

Source: NIDA Statistical Series, Quarterly Report, Data from the Client Oriented Data Acquisition Process, April-June 1976, (Series 5). Rockville, MD: National Institute on Drug Abuse, 1976.

federally funded programs in the United States from April to June 1976. Although somewhat dated, the findings show that a significant proportion of the Hispanic substance abusers are Puerto Ricans, and it shows that heroin and opiates are the primary drug problem for Puerto Ricans, more so than for Cubans as well as non-Hispanic groups. Puerto Ricans also appear to have less of a primary problem with non-narcotic substances as compared to other ethnic groups.

Recent data provided by the New York State Division of Substance Abuse Services (Des Jarlais, personal communication, 1983) indicates that of 2,711 people in the drug free residential program, 19 percent are Hispanics, which in the case of New York means predominantly Puerto Ricans. Similarly, of 30,787 patients receiving methadone maintenance treatment, 28 percent are Hispanics. Considering that Puerto Ricans constitute only 10.3 percent of the population of New York City (Alers, 1978) the data related to treatment population suggest that heroin addiction is nearly three times more prevalent in this group than in the population at large.

A study on substance abuse among a "normal" population which was based on a telephone survey using a random sample of almost 3,500 residents and projected to reflect drug use among an estimated 14.3 million household residents of New York State aged 12 years and older concluded that drug use was widespread among this population. More than 2,000,000 residents had recently used one or more illicit drugs. "Of these, 358,000 are considered to be serious abusers of drugs--many of whom have used seven or more drugs in the six months prior to the survey" (New York State, 1981).

This survey, contrary to the previously examined studies, seems to indicate that Hispanics have drug abuse rates similar to blacks and to whites. However, since this study was based on a telephone survey, "street" people, accounting for a significant proportion of narcotic addicts, as well as low socioeconomic Hispanic households, many of whom do not have telephones, may not have been included. Therefore, this study is representative of only a limited segment of the Puerto Rican community.

In conclusion, available epidemiological research pertaining to Puerto Ricans indicates that narcotic addiction is a severe problem among some segments of Puerto Rican communities in the United States.

It is recommended that a comprehensive epidemiological study examining substance abuse in all sectors of the Puerto Rican community be done taking into account issues such as socioeconomic status and levels of acculturation. For the purposes of such study, it would be essential to utilize Spanish-speaking interviewers familiar with the Puerto Rican culture.

Although considerable work has been done in the general area of substance abuse prevention, much needs to be done specifically in relation to prevention as it applies to Puerto Ricans. As in the case of other ethnic groups, focus has to be placed upon adolescents as the group most at risk. This is particularly pressing because, due to the relatively high birth rate, Puerto Rican population tends to be younger than other groups (Alers, 1978).

Nuttall et al. (1974) identify four groups among adolescents in Puerto Rico: The high risk group are those young people with police records, or whose names appear in the files of drug prevention centers, drug treatment centers, Narcotics and Drug Addiction Division or in newspaper articles of drug-related arrests. The medium risk group consists of people who are recorded in the files of social workers as needing help with social, psychological, educational, or financial problems. Siblings of high-risk individuals are also included in the medium-risk group. The third and fourth groups are high school dropouts and high school graduates who are still in the community.

The lowest risk group, according to this study, tended to live in homes owned by their parents. They were less likely to have a father absent when they were younger than 7 years. Their parents tended not to use hostile psychological control measures but used firm discipline. The children were more likely to be "tender minded" as opposed to high-risk children who were "tough minded."

Fitzpatrick (1975) notes that educational failure is related to drug use and abuse. A school dropout population of Puerto Ricans represents an at-risk group vulnerable particularly to drug abuse and addiction. This constitutes a serious problem and is recognized as such by both the Puerto Rican community and school authorities.

Drug abuse among Puerto Rican females as a particularly vulnerable group is also just beginning to be examined. Obeso and Bordatto (1979) briefly summarize traditional cultural factors as they relate to Puerto Rican females in the United States. Culturally, the typical Puerto Rican adult is raised in a traditional, firmly structured world based on respect for others, for the hierarchy of the community, and for parents. Specifically, being a male means having a keen sense of one's inner worth as an individual, exercising firm authority over wife and children in the home, and in return receiving proper respect. On the other hand, the role of the Puerto Rican female entails being responsible, faithful, submissive, obedient, and humble. Keeping all this in perspective, one realizes immediately that since specific cultural values are integrated into the conscious and unconscious processes of the individual at birth, culture conflict presents a serious obstacle for Puerto Ricans to overcome in the setting of American culture. As Obeso and Bordatto conclude, the Puerto Rican female drug user encounters a threefold problem: on one level she faces the pressures faced by all Puerto Ricans adjusting to a Puerto Rican value system in an American culture; on another level she faces the pressures of cultural traditions and values imposed on her as a Puerto Rican woman; and, still on another level, she faces the same pressures encountered by all drug abusers.

In 1972, the drug abuse treatment services network in Dade County, Florida, identified a confusing and disturbing problem. First, Cuban Americans were by and large underutilizing traditional Anglo-American-oriented treatment programs. Second, not unlike most immigrant groups in the United States, schools and courts were identifying Cuban Americans as being characterized by family disruption, behavioral disorders, and substance abuse. The need for culturally sensitive treatment services was thus particularly critical for Cuban Americans.

Most of the drug abuse treatment and prevention research conducted with the Cuban American population in Dade County has been carried out by the Spanish Family Guidance Center. The Center has investigated: (1) the nature of the drug abuse problem of Cuban Americans, (2) some of the etiological sources of drug-abusing behaviors that are specific to the Cuban American population, and (3) the treatment and prevention variables and their effectiveness. The service-delivery model that emerged from these efforts is based on: (1) the disruptive effects of the acculturation process on these families; (2) the need to conceptualize the genesis and maintenance of drug-abusing behavior along the lines of Systems Theory, and (3) the efficacy of family therapy in the treatment of this client population.

Any consideration given to further efforts in this field should continue to be based on these proven tenets: that the drug-abusing Cuban American must be understood, reached, and treated in the context of his/her ecological systemic interactions, primarily the family, and with close attention paid to the role which acculturation is playing at this time in his/her life and that of the family as a whole.

Chipwood (personal communication, 1983), of the Univeristy of Miami Department of Psychiatry, has been attempting to study the increasing problem of cocaine abuse in South Florida. A recent survey conducted by his office of the adolescent population in high schools revealed that a higher proportion of adolescents use cocaine in South Florida than in a comparable national sample. His office recently interviewed 170 cocaine users identified both through treatment programs and through networking of cocaine users. While his overall sample was approximately one-third Cuban American, Cuban Americans were underrepresented in the treatment program subsample. Chipwood suggests, however, that among Cuban Americans cocaine use is probably larger than currently identified. Two reasons account for their suspected relative underrepresentation in the obtained sample: (1) their relative absence from treatment programs, and (2) the fact that a large number of Cuban American cocaine users probably belong to the middle and upper classes, and no research has been conducted with these groups.

Chipwood further indicates a positive correlation has been found between length of use and an accelerated level of the consequences of use among cocaine abusers. This finding is of grave clinical consequence because it points to the probability that Cuban Americans, who have extensive social supports maintaining them out of treatment longer, are at the same time increasing the complications of abuse at an accelerated rate. Thus, the jump from experimentation to dysfunctional abuse appears more rapidly with cocaine than with other drugs.

Work at the Spanish Family Guidance Center in South Florida has revealed that when Cuban American adolescents who entered into treatment in 1974-1977 are compared with adolescents who entered in 1979-1982, there was a serious increase in drug use in the later cohorts. Whereas the earlier sample tended to exhibit primarily experimental drug use, with marijuana as the primary drug of use and in rate cases also abuse of methaqualone and cocaine, the later cohort continued to abuse the same three drugs but on a larger scale. Further, the later cohort was far more likely than the

earlier to be involved in drug dealing and other related antisocial activities. It would seem, then, that prevention efforts in this area could be targeted more at the early intervention stage. Given that detection of cocaine involvement among Cuban Americans at a primary or even secondary level is such a difficult endeavor, and given that a considerable problem exists among those individuals trying to "make it," consideration could be given to development of a prevention model which addresses the basic issues of stress and stress management in potential cocaine abusers.

One problem is dramatically made clear by the studies conducted at the Spanish Family Guidance Center and by clinical experience reported by other mental health and drug abuse treatment providers working with the Cuban American community. This is the problem of initially engaging drug-abusing client families in the therapy process. Approximately two-thirds of the adolescent drug-abusing population covered by outreach efforts of the Spanish Family Guidance Center could not be helped because they never entered therapy. This is a problem common to drug abuse treatment efforts throughout the country and with many populations. Most data on the prevalence of drug abuse among Cuban Americans have been obtained from admission rates to treatment programs and from judicial system records. However, it is well known that the social support network among Cuban Americans, most especially the immediate and extended family serves to maintain and support drug users, and that most treatment programs are culturally dystonic relative to Cuban Americans. Both factors limit their utilization of treatment programs or possible identification by the judicial system.

The question of engaging and treating Cuban American drug users is complex. Denial of the addiction and fear of loss of status make this population very difficult to reach and to maintain in treatment. New and innovative approaches need to be developed and tested that will detect, engage, and retain these individuals. As is usual among all Cuban American groups, the family is the first to identify the probelm and mobilize for treatment. One important implication of these findings is that methodologies must be developed that more effectively aid a concerned family member to persuade his/her entire family (or any relevant part thereof) to enter the therapy process.

A second clinical issue pertains to the impact of systems other than the family on adolescent drug use. A still unattended area relates to the issue of adolescent drug abuse and peer influence. Not unlike their Anglo American counterparts in Kandel's study (Kandel, 1973), Cuban American adolescents' drug use is showing strong evidence of being influenced by friends' use. Furthermore this is compounded when peers' use of illict drugs is added to the effects of parents' use of psychoactive drugs. In the Cuban American community, parental influence synergizes with peer influence in two ways: (1) by reinforcing peer influence through their own licit or illicit drug abuse, and (2) by the fact that the adolescent's peer group is still by and large composed of the children of the family's own friends and own social network. Research needs to address this triadic relationship between the Cuban American adolescent, his/her parents, and his/her peer group vis a vis the adolescent's drug use. At this point in the acculturation process of Cuban Americans, where does peer influence begin to have a stronger effect on adolescent drug involvement, and how can

this be restructured so as to reposition the parents in an executive role? Given the close ties still existing between families and their peer groups, one such possibility may be the application of family therapy techniques within a group treatment context.

A major goal should be to assist parents to counteract peer influence. Clinical experience indicates that the family is still the most significant and powerful force in the Cuban American adolescents' life and suggests that given effective leadership on the part of the parents, negative peer influence can be greatly minimized and diminished. In light of these observations the Family Effectiveness Training (FET) model of prevention could be modified and made available to parents' groups in such a way that the family would not need to identify one of its members as already dysfunctional (Szapocznik et al., 1983). The Spanish Family Guidance Center's findings in the Brief Strategic Family Therapy project clearly indicate that the behavior of one family member towards another is contingent and dependent upon complementary behavior by the second family member and, therefore, it is possible to achieve familial changes by working with only one segment in the family (Szapocnik et al., 1984). Since adolescents are often difficult to engage in such growth endeavors (nay, even difficult to engage in therapy after a problem has been identified), the contention in such a proposal would be that through the parents, in a learning and supportive group situation, and by utilizing the FET model, the high-risk potential for drug abuse among Cuban American adolescents can be significantly reduced.

Yet in all such family-centered interventions the disruptive impact of acculturation on Cuban families must be borne in mind in treatment planning to ensure bicultural adjustment that preserves the integrity of the family structure while facilitating nonstressful and productive adaptation to the family's social environment.

Findings from the FET project indicate that this model is effective in bringing about hypothesized changes in both identified patients (high-risk children) and their families. That is, the FET model was effective in significantly decreasing behavior problems in the children, assisting the family to achieve a more successful rate of bicultural adaptation, and improving familial structure, conflict resolution, and cohesion. The FET model needs to be extended to prevention and/or early intervention efforts among adolescents. Reasons for this recommendation include: (1) the perceived community need for family-oriented prevention approaches for adolescents, as evidenced by a surprisingly large number of requests for such services at the Spanish Family Guidance Center; (2) the relative paucity of research in family-oriented drug abuse prevention models; and (3) previous experience with antecedents of drug abuse, as evidenced in psychotherapy research with adolescent drug abusers.

Certain subgroups of drug-involved Cuban Americans have not yet received adequate attention and may be in need of specialized intervention efforts. There are (1) the elderly; (2) the Mariel (or recently arrived) refugees; and, (3) the cocaine-involved young or middle-aged professional executives. The broad abuse of psychoactive medication by the elderly has been corroborated repeatedly by health and mental health service providers. The needs of this population must be addressed further in terms of its

epidemiology, treatment, and prevention.

The Mariel refugees pose a whole new set of questions and issues to drug treatment service efforts. A series of characteristics and past experiences of sectors of this population point to probably high propensity for drug use. In Cuba, because of the political system, and subsequently in the United States, because of the geographical distances, many of the Mariel refugees have been living in severely disrupted families, with the concomitant lack of social supports. Many professionals in the service delivery network suspect that sectors of the Cuban refugee population may be heavily involved in drug use and perhaps have resorted to drug trafficking as a way of making a living. In addition, the stresses and adjustments associated with the financial success of some upwardly mobile Cuban Americans make them especially susceptible to drug use. Although the extent of cocaine use in this population has never been documented, there are many indications that the problem is large and warrants serious concern.

Summary

At present our knowledge of the drug and alcohol use and abuse patterns among America's ethnic minority populations is at best spotty. Much of what we know is limited to epidemiologic studies among youth primarily at the adolescent stage of development. Little or no information exists describing and documenting the use and abuse patterns among ethnic minority adults, elderly, refugees, homeless, pregnant women and families as a unit. Yet what we do know provides us with a portrait of a very serious and complex set of problems.

In addition to epidemiologically grounded knowledge gaps, numerous theoretical, conceptual and methodological problems and issues abound. Reviewers and contributors noted a number of problems involving the interpretation and use of some of the findings. Many of the studies contained limited and restricted data bases, inaccurate estimates of the prevalence of drug use patterns and a distinct lack of documentation of client concerns. The problems can and should be corrected in future studies.

The presence of the knowledge gaps together with the problems listed above point to the need for more directed and well-thought-out research investigations. Along with the apparent need for more research exists a sense of urgency. From what many of us in the field understand numerous large scale prevention and treatment program decisions are being made for many ethnic minorities on the basis of scant research findings. With these points in mind a number of research questions were generated from the workshop presentations. The questions are provided solely as a guide for stimulating work in the field and do not necessarily reflect the research priorities, opportunities or responsibilities of the National Institute of Drug Abuse.

The following research questions by no means are exhaustive--they represent some of the fundamental areas that need immediate attention.

- Which drugs are most likely to be used at which ages and under which

social circumstances? Within an ethnic group what are the subgroups most at risk for drug and alcohol abuse and to what extent?

- It is essential that future studies distinguish ethnic groups on the basis of values, norms, life conditions, history and heritage, and adaptive problems. The common division in drug and alcohol studies between "white" and "non-white" populations is grossly inadequate for examining drug abuse within a culture and each ethnic group needs to be studied in its own right.

- What psychological characteristics are associated with drug abuse? There is a need to determine the extent and the level of pathology, self-perception, social skills, experienced anxiety, guilt, and rejection and alienation from the surrounding community and one's own family.

- There is the need to examine alternative measures to assess the extent and kinds of abuse. Measures must be developed to reflect the varying differences accruing from cultural differences. Operationalizations of substance abuse must be behaviorally anchored. In conducting research investigations, attention should be given to the use of (a) case-controlled retrospective studies between those who are and those who are not abusive; and (b) cohort prospective designs which identify two groups on a common abuse-related characteristic and track them to see which develop drug abuse patterns.

- The efficacy of particular treatment and prevention strategies needs to be evaluated. Some which have been described include: Family Effectiveness Training, crisis intervention, bicultural education and youth intervention programs. The question of their efficacy remains with regard to the target populations. For example, how effective are educational programs with youth in various settings? What is the efficacy of peer-support groups in drug-free and drug-supplemented programs?

- To what extent are available prevention techniques differentially effective among different age groups? How do prevention programs differ, depending on age and generation of the target group?

- What treatment modalities (indigenous and traditional) are available to effectively deal with substance abuse and addictions? What expectancy variables define the treatment and therapeutic relationships? From the ethnic minority's point of view? From the therapist's viewpoint?

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