AIDS knowledge, attitudes, beliefs and behaviors in Southeast Asian communities in San Francisco

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EXECUTIVE SUMMARY

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Introduction

This study of the knowledge, attitudes, beliefs and behaviors in relation to AIDS of the Southeast Asian community in San Francisco was conducted by the Center for Southeast Asian Refugee Resettlement, in cooperation with the San Francisco Department of Public Health. It is the first study of its kind in the United States. A total of 87 Cambodian, 91 Laotian and 205 Vietnamese adults, age 18 to 60, were interviewed in the Fall 1990. Respondents were randomly selected among households in six Census tracts, covering 60 blocks, in the Tenderloin area. Bilingual interviewers and questionnaires translated into the native language

were utilized. The response rate was 69% for Vietnamese, 78% for Laotians and 80% for Cambodians.

Socio-Demographic Characteristics

Assessment of the study findings should take into account the fact that Southeast Asians are newcomers to this country, having been admitted as refugees only since 1975. The study sample comprise a relative young population with a mean age of 35.8 for Laotians, 36.4 for Vietnamese and 37.6 for Cambodians. Their median length of residence in the United States was 6.5 years for Vietnamese, 7.5 years for Laotians and 7.6 years for Cambodians. The median family size was 4.6 members for Vietnamese, 4.8 for Laotians and 5.7 for Cambodians. Their median level of education was 3.9 years for Cambodians, 6.9 years for Laotians and 8.2 years for Vietnamese. A substantial number-- 19.8% of Laotians, 35.1% of Vietnamese and 64.4% of Cambodians--were either unemployed, retired or on welfare. Of those employed (16.5% of Cambodians, 27.5% of Laotians and 31.2% of Vietnamese) most were in “service occupations” or “operators/laborers”. A consequence of the interplay of these various socio-demographic factors is the extremely low level of family income, ranging from $9,864 for Vietnamese, $11,420 for Cambodians, and $13,500 for Laotians. Considering the family size the median income for all three groups would be well below the official poverty level of $12,675 for family of four in 1989.

In limiting this study to Southeast Asians living in the Tenderloin area, the sample may be skewed towards the low income recent refugee population. Historically, the Tenderloin has served as the first stop for Southeast Asians arriving in the San Francisco Bay area. As they become economically and psychologically more secure, they tend to move out of the Tenderloin, usually within a period of less than ten years, to the outlying residential districts and suburbs which provide better housing, less congestion and a more desirable environment for families. Therefore, more acculturated families in the middle and upper socio-economic classes would be under-represented in this study.

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AIDS Knowledge

A high level of ignorance was found regarding AIDS transmission. On a scale of 18 possible correct responses to ways by which AIDS is transmitted, the Vietnamese had the highest mean score (10.5), followed by Laotians (8.9) and Cambodians (5.7). Most of the respondents correctly identified the major ways of transmitting AIDS (sexual intercourse, sharing needles, blood transfusion, mother to child during pregnancy, anal and oral sex). However, among the erroneous beliefs were that AIDS can be transmitted by: kissing (43% of Laotians), sitting on toilet seats (49% of Cambodians) and insect bites (56% of Vietnamese). Overall, the mean number of correct responses (8.4) among Southeast Asians was lower than the mean correct answers reported for Chinese (10.3) and Japanese (14.0) respondents in comparable studies.

Knowledge of AIDS was found to be significantly related to gender and education in all three samples and selectively related in one or more samples to income, marital status, and age. Increase in education level was correlated with increase in AIDS knowledge. Women scored

lower in AIDS knowledge than men. For the Vietnamese sample, AIDS knowledge was also higher among higher income groups. Among Cambodians, AIDS knowledge was higher among the "single/divorced/widowed" and the "below 29 years old" groups than amoung the "married/living together" and the "above 30 years".

Of special interest is the finding that knowledge of AIDS was not significantly related to high risk behavior for AIDS in all three groups. Respondents who scored high on AIDS knowledge seem to be just as likely to be in the high risk group as those who scored low. The implication is that increase in knowledge is not necessarity followed by change in behavior.

Attitude About AIDS

The high level of ignorance about AIDS seems to lead not only to an exaggerated sense of the dangers of AIDS but also to discriminatory and hostile attitudes towards people with AIDS. For example, most of the respondents would not send their children to the same school attended by another child with AIDS. A high proportion agreed that "People with AIDS should be quarantined" (59% of Cambodians, 74% of Laotians and 74% of Vietnamese) and that "People who test positive on the AIDS-HIV test should be publicly identified" (36% of Cambodians, 46% of Laotians and 50% of Vietnamese).

All three groups ranked AIDS as the second greatest health problem in the community (cancer ranked first for Vietnamese and Cambodians, mental illness was first for Laotians). Over two thirds of the sample expressed worry about family members getting AIDS. While acutely sensitive to the dangers of AIDS, there is also a sense that the threat is not personal but rather directed against other people. AIDS is seen as an affliction that affects others, not themselves. Well over half of the subjects expressed confidence in their own ability to protect themselves against AIDS. Yet, less than half of the sample had heard of the AIDS-HIV test and only a few had been tested in the past year (2.3% of Cambodians, 5.5% of Laotians and 6.8% of Vietnamese).

AIDS Information and Message Recall

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Previous AIDS education efforts to reach the Southeast Asian community through the mass media have not been successful. Their failure is evident in the small numbers of respondents who had heard or received information about AIDS (36% of Cambodians, 61% of Laotians and 69% of Vietnamese). There was a generally low level of recall of media messages and literature on AIDS prevention. TV programs, community agencies and friends/relatives were most frequently cited as sources of information. A strong preference was expressed for AIDS information to be delivered in their native language via community agencies and TV/radio programs.

Sexual Behavior

For the purpose of this study, high risk or unsafe sexual behavior for AIDS was defined as having unprotected sex with multiple partners, HIV infected persons, homosexuals and bisexuals,

prostitutes and intravenous drug users. The rate of high risk sexual behavior among the three samples ranged from 5.7% for Cambodians, 8.8% for vietnamese, and 20.9% for Laotians.

One half of the respondents in all three samples stated they had not changed their sexual behavior since becoming aware of AIDS. Change in sexual behavior was reported by 4.6% of Cambodians, 17.6% of Vietnamese, and 29% of Laotians. Although Laotians had the highest proportion of changed sexual behavior, it should be noted that they also had the highest proportion of people with high risk behavior.

The majority of all respondents indicated having sex with one partner only. Close to 15% of Laotians and 20% of Vietnamese and Cambodians reported not having sex in the past year. This data may reflect the large proportions of single/never married/widowed in all three groups.

Multiple sexual partners were reported by 4% of Cambodians, 12% of Vietnamese and 24% of Laotians. Again, the high incidence of multiple partners among the Laotians corresponds with their higher rate of high risk behavior.

Among high risk partners, gay men and female prostitutes were most prevalent. Intravenous drug users as sexual partners were minimal. Men were involved in sex with high risk partners more than women. Laotians had the highest incidence of high risk partners (25%) followed by Vietnamese (11%) and Cambodians (3%).

The majority of all three samples were found to engage in sex without use of a condom. Non-use of a condom in vaginal intercourse was reported by 57.5% of Cambodians, 58% of Vietnamese and 62.6% of Laotians. Gender breakdown of the subgroup (vaginal sex without a condom) showed a higher proportion of women (75%) than men (55%). The high rate of non-condom use may reflect the high proportion of married respondents and single partner relationships in the samples.

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Drugs and Alcohol Use

Unsafe or intravenous drug use was found to be non-existent among the Vietnamese and extremely low for Cambodians (1.1%). The Laotian sample had much higher unsafe drug use (11%). The higher rate of drug use among Laotians may be attributable to a greater tolerance of substance use in parts of their native country, associated with the production of opium in the region bordering Burma.

Alcohol consumption was low. Among frequent drinkers (3-4 times per week) were 6.8% of Vietnamese, 8% of Cambodians and 18% of Laotians. Although the Laotian sample also had the highest incidence of drug use, the relationship of alcohol consumption to drug use was not established.

Overall Unsafe Behavior

Data on both unsafe sexual behavior and unsafe drug use were computed to arrive at an overall rating of "Any Unsafe Behavior." The rate of "Any Unsafe Behavior" was 5.7% for Cambodians, 8.8% for Vietnamese and 26.4% for Laotians. These rates may be compared to the findings reported of 3.6% for the Chinese, 6% for Filipinos and 8.1% for Japanese in similar studies.

The Laotian sample differed substantially from the Vietnamese and Cambodian sample in several areas to account for their higher "Any Unsafe Behavior" rate. In addition to a higher rate of unsafe drug use, Laotians had a higher rate than Vietnamese and Cambodians in: non-use of a condom, multiple sex partners, and high risk sexual partners (people with AIDS, gay men, male and female prostitutes, and intravenous drug users.)

Another possible contributing factor to account for the higher rate of unsafe behavior among Laotians is a possible oversampling of homosexual and bisexual men and intravenous drug users due to unforeseen sampling circumstances. A consequence of the sampling method, which required interviewing of adults in randomly assigned households, was that two of the 21 buildings sampled yielded a total of 16 interviews (17.6% of all interviews). Of the 16 respondents, 13 (81.3%) were found to engage in high risk behavior. Informed community sources confirm that these two buildings happen to house a community of Laotian homosexual and bisexual men and that their distribution in the two buildings is not representative of the rest of the sampled buildings. Due to the size of the sample and limited knowledge of the wider Laotian community, it would be difficult to demonstrate mathematically the degree of oversampling of the high risk population in the study sample. This issue warrants further investigation.

Summary and Recommendation

Both AIDS education and AIDS intervention strategies aimed at risk prevention and risk reduction must be designed to be culturally and linguistically relevant to Southeast Asian communities. In relation to AIDS education a major study finding is that the overall level of knowledge among Southeast Asians about AIDS is critically deficient. AIDS education campaigns directed

to the general public have had little impact upon Southeast Asian communities. Not only is there widespread ignorance about how AIDS is transmitted but also gross misinformation about modes of AIDS transmission. p. v

The data point to a compelling need for a comprehensive AIDS education campaign specifically designed and targeted to Southeast Asian communities. The following recommendations regarding AIDS education are directed to increasing knowledge in Southeast Asian communities about AIDS and AIDS transmission:

Recommendations

1 - AIDS education programs should be mounted in Southeast Asian communities utilizing the full range of ethnic media, with heavy emphasis upon ethnic TV/radio programming.
2 - The popularity of videotapes for recreational use in Southeast Asian communities should be exploited by including AIDS information in tapes that are most frequently rented.
3 - Bilingual health educators should reach out to collectivities of Southeast Asians, such as in their workplaces, schools, temples, churches and other community based facilities.
4 - Organizations that serve Southeast Asian communities must be involved in efforts to provide AIDS education presentations and literature to their constituencies in their native language.
5 - Schools which have a high enrollment of Southeast Asian children should be included in the outreach effort to impart AIDS information as part of the sex education curriculum.
6 - In addition to traditionally known high risk groups, AIDS education should target women, people with a low level of education, the single/unmarried and people over age 30.
7 - Educational methods and materials should be sensitive and relevant to the level of education of the targeted groups.

AIDS intervention strategies must also be culturally and linguistically designed to respond to the special needs of groups vulnerable to high risk behavior in Southeast Asian communities. Unless further evidence indicates otherwise, the high rate of unsafe behavior found in the Laotian community calls for special attention.

The high risk groups most in need of targeted intervention are Southeast Asian homosexual and bisexual males. Experience has shown that the most effective outreach approach is through the use of peer groups to provide support for safer drug and sexual behavior and to reinforce reduced risk behaviors. Peer groups also provide the interpersonal support essential to maintain behavior changes already made and to prevent relapse to old habits. The following recommendations aim at effecting behavioral changes among high risk populations in Southeast Asian communities:

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Recommendations

8 - Staffing with bilingual capability is a critical component of any effort to reach high risk groups, in particular homosexual and bisexual males, in Southeast Asian communities.
9 - Behavioral interventions must include bilingual HIV counseling and testing, one-on-one counseling services, support and counseling groups and periodic planned follow-up contacts.
10 - Peer counseling should be encouraged as a method of reaching high risk individuals. Special effort should be made to engage Southeast Asian peer counselors, who are themselves members of high risk groups, to function as facilitators.
11 - The formation of peer facilitated groups, patterned after the concept of self-help groups, should be encouraged and supported among southeast Asian high risk persons.

12 - Counseling should move beyond the provision of general information about AIDS transmission and focus upon personalized risk assessment, the effectiveness of specific risk reduction strategies, and skill building in risk reduction behaviors.

13 - In addition to traditionally known high risk groups, intervention should target young U.S. born Southeast Asians who are likely to engage in unprotected sex with multiple partners and/or intravenous drug use.

14 - A focus of AIDS outreach should be places where high risk groups and sex industry workers congregate, such as particular street corners, bars, coffee and noodle shops, massage parlors and hotels.

15 - HIV testing should be encouraged as part of the overall AIDS prevention outreach effort.

16 - The unexpected rate of high risk behavior found in the Laotian community calls for special outreach efforts. Further research is needed for more definitive knowledge and understanding of the role of AIDS in the Laotian community.

17 - Although resources are not currently available to implement the above recommendations, the needed resources must be found if a highly likely acceleration of HIV infection among Southeast Asians is to be averted.

II. BACKGROUND - AIDS AND THE SOUTHEAST ASIAN COMMUNITY

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Providers of AIDS education in the Southeast Asian refugee community face a difficult task. Each of the major Southeast Asian communities--Cambodian, Laotian and Vietnamese--has its own distinctive language, history, culture and social structures which must be taken into account in planning and implementing any AIDS education effort. In addition, the life experiences and backgrounds of many Southeast Asian refugees have not prepared them to know and to understand common Western medical concepts which are essential to AIDS education and prevention.

A basic problem is the paucity of information available about the knowledge, attitudes, beliefs and behaviors among Southeast Asians with respect to AIDS. Previous studies of other Asian communities suggest that there may be similarities among Asians in their attitudes towards such matters as sexuality, homosexuality and terminal illnesses. However, the available information is not sufficient to provide a basis for developing AIDS education and prevention programs specifically targeted to Southeast Asian communities.

To address the problem of information deficit with respect to Southeast Asian communities, the Center for Southeast Asian Refugee Resettlement, with support from the San Francisco Department of Public Health, undertook this study to obtain data which would serve as a baseline from which to compare, in subsequent surveys, changes in AIDS-related knowledge, attitudes, beliefs and behaviors among Southeast Asian communities in San Francisco. A secondary objective was to collect data which would provide a foundation for developing an effective AIDS education and prevention program for the Southeast Asian community.

The information regarded as essential for these purposes was defined as comprising the following areas:

1. Socio-demographic characteristics of the Southeast Asian population;
2. Their level of awareness and knowledge about AIDS;
3. Attitudes and opinions about AIDS related issues;
4. The range and prevalence of risk behaviors;
5. Characteristics of those who are most at risk; and
6. Strategies for the dissemination of AIDS prevention information.

The initial target was 150 Vietnamese, 75 Laotian and 75 Cambodian respondents. The actual number of completed interviews was 205 Vietnamese, 91 Laotian and 87 Cambodian.

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III. METHODOLOGY

Subjects and Site

The universe covered in this study consists of Cambodians, Laotians and Vietnamese adults, age 18 to 60, residing in San Francisco. Since the largest concentration of Southeast Asians reside in the Tenderloin area of the city, the decision was made to draw the study sample from six Census tracts within the Tenderloin with the highest number of Asian Americans reported in the 1980 Census. With Bush and Market streets as the North and South boundaries and Van Ness Avenue and Powell Street as the East and West boundaries, the six Census tracts include an area of approximately 70 city blocks. The area is mostly commercial and industrial, with residential buildings interspersed throughout.

The Tenderloin is known to be the most densely populated and economically depressed area of San Francisco. It has the highest proportion of welfare dependent individuals and families and the highest incidence of AIDS in the city. Through March 1990, of 613 reported AIDS cases in the Tenderloin area, 2.1% were Asian Pacific Islanders, almost all of whom were Southeast Asians.

In limiting the sample to Southeast Asians living in the Tenderloin area, the sample may be skewed towards the low-income recent immigrant population. Historically, the Tenderloin has served as the first stop for Southeast Asians arriving in the Bay Area because of the availability of affordable housing, access to businesses that cater to Southeast Asians, and the familiarity and security afforded by an ethnic enclave. The usual pattern is that as Southeast Asians become economically and psychologically more secure, they tend to move out of the Tenderloin to the outlying residential districts and suburbs which provide better housing, less congestion and a more desirable environment for families. This process of transition seems to take from five to six years. Therefore, families who are more acculturated and who are in the middle and upper socioeconomic classes may be under-represented in the study sample.

Sampling Procedure

The sample selection process consisted of two stages. In the first stage, to generate a pool of potential respondents, a mail box survey to identify Southeast Asian residents was conducted among dwelling units within the six Census tracts defined for the study. Due to security problems in the Tenderloin not all of the buildings could be entered to conduct the mailbox

survey. In some cases building managers or owners were approached for a listing of residents. The mailbox survey process yielded a pool of 590 Vietnamese, 154 Laotian and 141 Cambodian households.

In the second stage, households were grouped according to buildings and blocks in each of the six Census tracts and the households to be contacted for interviews were randomly selected. For the Vietnamese sample, every fourth household was designated for interview and for the Laotian and Cambodian

samples every third household was identified. To allow for attrition of households due to absences and refusals, multiple interviews were permitted in each household (to a limit of three per household). p. 3

Instrument

For purposes of this study, the questionnaire utilized in the Chinese/Japanese AIDS Baseline Survey was adapted with minor modifications made in the interest of cultural appropriateness, clarity and comprehension for Southeast Asian respondents (see sample questionnaire in Appendix). The English version was translated into Cambodian, Laotian and Vietnamese languages. Separate answer sheets were developed for responses to especially sensitive questions such as sexual and drug use behavior. The answer sheets were then sealed in an unidentifiable envelope and returned to the interview. A script was incorporated into the interview to facilitate uniformity of questioning, ease of communication and appropriate cultural sensitivity. All questions were read aloud by the interviewer so as not to assume literacy among all respondents, unless it was evident that the respondent was literate.

To assure anonymity each questionnaire was coded with an identification number. Information derived from the questionnaire and entered into the data set could not in any way be linked to the name of any individual by anyone other than the study staff. Appropriate measures were also taken to assure protection of human subjects.

To administer the questionnaire, 23 bilingual interviewers (14 Vietnamese, 5 Laotians and 4 Cambodians) were recruited and trained. A two-day training session was conducted by the Principal Investigator, Project Coordinator and Community Consultants. The training included information on AIDS prevention, the sample selection process, questionnaire items, interviewing techniques, role playing the interview, and cultural issues relevant to interviewing in the Southeast Asian community.

Data Collection and Management

Prior to the field interviews, the Southeast Asian community was informed about the survey through the ethnic media and each household was sent a letter with information about the survey. Each interviewer also carried a letter of introduction and an Informed Consent form. For their participation, respondents were given $20 as a token of appreciation for their time and effort.

The field interview process was supervised by the Project Coordinator under the direction of the Principal Investigator. Supervision and support of the field staff consisted of weekly contacts, monitoring of the interviewing process, problem solving of special situations, logging in of completed interviews and making of new assignments, and cross checking of responses. Approximately 10% of the completed interviews were validated for authenticity. During the course of the field work, group meetings were also held for interviewers to provide additional opportunities for reviewing and sharing experiences.

p. 4 Preparation of the questionnaire responses for computer entry was carried out under the supervision of the Project Coordinator. The data entry and analysis was conducted by the Computer Center at San Francisco State University.

Response Rate

As shown below, the response rate for the Vietnamese sample was 69%, 78% for the Laotian sample and 80% for the Cambodian sample. The lower rate of response for the Vietnamese sample may be due to a higher degree of urbanization and alienation leading to greater suspicion and distrust of strangers. In contrast, Laotians and Cambodian, coming from a less urbanized and simpler village like society, were more open and receptive to being interviewed. The Laotian and Cambodian communities, much smaller than the Vietnamese community, have developed a network of relationships that is much closer knit than that of the Vietnamese. It was apparent that, as a result of their communication network, information about the survey had quickly spread by word of mouth and respondents were waiting expectantly and eager to be interviewed.

Another factor that may have facilitated the higher rate of response from Laotian and Cambodian respondents was the fact that the interviewers, all of whom either lived or worked in the Tenderloin area, were well known in their respective communities. This meant that they commanded a degree of personal trust and confidence among respondents which allayed fears and resistance to being interviewed. In contrast, most of the Vietnamese interviewers were in fact outsiders and their relationship with respondents was much more impersonal and formal, thus tending to evoke fear and uncertainty.

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Data Analysis

The data analysis was performed under the direction of the Co-Principal Investigator. Data was entered into the computer for each questionnaire and saved as individual raw data files. Case files were then combined into a master raw data file that contained data for the entire sample of Vietnamese, Laotian and Cambodian respondents, respectively. The raw data was then converted into an SPSS-PC+ system file. All analyses were conducted using the SPSS-PC+ program. The SPSSPC + CROSSTAB procedure was then used to generate chi-square tests of selected contingency tables.

All data was analyzed utilizing the following 11 specific factors as independent variables:

1. Age
2. Gender
3. Marital Status
4. Education
5. Income
6. Level of AIDS transmission knowledge
7. Level of AIDS message recall
8. Change in sexual activities since becoming aware of AIDS
9. Safe/unsafe drug use
10. safe/unsafe sex
11. All unsafe behavior

IV. FINDINGS: VIETNAMESE

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REPORT FORMAT

The report is organized into three major parts, reflecting the three samples that were studied: Vietnamese, Laotians and Cambodians. Under each identified population, findings are organized in the following order:demographic profile; AIDS knowledge; AIDS attitude and opinions; effectiveness and preference for educational/informational media; sex and drug behavior; and profile of High Risk Group. The final section will summarize the findings from the three samples, highlighting some of the major differences and similarities. Conclusion and recommendations will then be drawn.

DEMOGRAPHIC PROFILE

A total of 205 subjects responded to the study from the Vietnamese sample. Person-to-person interviews were conducted with all of the subjects. The overwhelming majority of the interviews (85%) was conducted in the native language (Vietnamese or ethnic Chinese). All the interviewers were bilingual (English and Vietnamese/Chinese).

The mean age of the sample is 36 years old. About three fourths of the sample are within the age range of 25 and 50, and 45% of the total are from the 30-40 age group. Slightly more than half (52%) are female.

Most of the subjects (62%) are married, and over a quarter (27%) of the subjects are single/never married.

Two generation families seem to predominate the household pattern. The adult subjects (87%) are not living with parents. The average number of children in the household is 2.27. The average household size is 4.6. The data seem to reflect that there are more than two adults in the household although most of them are not living with their elderly parents. Although the information is not solicited in the study, one possible explanation is that many of the households include extended family members (cousins, aunts/uncles).

Almost all the subjects (91%) were born in Vietnam, only two in the U.S. Over half (54%) of the subjects have been in the U.S. for 6 to 10 years. The length of residence reflects the second wave of refugee migration to the U.S. in the 1980's. Only 5% have been in the U.S. for over 10 years.

The average years of education is 8. The highest number (26%) is in the “1-6 years”. Only four (2%) out of the total 205 subjects are college graduates. Over a third of the subjects (35%) are “unemployed, retired, on welfare”. Of those that are employed, most of them are in the service fields, laborers, or operators. The average income is $9,864. About a quarter of them (24%) have incomes under $5,000 and another quarter (26%) between $5,000 and $9,000. Considering the household size and number of children in the household, most of the families are living below the poverty level which in 1989 was $12,675 for a family of four.

p. 7 Comparability of the demographic data for the Vietnamese study sample with that of the 1980 Census is shown in Appendix D. Question may be raised about the validity of such a comparison since the 1980 Census data refer to a population far different from that of Vietnamese who entered the country after 1980. The population counted in the 1980 Census consisted of the “first wave” of refugees who were mainly associated with the Vietnamese establishment and therefore likely to be of the well-educated, affluent middle class. The “second wave” of refugees, most of whom were not included in the 1980 Census, consisted largely of the “boat people.” They included peasants from villages, farmers, and fishermen, as well as small shopkeepers and lower level bureacrats, and likely to be less well educated and of a lower socio economic status than the first wave refugees. These differences are reflected in the lower levels of education and income in the study sample compared to the 1980 census. The study sample also shows a considerably higher proportion of married than single persons than the 1980 Census, possibly reflecting greater opportunity for family groups to migrate in the more recent period. It should be noted that the data on age distribution is not comparable since the study sample excluded persons under age 18.

AIDS KNOWLEDGE

Knowledge about AIDS was assessed by two sets of questions. The first set inquired about the subjects' self-assessment of knowledge about AIDS and personal knowledge of someone with AIDS. The second set inquired about ways of AIDS transmission.

Overall Knowledge and Personal Knowledge of AIDS

Subjects were asked to rate their knowledge about AIDS. Almost half of the subjects (48%) stated that they knew “A Little” or “Almost Nothing” about AIDS; only 16% rated “A Great Deal”. When asked whether they personally knew someone with AIDS, 9% affirmed while 85% responded negatively. The above showed that the sample did not rate themselves highly regarding AIDS knowledge, nor did they personally know of someone with AIDS.

Knowledge of AIDS Transmission

Knowledge about AIDS transmission was assessed through responses to eighteen statements. The mean correct responses is 10.5 out of 18 (58% correct). The correct response rate is extremely low when considering the fact that "guessing" would have theoretically yielded around 50%.

Most of the subjects (84%) were able to identify the known ways of transmitting AIDS, such as:

18 - sexual intercourse/sexual relations
19 - sharing needles with person using intravenous drugs
20 - receiving a blood transfusion
21 - passing from mother to child during pregnancy

A lesser number recognized "having anal sex" (78.5%) and "having oral sex" (61%) as possible forms of transmission.

Over half of the subjects misidentified ways of transmitting AIDS. They mistakenly responded that AIDS can be transmitted by: p. 8

22 - needles used in the hospital (62%)
23 - kissing (51%)
24 - being bitten by mosquito/other insect (56%)
25 - being physically close to gay men (61%)

A third of the subjects thought that AIDS can be transmitted by "sitting on toilet seats" and "eating food prepared by an infected person"; and close to 43% stated that AIDS can be transmitted by "donating blood". Over a quarter of them thought that AIDS can be transmitted by "breathing the same air in a small room with an infected person" and "swimming in a public pool".

The above findings indicate that the sample's knowledge of AIDS transmission is exceedingly low, especially considering the fact that the subjects are living in an urban city (San Francisco) with one of the highest incidence of AIDS; and considering the fact that there have been major efforts by public health program to educate the general public regarding AIDS transmission.

AIDS Knowledge as Related to Demographic Characteristics p. 9

Knowledge about AIDS transmission was assessed though an 18-item scale. Correct responses to the items were summed and mean number of correct responses was then computed for each respondent. Crosstabulation was done with the demographic profile of the subjects. Respondents with ten or more correct answers were assigned to the "High Knowledge" group while respondents with below ten correct answers were assigned to the "Low Knowledge" group, Chisquare testing of significance was computed for all the cross tabulations.

Knowledge about AIDS is significantly related to income, education, and gender. Knowledge about AIDS is not related to marital status, age, drug use, sexual behavior, and message recall:

- A greater proportion of the "Below $10,000" group is in the Low AIDS Knowledge than in the "above $20,000" income group. A greater proportion of the "above $20,000" income group have High AIDS Knowledge than the "Below $10,000" group;
- As respondents increase in education level, there is a corresponding increase in AIDS Knowledge;
- A greater proportion of the males is in the High AIDS Knowledge than females. Half (58%) of the males are in the High AIDS Knowledge group, while 43% of the females are in the High AIDS Knowledge group.

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ATTITUDE/OPINION ABOUT AIDS

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Importance of AIDS as a Health Problem

Two open-ended questions were asked regarding subjects' perception of the major health problems in the community: the first question sought identification of the health problems; the second question sought ranking of the health problems. In sum, the following three were ranked as the most important health problems:

- Cancer (22.4%)
- AIDS (18.5%)
- Heart disease/stroke/hypertension (13.2%)

It is interesting to note that although they did not rate themselves as knowledgeable about AIDS, they ranked AIDS as one of the most important health problems.

Importance of AIDS to American People and to Vietnamese Community

Two questions were asked regarding the importance of the AIDS issue to the people of America and to the Vietnamese community. Over 40% of the subjects considered AIDS as the most important issue. A slightly higher percentage (45%) responded that AIDS is the most important issue to the people of America, as opposed to the Vietnamese community (40%).

When asked whether they worried about family members getting AIDS, over half of the subjects (56%) were "very worried" while 19% were "somewhat worried". Preoccupation of AIDS as a health problem seemed to be more prevalent in a personal context than in the context of the larger community.

AIDS Testing

Consistent with earlier responses regarding knowledge about AIDS, over half of the subjects (56%) have not heard of the AIDS test. Fourteen of the subjects (6.8%) were tested for AIDS,

most of them in the past year. Most of them stated that it is unlikely that they would be tested for AIDS (68%).

Child Attending Same School/AIDS Education

When asked what they would do if their child was attending the same school as a child who had AIDS, the most frequent response was “keep child at home/transfer child to another school”. About a quarter of them would continue sending their child to school. The lack of knowledge about AIDS seemed to have affected their hypothesized behavior regarding children's contact with other AIDS children.

When asked about who should teach AIDS education, most subjects felt that it should be jointly taught by teachers and parents. Although subjects were not confident about their AIDS knowledge, they were expressing interest/responsibility toward AIDS education for their children.

Attitude Toward AIDS

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Subjects were asked to rate ten statements according to the Likert Scale of Strongly Agree to Strong Disagree. The answers were collapsed to reflect the dichotomized responses of “Agree” and “Disagree”.

Two thirds of the subjects agreed that they would be able to protect themselves against AIDS. Half of the subjects agreed that “there is little that can be done to control the spread of AIDS”. The heightened fear seemed to be reflected in the large number of subjects (74%) who agreed that “people with AIDS should be quarantined"; and half of the subjects agreed that “people who test positive on the AIDS antibody test should be identified”.

In sum, the lack of knowledge combined with the heightened fear toward AIDS led the subjects to believe that drastic and discriminatory measures should be taken against people with AIDS. The root of the fear seemed strongly grounded on the lack of knowledge, and/or misinformed knowledge regarding AIDS.

AIDS INFORMATION AND MESSAGE RECALL

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AIDS Information

Four questions were asked regarding the respondents' assessment of AIDS information disseminated through the mass media.

The majority of the respondents (69%) stated “yes” that they “have received or heard of information about AIDS”. When asked about the source of media information, slightly over half (56%) of the subjects responded that they received the information from newspapers, TV programs and friends/relatives--more often in the native language (Vietnamese) than in English.

Most respondents (72%) would prefer AIDS information in the native language, which is not unusual considering the fact that almost all the subjects were foreign-born/immigrants.

When asked about “the best way for you to receive information about AIDS”, the most frequent response was TV/radio (34%), followed by “pamphlets, literature, posters” (29%), and “community health education by schools and agencies” (12%).

Public Message Recall

The Surgeon General's Office and various community agencies have made concerted efforts to reach every household in the U.S. regarding AIDS information. Respondents were asked whether they recalled receiving or hearing such messages:

The results showed that the efforts have not been successful. Posters that were in native languages did not fare better than those in English language.

SEXUAL BEHAVIOR

In determining AIDS risk behavior, questions were asked regarding the respondents' sexual activities, and alcohol and drug use. Due to the senstivity of the subject matters, respondents were asked to write their answers on a card rather than verbally responding to the interviewers' questions.

Changes in Sexual Behavior

Over half of the respondents (57%) indicated that they had not changed their sexual behavior since becoming aware of AIDS. Fifteen percent did not have any sexual activity, while 17.6% reported that they had changed their sexual behavior. Of those who had changed their sexual behavior, most of them

p. 14 changed their behavior within the last year. Most of them have resorted to having “sex with one partner only”, “use safe sex/use condom"; followed by “stop going to baths, prostitute, massage parlors”.

Sexual Partners

When asked “how many different sexual partners you have had in the past year”, 66% had one partner, and 21% did not have any. Twenty nine (12.4%) subjects stated that they had more than one partner.

Respondents were asked whether they had had sexual activities with a list of different types of partners, such as: men, women, people who have AIDS, men who have sexual intercourse with other men, female prostitutes, male prostitutes, intravenous drug users, and people who have been sexual partners with any of the last five groups of people.

The results indicated that 11% of the respondents have engaged in sex with high-risk partners. There was a slight decrease in sexual activities with high-risk partners in the past year (from 11% to 9%), especially with male prostitutes and with partners of a high-risk group.

Frequency of Condom Use

Frequency of condom use was reported as “Always” by 5.9%, “Sometimes” by 32.2% and “Never” by 40.5% of the sample. The data on non-condom use may reflect a high proportion of married respondents (62%) and single-partner relationships (66%) in this sample.

Sexual Activities

In assessing types of high-risk sexual behavior, respondents were asked if they had ever engaged in a particular sexual activity, and if “yes” they were asked whether the activity occurred in the past year. Due to the sensitivity of the subject matter (even though precautionary measures were taken), 21.5% of respondents did not respond to the questions.

“Unsafe Sexual Behavior”

p. 15

The operationalized definition for “unsafe sexual behavior” is as follows:

- Having two or more sex partners in the past year and having vaginal or anal intercourse without a condom; or
- Having one sexual partner in the past year who is in one of the following six groups:
  - people who have aids
  - men who have had sexual relations with both men and women
  - female prostitutes
  - male prostitutes
  - intravenous drug users
  - people who have been sexual partners of any of the above types of people; and had vaginal or anal intercourse without a condom

A second category for unsafe sexual behavior is “Possibly Unsafe”, which is defined as:

- Yes to one of the items listed in a-f, and engaged in oral sex or
- Having two or more sexual partners in the past year and engaged in oral sex

Based on the above operationalized definitions, the study showed that 18 respondents (8.8%) have engaged in “unsafe sex” and 8 (3.9%) have engaged in “possibly unsafe sex”. Sixty six percent (135) have engaged in safe sex.

DRUG BEHAVIOR

Questions were asked regarding drug and alcohol behavior. Responses showed that alcohol consumption was low and so were other forms of drug use. Intravenous drug use was

considered high-risk behavior. According to the survey, only one out of the total of 205 had needle use in the past year.

Alcohol Consumption

About half of the respondents (49%) never had a drink in the past year. Twelve percent drank several times per year. Only 6.8% (14) are frequent drinkers, 3-4 times per week. Question was asked regarding the number of drinks consumed when alcohol occurred. Most of them responded that 1 or 2 drinks were consumed.

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Drug Use

In terms of doctor-prescribed drugs, 5.4% indicated that they had taken tranquilizers, and 1.5% insulin. Three out of the 14 prescribed-drug users stated that they had used needles for the drugs.

Respondents were asked whether they had used any of the following non-prescribed drugs: marijuana, PCP, cocaine, crack, downers (barbituarates/-tranquilizers), quaaludes, methadone, heroin-opiates, and speed (amphetamines, crystal). Eight respondents (3.9%) indicated that they had used non-prescribed drugs. Five of them used marijuana, while the remaining three had used cocaine, quaaludes, downers and speed. None of them were needle-users. None of them had ever shared needles. When asked about how to disinfect needle to kill AIDS virus, the most frequent response was “boiling needle"(25%).

HIGH-RISK AIDS BEHAVIOR

High-risk AIDS behavior was compiled based on two indicators: high-risk sex behavior and high-risk drug behavior. Eighteen respondents were identified as practicing “unsafe sex behavior” and 8 “possibly unsafe”. No “unsafe drug use” was found. Thus, the total number of high-risk AIDS behavior was the 18 respondents identified in the “unsafe sex behavior” group.

In sum, this survey showed that 8.8% of the Vietnamese sample are engaging in high-risk AIDS behavior, mainly by individuals who practiced unsafe sex activities.

The incidence of high-risk behavior could be increased by two methodological errors. Error could occur when the “possibly unsafe” group was not included in the high-risk group. The operationlized definition for the “possibly unsafe” behavior seems to point to strong possibility for high-risk AIDS behavior: such as, having more than one partners who practice unsafe sex behavior. The inclusion of the “possibly unsafe” as high-risk would increase the risk factor to 13.7%. Another possible error is that about 21.5% of the respondents did not respond to the questions regarding sex behavior. Further clarification from the missing data would have yielded more definitive results.

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High-Risk AIDS Behavior as Related to Demographic Profile

High risk behavior is operationalized as behavior which includes sharing needles for intravenous drug use, multiple sex partners, and having high-risk sex activities. Further definition of the concepts was made in the respective sections.

Hisk-risk AIDS behavior is significantly related to marital status, gender, and change in sex behavior in past year:

42 - Unsafe behavior is more prevalent in the single/divorced/widowed group (15%) than in the married/living together (5%);
43 - Males (13%) are more likely to have unsafe sex behavior than females (5%);
44 - Those who changed sex behavior in the past year have a greater percentage (19%) in the high-risk AIDS behavior than those who did not (5%).

V. FINDINGS: LAOTIANS p. 18

DEMOGRAPHIC PROFILE p. 19

Ninety one subjects responded to the study from the Laotian population. Person-to-person interviews were conducted with all of the subjects, who ranged in age between 18 and 65. Almost all of the interviews were conducted in the native language (97.8%). Only two interivews were conducted in English.

The mean age of the sample is 35.8 years old. Two thirds of the sample (N=61) were within the ages of 25 and 44, with the largest group (23%) in the 30-34 age group. Slightly more than half (53.8%) are female. Over half of the subjects (59%) are married, while the remaining are either single/never married (16.5%) or divorced/separated (13.2%).

About a quarter of the subjects (22%) have parents in the household. The remaining (78%) are presumably in a two generation families. The average number of children in the household is 1.9. The average household size is 4.8. The data indicate that there are more than two adults in the household although most of them are not living with their elderly parents. Although the information is not solicited in the study, one possible explanation is that many of the households include adult children or extended family members (cousins, aunts/uncles) living in the same household.

Almost all the subjects (98.9%) were born in Laos. Over half (59.3%) of the subjects have been in the U.S. for 6 to 10 years, with the remaining being in the U.S. less than five years (28.6%) and over 11 years (12%).

The mean years of education is 6.9. Over half of the respondents (53.8%) have between 1 - 6 years of education. Close to 7% did not have any formal education. One interesting characteristic is that although the norm for education is low, there is a cohort (13%) with some college education (13-15 years).

The employment profile of the respondents is diverse. The largest group is “students” (22%), followed by “unemployed/retired/welfare” (19.8%) and “housewife” (11%). Of those that are employed, most of them are in “technical, sales” (13.2% or N=12), and “service” (14.3% or 13 respondents). Ten respondents are in “production” and “laborers”.

The median income of the sample is $13,500. The mode income is $7,500, which means that the most frequent category (30.8%) is the $5,00-$9,999. The median income is reflective of the poverty level for a household of 5.

Comparability of the Laotian sample with that of the 1980 Census is shown in Appendix E. As will be noted, in the absence of 1980 Census data on the Laotian population for San Francisco, data on Laotians in San Diego is used. Comparability is difficult to establish because of possible differences in the two geographic areas and differences between the population included in the 1980 Census and the sample population. However, statistically, the differences between the 1980 Census and the study sample appear to be relatively

p. 20 small in relation to Sex, Marital Status, Education and Income. The difference is age distribution is not comparable since the study sample omitted those under age 18.

AIDS KNOWLEDGE

Knowledge about AIDS was assessed by two sets of questions. The first set inquired about the subjects' self-assessment of knowledge about AIDS and personal knowledge of someone with AIDS. The second set inquired about ways of AIDS transmission.

Overall Knowledge and Personal Knowledge of AIDS

Subjects were asked to rate their knowledge about AIDS. A quarter of them (27%) rated themselves as knowing “A Little” or “Almost Nothing”. Only 15% rated “A Great Deal”. Close to 40% of the respondents chose not to respond by not marking the responses, thus showing as “Missing Data” category. When asked whether they personally knew someone with AIDS, 13% (N=12) affirmed while 74% responded negatively.

The data showed that the sample did not rate themselves highly regarding AIDS knowledge, nor did they personally know of someone with AIDS.

Knowledge of AIDS Transmission

Knowledge about AIDS transmission was assessed through responses to eighteen statements. The median number of correct responses is 10. The mean correct responses is 8.86. The lower mean response rate points to the fact that the distribution of the correct responses skewed toward the lower end (or below the average responses of 10). The correct response rate is extremely low statistically.

Of the eighteen statements, the only item yielding a high correct response rate was transmission by “sexual intercourse/sexual relations” (64.8%). The other five major ways of transmitting AIDS were known to about half of the respondents:

45 - sharing needles with person using intravenous drugs (57.1%)
46 - receiving a blood transfusion (54.9%)
47 - passing from mother to child during pregnancy (49.5%)
48 - having anal sex (48.4%)
49 - having oral sex (41.8%)

Among the misinformed ways of transmitting AIDS, 42.9% of the respondents marked “kissing” as a way of transmission. One significant characteristic in the response pattern is the high percentage of “don't know” and “no response”. Except for the three major ways of transmitting AIDS (“sexual intercourse”, “sharing needles”, and “receiving a blood transfusion”) to which a third of the subjects did not respond, about half of the respondents did not respond or marked “don't know” for the remaining fifteen items. The high non-response rate could be interpreted as: 1) not knowing the answers; or 2) not wanting to guess the answers. In either case, the correct response rate could have been lower if we grouped the “don't know” category with the incorrect responses.

The above findings indicate that the sample's knowledge of AIDS transmission is exceedingly low, especially considering the fact that the subjects are living in an urban city (San Francisco) with one of the highest incidence of AIDS; and considering the fact that other indicators (sexual and drug behavior) showed that a large proportion of the sample was in a high-risk group (26% “unsafe”). p. 21

AIDS Knowledge as Related to Demographic Characteristics p. 22

As stated earlier, knowledge about AIDS transmission was assessed through an 18-item scale. Correct responses to the items were summed and a mean number of correct answers was then computed for each respondent. Crosstabulation was done with the demographic profile of the subjects. Respondents with 10 or more correct answers were assigned to the “High Knowledge” group while respondents with below 10 correct answers were assigned to the “Low Knowledge” group. Chi-square testing of significance was computed for all the crosstabulations.

Knowledge about AIDS transmission is significantly related to gender and education. Knowledge about AIDS is not related to income, marital status, age, drug use, sex behavior, message recall and change in sex behavior in the past year:

50 - Women tend to score low in knowledge about AIDS (84% of women), while men have a higher percentage (45%) in the High AIDS Knowledge;
51 - Education level of respondents is directly related to proportion in high AIDs knowledge--16% of the “6 years and under"; 38% of the 7-11 years; and 60% of the “12 years and over”.

ATTITUDE/OPINIONS ABOUT AIDS

p. 23

Importance of AIDS as a Health Problem

p. 24

Two open-ended questions were asked regarding subjects' perception of the major health problems in the community: the first question sought identification of the health problems; the second question sought ranking of the health problems.

The open-ended questions yielded the following ranking of health problems in the community:

It is interesting to note that although they did not rate themselves as knowledgeable about AIDS, they recognized AIDS as an important health problem in the community. AIDS was ranked as the most important health problem by 25% of the sample, second to “Mental Illness” and more frequent than “Cancer”.

Importance of AIDS to American People and to Laotian Community

Two questions were asked regarding the importance of AIDS issue to the people of America and to the Laotian community. Fifty five percent of the respondents felt that the AIDS issue is important to America, and 43% felt that AIDS is important to the Laotian community. The somewhat lower rate between items seems to indicate that the sample was slightly less concerned about the AIDS issue in their own community than in America as a whole.

When asked whether they worried about family members getting AIDS, a third (35.2%) of the respondents were “very worried” while 25% were “somewhat worried”. Thirty percent of the subjects were not worried about family members getting AIDS.

AIDS Testing

Consistent with earlier responses regarding knowledge about AIDS, two third of the subjects (63.7%) have not heard of the AIDS test. Only 5.5% of the respondents (5 out of 91) were tested for AIDS, four of whom were tested in the past year. Most respondents (70%) indicated that it would be unlikely for them to be antibody tested even though they had now found out about the testing.

The low rate of being tested for AIDS seems congruent with the low AIDS knowledge, but alarming considering the high-risk behavior indicated in the remaining study.

p. 25

Child Attending Same School/AIDS Education

Two questions were asked assessing subjects' attitude toward their child being in close contact with other children with AIDS.

Sixty percent of the respondents would take action to prevent their children going to the same school: such as keeping their child at home, or demanding the school to remove the child with

AIDS. Less than a quarter of them (22%) would continue sending their child to school. Fear of contact with people who have AIDS seemed to be manifested in this situation.

Most subjects felt that AIDS education to children under 18 should be taught jointly by parents and teachers (58%). Over a quarter (27.5%) indicated that teachers at school should be responsible for AIDS education. Although most respondents were not confident about their AIDS knowledge, and their knowledge level was low, they were nonetheless expressing interest/responsibility toward AIDS education for their children.

Attitude Toward AIDS

Respondents were asked to rate ten statements reflecting their attitude towards AIDS according to the Likert Scale of “Strongly Agree” to “Strongly Disagree”. The answers were collapsed to reflect the dichotomized responses of either “Agree” or “Disagree”.

The majority of the respondents (60.5%) agreed that they would be able to protect themselves against AIDS. Close to half (47.3%) agreed that “there is little that can be done to control the spread of AIDS”. The heightened fear seemed to be reflected in the large number of subjects (73.6)%) who agreed that “people with AIDS should be quarantined"; and 46.2% of the respondents agreeing that “people who test positive on the AIDS antibody test should be identified”.

It is interesting to note that a large number of the respondents (44%) agreed that AIDS is not a significant problem in their ethnic community, contrary to the fact that the sample from this ethnic community yielded a high risk factor (26%) for AIDS.

AIDS INFORMATION AND MESSAGE RECALL p. 26

AIDS Information p. 27

Four questions were asked regarding the respondents' assessment of AIDS information that has been broadcast or published through the mass media.

Sixty one percent responded that they “have received or heard of information about AIDS”. When asked about the source of information, the most frequent responses were “Community Agencies” (59%)' “Friends/Relatives” (58%), and TV Program (58%). Lao was the predominant language through which information was transmitted, except for TV which was transmitted equally in both English and Lao.

Most respondents (74%) would prefer AIDS information in the native language, which is not unusual considering the fact that almost all the subjects were foreign-born/immigrants. The remaining 19% of the respondents expressed that “either/both” languages would be fine.

An open-ended question was asked in terms of “the best way for you to receive information about AIDS”. The most frequent response was community health education by schools, agencies (35%), followed by “TV/radio” (18.7%) and pamphlets, literature, posters” (16.5%).

Public Message Recall

The Surgeon General's Office and various community agencies have made concerted effort to reach every household in the U.S. regarding AIDS information. Respondents were asked whether they recalled receiving or hearing such messages:

The results showed that the efforts have not been successful. Posters that were in native languages did not fare better than those in English language. Overall, about a quarter of the sample could recall the messages while almost half could not.

SEXUAL BEHAVIOR

In determining AIDS risk behavior, questions were asked regarding the respondents' sexual activities, and alcohol and drug use. Due to the senstivity of the subject matters, respondents were asked to write their answers on a card rather than verbally responding to the interviewers' questions.

p. 28

Changes in Sexual Behavior

Half of the respondents (53%) indicated that they had not changed their sexual behavior since becoming aware of AIDS. Twenty nine percent (29%) of the subjects indicated that they had changed sexual behavior since being aware of AIDS. Of those who had changed their sexual behavior, most of them changed their behavior from one to four years ago (61%), while 33% changed their behavior within the past year.

The most frequent response in terms of “ways of changing sexual behavior” was “use safe sex/use condom” (53%); followed by “stop having sex” (13%) and “sex with 1 partner only” (7%).

Sexual Partners

When asked “how many different sexual partners you have had in the past year”, 56% had one partner, and 15% did not have any. Twenty two (24%) subjects stated that they had more than one partner. Multiple partners is an indicator for high risk AIDS behavior.

Respondents were asked whether they had had sexual activities with a list of different types of partners, such as: men, women, people who have AIDS, men who have sexual intercourse with other men, female prostitutes, male prostitutes, intravenous drug users, and people who have been sexual partners with any of the last five groups of people. The following was the response rate.

Eleven respondents had ever had a total of 23 high risk sexual partners. Female prostitutes constituted slightly more than one third of all high risk partners. There was a slight decrease in sexual activities with high-risk partners in the past year (from 25% to 19%), specifically with gay men (from six respondents to four respondents) and with partners of high-risk group (four respondents to 0 respondent). Two respondents indicated that they had had sex with partners with AIDS and had not changed their behavior in the past year. There was a decrease from two respondents to one respondent in terms of sexual partners with intravenous drug users.

Frequency of Condom Use

p. 29

Frequency of condom use was reported as "Always" by 11%, "Sometimes" by 28.6%; and "Never" by 48.4% of the sample. The high proportion of respondents reporting non-condom use may reflect the high proportion of persons married (59%) and single partner relationships (56%).

Sexual Activities

In assessing types of high-risk sexual behavior, respondents were asked if they had ever engaged in a particular sexual activity, and if "yes" they were asked whether the activity occurred in the past year. One interesting result is that most respondents gave either a positive or negative answer, rather than not responding to the questions at which was a phenomenon in the Vietnamese sample.

The results seemed to indicate that men who engaged in anal sex with men were taking precaution for their sexual activities, such as using condom. However, three percent of the respondents were having anal sex while the partner was not using condom.

"Unsafe Sexual Behavior"

The operationalized definition for "unsafe sexual behavior" is as follows:

- Having two or more sex partners in the past year and having vaginal or anal intercourse without a condom; or
- Having one sexual partner in the past year who is in one of the following six groups:
  - people who have AIDS
  - men who have had sexual relations with both men and women
  - female prostitutes
  - male prostitutes
  - intravenous drug users
  - people who have been sexual partners of any of the above types of people; and had vaginal or anal intercourse without a condom

A second category for unsafe sexual behavior is "Possibly Unsafe", which is defined as:

- Yes to one of the items listed in a-f, and engaged in oral sex or

p. 30

61 - Having two or more sexual partners in the past year and engaged in oral sex

Based on the above operationalized definitions, the study showed that 19 respondents (21%) have engaged in “unsafe sex” and 3 (3.3%) have engaged in “possibly unsafe sex”. Fifty six respondents (61.5%) have engaged in safe sex. The incidence of unsafe sex was high when compared with other Southeast Asian populations; however it was comparable to studies that were done on the African-American population, and on a subsample of the Filipino population (American born and single).

DRUG BEHAVIOR

Intravenous drug use is considered a high-risk AIDS behavior, especially when needles are shared among the drug users. The survey questioned the respondents on alcohol and drug behavior.

Alcohol Consumption

Eighteen percent (17) of the respondents were frequent users, i.e. consuming alcohol daily or 3-4 times per week. A quarter of the respondents (25.3%) consumed alcohol 1-2 times per week. Thirty three percent of the respondents never had a drink in the past year. The remaining were occasional drinkers (once a month to several times per year). When asked the about number of drinks taken during the periods of alcohol consumption, most respondents (44%) indicated that they took 1-4 drinks. Seven percent indicated consuming 7 or more drinks each time.

The eighteen percent rate of regular alcohol consumption (daily or 3-4 times per week) was higher than the Vietnamese (11%); Chinese (5.3%); Cambodians (8%); and lower than the Japanese (27%). However, significance testing was not done on the differential rates between the groups.

Drug Use

In terms of doctor-prescribed drugs, 3% indicated that they had taken transquilizers in the past year. None of them used needles for the prescribed drugs.

Respondents were asked whether they had used any of the following non-prescribed drugs in the past year: marijuana, PCP, cocaine, crack, downers (barbituarates/tranquilizers), quaaludes, methadone, heroin-opiates, and speed (amphetamines, crystal). The highest incidence of drug use was marijuana (15.4%), followed by heroin (6.6%), downers (6.6%) PCP/hallucinogens (5.5%), cocaine (5.5%); and methadone (5.5%).

Of those who had used drugs, ten had used needles. Needles were used by those who took PCP/hallucinogens (4), cocaine (4), heroin (4), downers (1), quaaludes (1), methadone (1) and speed (1). Four had shared needles in the past year. Of the fifteen needle users, four used bleach to clean needles. Of the four who shared needles, two shared two times while one shared 3 times in the past year.

Unsafe Drug Use

p. 31

"Unsafe drug use" is defined as behavior whereby individuals would use illegal drugs by needle injection and/or by sharing needles. Ten respondents were found to be unsafe drug users, which yields to 11% of the sample. Unsafe drug use is high when compared with other Asian groups: 0% for Vietnamese; 0% for Cambodians; 1% for Chinese; 0% for Japanese; and 0% for Filipinos. The higher rate of drug use among Laotians may be attributable to a greater tolerance of substance use in parts of their native county, associated with the production of opium in the region bordering Burma.

HIGH-RISK AIDS BEHAVIOR

High-risk AIDS behavior was compiled based on two indicators: high-risk sex behavior and high-risk drug behavior. Operationalized definitions for high-risk behaviors were defined in the previous two sections.

Twenty four respondents (26.4%) were found to be in the "Any Unsafe Behavior". Five of them were in the unsafe drug use while the remaining 19 were in the unsafe sex behavior group. The incidence of high-risk AIDS behavior is alarming when compared with other Asian groups, such as Vietnamese (8.8%); Cambodians (5.7%); Japanese (8%); Chinese (3.6%); and Filipinos (16.7%). Among Laotians one unique factor, which has not been observed in the other groups, is the "unsafe drug use" group, which contributed 42% of the high-risk group.

In sum, this survey indicated that 26.4% of the Laotian sample engaged in high risk AIDS behavior. Twenty one percent of the sample practiced unsafe sex while 11% practiced unsafe drug use. Forty two percent of all high-risk AIDS behavior represent unsafe drug use; 79% represent unsafe sex behavior. The Laotian sample differed substantially from the Vietnamese and Cambodians in several areas to account for their higher rate of high risk behavior. In addition to higher rate of unsafe drug use, Laotians had a higher rate than Vietnamese and Cambodians in: non-use of a condom, multiple sex partners, and high risk sexual partners (people with AIDS, gay men, male and female prostitutes, and intravenous drug users).

High-Risk AIDS Behavior As Related to Demographic Profile

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As stated in earlier sections high-risk AIDS behavior is operationalized as behavior which includes sharing needles for intraveous drug use, multiple sex partners, and having high-risk sex activities.

Overall high-risk behavior is significantly related to income, drug use, sex behavior, and change in sex behavior past year. High-risk AIDS behavior is not related to education, marital status, age, gender and message recall:

62 - Respondents with low income (less than $10,000) tend to have the highest proportion (88%) of low risk-behavior, while the mid-income group ($10,000-$19,999) tend to have the highest proportion (41%) of high risk-behavior;

63 - Unsafe drug use is completely related to high-risk behavior. This finding is expected since the operationalized definition for high-risk behavior includes unsafe drug use;

64 - Unsafe sex behavior is completely related to high-risk AIDS behavior. Again, the finding is expected since the operationalized definition includes unsafe sex behavior. It is interested to note that 3% (N=2) of the "safe sex behavior" group is in the "high-risk AIDS behavior"

65 - A significantly larger proportion (54%) of those who changed their sex behavior in the past year were in the high-risk AIDS behavior; while only 16% of those who did not change their sex behavior were in the high-risk AIDS behavior. The finding indicates that changing sex behavior in the past year is related to recognition and practice of high-risk AIDS behavior.

p. 33

VI. FINDINGS: CAMBODIANS

p. 34

DEMOGRAPHIC PROFILE

Eighty seven subjects responded to the study from the Cambodian population. Person-to-person interviews were conducted with all of the subjects, who ranged in age between 18 and 65. Almost all of the interviews were conducted in the native language (98.9%). Only one interview was conducted in English.

The mean age of the sample is 37.1 years old. Half of the respondents (57%) were within the age range of 20 and 40. Slightly over a third of them (37%) were between the ages of 40 and 60.

Fifty two of the respondents (59.8%) were female. Over half of the subjects (52.9%) are married, while the remaining are either single/never married (16.1%) or divorced/separated/widowed (25.3%).

As stated earlier, the sample consisted of adults only, ages 18 and above. Fourteen of them (16%) live with parents in the household. The remaining (83.9%) are presumably in a two generation families. The average number of children in the household is 4.1. The average size of the household is 5.67. In terms of demographic profile, the mean numbers of children and household size are much higher among Cambodians than the other Asian groups.

All the subjects (100%) were born in Cambodia. The majority of the respondents (71.5%) have been in the U.S. for 6 - 10 years; twelve respondents were in the U.S. for less than five years.

The mean years of education is 3.99, which is extremely low when compared with the other Southeast Asian groups. The largest proportion of them (64.4%) have between 1 -6 years of education. Sixteen (18%) respondents did not have any formal education.

In terms of occupation, fifty six respondents (64.4%) are categorized as "unemployed/retired/welfare". Sixteen respondents (18%) are housewife/student. Thus, only 16.5% are employed. The largest proportion was employed in the "service" fields.

The median income of the sample is $11,420. The mode income is $10,000-14,999--half of the respondents have incomes within this bracket. The median income is reflective of the poverty level for a household of five.

Comparability of the Cambodian sample with the 1980 Census data is shown in Appendix F. As will be noted, in the absence of 1980 Census data on Cambodians in San Francisco, data on Cambodians in the Long Beach - Los Angeles area is used. However, comparability of the data is difficult to establish because of possible differences in the two geographic areas and differences between the population included in the 1980 Census and the sample population. The two groups are generally similar in terms of Sex and Marital Status but there appear to be substantial differences in Education and Income. The study sample is considerably less educated (3.6 years median) than those counted in the 1980 Census (medium 11.5 years) and have a lower median income ($11,420) than reported for 1980 (median $11,544). If the inflationary factor is taken

into account, the income difference would be much greater. Comparability of the age distribution is not possible due to the omission of persons under age 18 from the study sample. p. 35

AIDS KNOWLEDGE

Knowledge about AIDS was assessed by two sets of questions. The first set inquired about the subjects' self-assessment of knowledge about AIDS and personal knowledge of someone with AIDS. The second set inquired about ways of AIDS transmission.

Overall Knowledge and Personal Knowledge of AIDS

Respondents were asked to rate their knowledge about AIDS. A quarter of them (25%) rated themselves as knowing “A Great Deal”. Half of the respondents rated themselves as knowing “some” to “almost nothing” about AIDS. A quarter of them (25%) did not respond to the question. Fifteen of the subjects (17%) personally knew someone with AIDS.

Knowledge of AIDS Transmission

Knowledge about AIDS transmission was assessed through responses to eighteen statements. The mean number of correct answers is 5.7 out of 18 possible correct answers; which is a 32% correct response rate. The mean number of correct answers is the lowest among the Asian groups: 10.5 correct answers for the Vietnamese sample; 8.6 for Laotians; 10.39 for Chinese; and 14.0 for Japanese. Although the three Southeast Asian samples (Vietnamese, Laotians and the Cambodians) all indicate low education levels, the Cambodians seemed to have the lowest level (3.9), which could explain the corresponding lowest AIDS Knowledge rate.

Of the eighteen statements, two items yielded a high correct response rate: “sexual intercourse/sexual relations” (79.9%) and “receiving a blood transfusion (80.5%). The other four major ways of transmitting AIDS were known to about half of the respondents:

- sharing needles with person using intravenous drugs (50.6%)
- passing from mother to child during pregnancy (58.6%)
- having anal sex (46%)
- having oral sex (43.7%)

Among the misinformed ways of transmitting AIDS, the following items have high rates of incorrect response:

-needles used in the hospital (49.4%)
- sitting on toilet seats (49.4%)
- drinking from the same glass of an infected person (41.4%)
- being bitten by mosquito/other insect (39.1%)
- donating blood (39.1%)
- breathing the same air in a small room (36.8%)
- eating food prepared by an infected person (36.8%)

p. 36 It is interesting to note that more respondents thought that “needles used in the hospital”, and “sitting on toilet seats” would transmit AIDS than “having anal sex” and “having oral sex”. The high percentage of “don't knows” is troublesome. Twelve of the eighteen items yielded over 40% “don't know” responses. The high non-response rate could be interpreted as: l)not knowing the answers; or 2) not wanting to guess the answers. In either case, the incorrect response rate could have been higher if we grouped the “don't know” category with the incorrect responses.

p. 37 **AIDS Knowledge As Related to Demographic Characteristics**

As stated earlier, knowledge about AIDS transmission was assessed through an 18-item scale. Correct responses to the items were summed and the mean number of correct answers was then computed for each respondent. Crosstabulation was done with the demographic profile of the subjects. Respondents with 10 or more correct answers were assigned to the “High Knowledge” group while respondents with below 10 correct answers were assigned to the “Low Knowledge” group. Chi-square testing of significance was computed for all the crosstabulations.

Knowledge about AIDS is significantly related to education, marital status, age and gender. Knowledge about AIDS is not related to drug use behavior, income, and sex behavior:

- Respondents with more than 12 years of education have a greater percentage in High AIDS Knowledge than respondents with less than 12 years of formal education;
- The “single/divorced/widowed” respondents tend to have greater in AIDS knowledge than the “married/living";
- Respondents under 29 years old tend to have greater percentage in the High AIDS Knowledge group than respondents over 30 years old
- Males tend to have greater percentage in the High AIDS Knowledge group than females.

ATTITUDE/OPINIONS ABOUT AIDS

p. 38

Importance of AIDS as a Health Problem

p. 39

Two open-ended questions were asked regarding subjects' perception of the major health problems in the community: the first question sought identification of the health problems; the second question sought ranking of the health problems.

The open-ended questions yielded the following ranking of health problems in the community:

It is interesting to note that although they did not rate themselves as knowledgeable about AIDS, they recognized AIDS as an important health problem in the community. AIDS was ranked as the most important health problem by 15% of the sample, second to “Cancer”.

Importance of AIDS to American People and to Cambodian Community

Two questions were asked regarding the importance of AIDS issue to the people of America and to the Cambodian community. The majority of the respondents (63%) felt that the AIDS issue is important to America; and an equal number of respondents (64%) felt that AIDS is important to the Cambodian community. When compared with the Vietnamese and Laotian samples, the Cambodian sample seemed to express a stronger concern for AIDS in their own community than the other two groups.

When asked whether they worried about family members getting AIDS, almost two thirds (70.1%) of the respondents were either “very worried” or “somewhat worried”. Thirteen percent of the respondents were not worried about family members getting AIDS.

HIV Testing

Respondents were asked as to whether they had heard of the AIDS antibody test. Half (51.7%) of the respondents had not heard of the test. Only two respondents (2.3%) were tested for AIDS antibody; one was tested within the last year while the other was tested more than a year ago. Slightly over half of the respondents (57%) stated that it would be unlikely for them to be tested even though they have now heard of the test. A large number of them (42%) did express likelihood for being tested. The proportion of those likely to be tested is high than the Vietnamese and Laotian samples.

Child Attending Same School/AIDS Education

p. 40

Two questions were asked assessing subjects' attitude toward their child being in close contact with other children with AIDS.

Sixty two percent of the respondents would take action to prevent their children going to the same school: such as keeping their child at home, demanding the school to remove the child with AIDS from school or from the same classroom. Only two percent of the respondents would

continue sending their child to school. Fear of contact with people who have AIDS seemed to be manifested in this situation.

Most subjects felt that AIDS education to children under 18 should be taught jointly by parents and teachers (47%). Close to a quarter (21.8%) indicated that teachers at school should be responsible for AIDS education. Although most respondents were not confident about their AIDS knowledge, and their knowledge level was low, they were nonetheless expressing interest/responsibility toward AIDS education for their children. A majority of them were supportive in children getting AIDS education.

Attitude Toward AIDS

Respondents were asked to rate ten statements reflecting their attitude toward AIDS, according to the Likert Scale of “Strongly Agree” to “Strongly Disagree”. The answers were collapsed to reflect the dichotomized responses of either “Agree” or “Disagree”.

Over half of the respondents (59%) agreed that they would be able to protect themselves against AIDS. Close to half (41.4%) agreed that “there is little that can be done to control the spread of AIDS”. Half of the respondents “don't know” whether AIDS is a problem for Cambodians.

The heightened fear seemed to be reflected by the large number of subjects (59%) who agreed that “people with AIDS should be quarantined"; and and that “people who test positive on the AIDS antibody test should be identified” (36%). Both items also yielded a large proportion of “don't know” indicating the sample's reluctance to answer or lack of knowledge on the subject matter.

An open-ended question was asked in terms of the “best way to prevent getting AIDS”. The most frequent responses were “use safe sex/use condom” and “avoid people with AIDS or places”. The respondents were divided (33.4% agree vs. 22.9% disagree) as to whether AIDS will ever affect their lives. In fact the most frequent response (42%) was “Don't Know.”

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AIDS INFORMATION AND MESSAGE RECALL

p. 42

AIDS Information

Four questions were asked regarding the respondents' assessment of AIDS information that has been broadcast or published through mass media.

A third of the respondents (35.6%) have “received or heard of information about AIDS”. The percentage is extremely low when compared with the other Southeast Asian groups (67% for Laotians and 69% for the Vietnamese). Of those who responded having received information about AIDS, the most frequent sources of information are: English TV programs, ethnic and/or English newspapers and English billboards/signs. Readers should be aware that presently there are no TV programs in Cambodian language, nor are there billboards/signs in the Cambodian

language. There is extremely limited circulation of newspapers in southeast Asian languages. Thus, the response on media information is predominantly in relation to the English language. Considering the low education level, and limited proficiency in English, it should not be surprising that public information about AIDS has not reached the Cambodian community. “Friends/relatives” and “community agencies” have not supplemented the vacuum of information in this respect.

Almost all the respondents (97.7%) would prefer AIDS information in the native language.

An open-ended question was asked in terms of “the best way for you to receive information about AIDS”. The most frequent responses were TV/radio (34.5%) and community health education by schools/agencies (32%). The responses were congruent with the responses from the Vietnamese and Cambodian samples.

Public Message Recall

The Surgeon General's Office and various community agencies have made concerted effort to reach every household in the U.S. regarding AIDS information. Respondents were asked whether they recalled receiving or hearing such messages:

The results showed that the efforts have not been successful. Most respondents could not recall messages regarding AIDS. Posters that were in Vietnamese and Chinese languages did not fare much better than those in English language. It is interesting to note that the poster in Vietnamese yielded the highest response (20%) when compared with the posters in other languages.

SEXUAL BEHAVIOR

p. 43

In determining AIDS risk behavior, questions were asked regarding the respondents' sexual activities, and alcohol and drug use. Due to the senstivity of the subject matters, respondents were asked to write their answers on a card rather than verbally responding to the interviewers' questions.

Changes in Sexual Behavior

Over half of the respondents (59.8%) indicated that they had not changed their sexual behavior since becoming aware of AIDS. Only four (4.6%) out of the 87 respondents indicated that they had changed their sexual behavior since being aware of AIDS. The percentage of behavior change is much lower than the Laotian sample (29%) and the Vietnamese sample (18%). Of those who changed sexual behavior, two changed their behavior between 6-12 months,while the other two changed between 2-4 years.

Sexual Partners

Respondents were asked the number of different sexual partners they have had in the past year. Eighteen (20.7%) respondents did not have any partners. It should be noted that the Cambodian sample include a large group of single unmarried respondents who have never been married or who have been widowed.

Only 4% of the subjects stated that they had more than one partners. The percentage is lower than the Laotian smaple (24%) and the Vietnamese (12.5%). Multiple partners is an indicator for high risk AIDS behavior.

A list of different types of partners was included for the respondents to indicate their sexual activities. The types of partners include: men, women, people who have AIDS, men who have sexual intercourse with other men, female prostitutes, male prostitutes, intravenous drug users, and people hwo have been sexual partners with any of the last five groups of people.

The results indicated that 3% of the respondents have “ever” engaged in sex with high-risk partners. The percentage was reduced to 1 in the past year. The percentage of high-risk AIDS sexual behavior is extremely low when compared with the Vietnamese (9% in the past year), and the Laotians (19% in the

p. 44 past year). It should be noted that one respondent who has engaged in sexual activity with an intravenous drug user in the past year, was previously in the non-high risk group.

Frequency of Condom Use

Frequency of condom use was reported as “Always” by 4.6%, “Sometimes” by 11.5% and “Never” by 60.7% of the sample. The high rate of non-condom use may reflect a population that is largely married (52.9%) or in single partner relationships (72.4%)

Sexual Activities

In assessing types of high-risk sexual behavior, respondents were asked if they had ever engaged in a particular sexual activity, and if “yes”, they were asked whether the activity occurred in the past year. One interesting result is that most respondents gave either a positive or negative answer, rather than not responding to the questions which was a phenomenon in the Vietnamese sample.

High-risk sexual activities referred to one respondent who had anal sex with a partner not using condom. According to the operationalized definition for “unsafe sex”, oral sex behavior could indicate unsafe behavior if the respondents' partners were from the high risk group.

“Unsafe Sexual Behavior”

The operationalized definition for “unsafe sexual behavior” is as follows:

- Having two or more sex partners in the past year and having vaginal or anal intercourse without a condom; or
- Having one sexual partner in the past year who is in one of the following six groups:
people who have AIDS
men who have had sexual relations with both men and women
female prostitutes
male prostitutes
intravenous drug users
people who have been sexual partners of any of the above types of people; and had vaginal or anal intercourse without a condom.

A second category for unsafe sexual behavior is "Possibly Unsafe", which is defined as: p. 45

- Yes to one of the items listed in a-f, and engaged in oral sex or
- Having two or more sexual partners in the past year and engaged in oral sex

Based on the above operationalized definitions, the study showed that four respondents (4.4%) have engaged in "unsafe sex". The remaining were in the safe sex category. The incidence of unsafe sexual behavior was low when compared with the Vietnamese sample of 8.8% and the Laotian sample of 21%. For the Cambodian group, the four respondents were engaging in sexual behavior with partners of high-risk (intravenous drug user, anal sex with partner who was not using a condom, and having multiple partners).

DRUG BEHAVIOR

Intravenous drug use is considered a high-risk AIDS behavior, especially when needles are shared among the drug users. The survey questioned the respondents on alcohol and drug behavior.

Alcohol Consumption

Eight percent (7) of the respondents were frequent users, i.e. consuming alcohol daily or 3-4 times per week. When compared with other Asian studies, the incidence of regular alcohol consumption (daily to 3-4 drinks per week) is comparable to the Chinese (5%); but lower than the Vietnamese (11%); Laotians (18%); and the Japanese (27%).

Drug Use

In terms of doctor-prescribed drugs, 8% had taken tranquilizers, and 2.3% methadone in the past year. One of them used needles for the prescribed drugs.

Respondents were asked whether they had used any of the following non-prescribed drugs in the past year: marijuana, PCP, cocaine, crack, downers (barbituarates/tranquilizers), quaaludes, methadone, heroin-opiates, and speed (amphetamines, crystal). Two respondents

indicated taking quaaludes in the past year. One respondent injected drugs with needle in the past two years. None of the respondents had shared needles.

Unsafe Drug Use

"Unsafe drug use" is defined as behavior whereby individuals would use illegal drugs by needle injection and/or by sharing needles. One respondent (1.1%) was categorized as an "unsafe drug user" based on the operationalized definition. The low incidence of unsafe drug use is comparable to studies of other Asian groups, e.g. Vietnamese (0%); Cambodians (0%); Chinese (1%); Japanese (0%); and Filipinos (0%).

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HIGH-RISK AIDS BEHAVIOR

High-risk AIDS behavior was compiled based on two indicators: high-risk sex behavior and high-risk drug behavior. Operationalized definitions for high-risk behaviors were defined in the previous two sections.

Five respondents (5.7%) were found to be in the "Any Unsafe Behavior" category. One of them was in the "unsafe drug use" category; and the remaining four were in the unsafe sex behavior group. The respondent with unsafe drug behavior was using methadone by injection. The four respondents with unsafe sexual behavior were engaging in sexual activities with high-risk groups, such as people with AIDS, female prostitutes, and having anal sex while partner not using condom.

The rate of "any unsafe behavior" (5.7%) was comparable with three other Asian groups: such as, Vietnamese (8.8%); Japanese (8%); and Chiense (3.6%); and exceptionally lower than the Filipinos (16.7%) and the Laotians (24%).

High-Risk AIDS Behavior As Related to Demographic Profile

As stated in earlier sections high-risk AIDS behavior is operationalized as behavior which includes sharing needles for intravenous drug use, multiple sex partners, and having high-risk sex activities. Overall high-risk behavior is significantly related to drug use, and sex behavior. High-risk behavior is not significantly related to income, education, marital status, gender, message recall, and knowledge about AIDS. Since the variable for high-risk behavior is defined according to the composite of unsafe drug use and unsafe sex behavior, it is not surprising that the these three variables are significantly related.

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VII. SUMMARY

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This study aimed at establishing a profile of AIDS knowledge and high-risk characteristics of the Southeast Asian population in San Francisco. When we talk about the Southeast Asian population, we are referring to people coming from vastly different countries, having different languages, different cultural orientations, religions, and histories. It would be methodologically unsound to consider the population as if they are one homogeneous group of people. For this

reason, the study was conducted by sampling three major groups of Southeast Asians rather than one, reflecting the three countries of origin of Southeast Asians who presently reside in San Francisco: the Vietnamese, Laotians, and Cambodians. The results of the study were also structured in such a way that findings for each group was reported separately. The Summary section is an attempt to compare the characteristics of the three groups. It should be noted that the term "Southeast Asians" is used to denote the composite characteristic of the three groups (Vietnamese, Laotians, Cambodians).

Demographic Profile

A total of 383 respondents were queried: 205 Vietnamese, 91 Laotians, and 87 Cambodians. Almost all of the interviews (98%) were conducted in the native language.

The mean age (36 years old) is similar in all three groups. Most of the respondents in fact came from the age group of 25 to 44. Over half of the subjects were married (62% Vietnamese, 59% Laotians, and 53% Cambodians). There is a larger proportion of Vietnamese (27%) that is single/never married when compared to the Laotians (16.5%) and Cambodians (16.1%). The proportion (25%) of divorced/separated is largest among the Cambodians (vs. 11% Vietnamese and 13% Laotians).

The two generation household is prevalent in all three groups: over 80% of the respondents are not living with their aging parents. Household size varies from 5.67 for Cambodians, to 4.8 for Laotians and 4.6 for Vietnamese. The average number of children in the household varies from 4.1 for Cambodians, to 2.27 for Vietnamese and 1.9 for Laotians. The data indicate that household size in all three groups is greater than the household size of the general population. The Cambodians have exceptionally large households with a greater number of children. The Laotian and Vietnamese samples seemed to have more than two adults in the household, which might indicate households with extended adult family members.

The respondents from all three groups are predominantly immigrants and refugees born in their country of origin. The average number of years in the U.S. is between 6 - 10 years, thus reflecting the second wave of refugees who came to the U.S. after the 1980 Refugee Act.

The education levels of all three groups are low compared to the U.S. general population: 8 years for Vietnamese, 6.9 years for Laotians and 3.89 years for Cambodians. However, it should be noted that the education system in Southeast Asia is different from the U.S. The mean years of education are probably reflective of the countries of origin.

For the Vietnamese sample, AIDS knowledge is also significantly related to income: the poor group scores lower in AIDS knowledge than the higher income group. For the Cambodian sample, in addition to gender and education, AIDS knowledge is significantly correlated with marital status and age: the single/divorced/widowed and the "below 29 years old" group tend to score higher in AIDS knowledge than the married/living together and the "above 30" age group. p. 50

It is important to note that AIDS knowledge is not significantly related to high-risk sex behavior, nor with message recall, and drug behavior.

Attitude/Opinions About AIDS

All three groups ranked AIDS as the second greatest health problems in the community (cancer being first for Vietnamese and Cambodians, and mental illness for Laotians). Over two thirds of the samples expressed worry about family members getting AIDS.

Over half of the samples have not heard of the AIDS-HIV test. A small number of them were tested in the past year: 6.8% Vietnamese; 5.5% Laotians; and 2.3% Cambodians.

Opinion toward AIDS was assessed through questions regarding whether respondents would send their children to the same school if AIDS was detected among other children. The majority of the samples answered negatively. Only 25% of the Vietnamese sample, 22% of the Laotian sample, and 2% of the Cambodians would continue sending their children to the same school. Low level of AIDS knowledge is directly related to heightened fear of AIDS. All three samples stated that AIDS education to children under 18 should be taught jointly by parents and teachers.

Attitude toward AIDS was studied according to responses to a group of statements on the prevalence of AIDS, and societal treatment of AIDS individuals. All three samples agreed that they would be able to protect themselves against AIDS; half of the respondents agreed that "there is little that can be done to control the spread of AIDS." A great number of the respondents agreed that "people with AIDS should be quarantined" (74% Vietnamese; 74% Laotians and 59% Cambodians); and that "people who test positivie on AIDS antibody test should be identified" (50% Vietnamese; 46% Laotians and 36% Cambodians).

AIDS Information and Message Recall

A major purpose of the study was to find out if the mass media has successfully reached the population in terms of AIDS information. Among Vietnamese, 69% and among Laotians 61% had heard or received information about AIDS; only 36% of the Cambodians responded similarly. Television programs, community agencies, friends/relatives were cited as sources of information.

All three groups expressed preference for their native language for AIDS information. TV/radio, community health agencies/schools, and pamphlets/literature were the desired ways of receiving the information.

p. 51 Respondents were asked to identify four slogans that were used for public messages on AIDS. All three samples scored low in recognizing the slogans; slogans in the native language did not score better than those in English.

Sexual Behavior

Over half of the respondents from all three samples stated that they had not changed their sexual behavior since being aware of AIDS. However the percentage of those who changed their behavior varied among the three groups: 29% of the Laotians, 17.6% of the Vietnamese and 4.6% of the Cambodians. The Laotian sample, which had the highest risk behavior for AIDS, indicated the largest percentage for changed sexual behavior. The most frequent responses to changed behavior include “use safe sex/use condom"; and “sex with one partner only”.

The majority of the samples had sex with one partner. Close to 20% of the Vietnamese and Cambodians, and 15% of the Laotians did not have sex in the past year--probably corresponding with the large number of single/never married/widowed group of the samples.

There is a great variation in the proportion of the sample having more than one sexual partner--24% of the Laotians, 12.4% of the Vietnamese and 4% of the Cambodians. The high incidence of multiple partners among the Laotians corresponds with their high incidence of high-risk AIDS behavior.

In terms of high risk sex partners, the results indicated that gay men, and female prostitutes were prevalent. Intravenous drug user was a very weak third group. Men were the prevailing group for practicing sex with high-risk partners. The highest incidence of high-risk sex partners is among the Laotians (25%), followed by Vietnamese (11%) and Cambodians (3%).

Questions were asked regarding sexual activities which might indicate “safe” versus potentially unsafe sex activities. In particular, respondents were asked whether a condom was used for vaginal and anal sex, and whether oral sex was practiced. The majority of all three groups (58% of the Vietnamese, 62.6% of the Laotians, and 57.5% of the Cambodians) engaged in vaginal sex without a condom. Gender breakdown of the sub-group (the vaginal sex without a condom) showed a higher proportion of women than men (75% for women, 55% for men). Unprotected anal sex was practiced by 5.9% of Vietnamese, 2.2% of Laotians and 1.1% of Cambodian.

For the purpose of this study, “unsafe sex behavior” is defined as behavior which includes a composite of characteristics: for example, having multiple partners for vaginal or anal intercourse without a condom, or having one partner in the high-risk group (people with AIDS, bisexual or homosexual men, prostitutes, and intravenous drug users). The incidence of unsafe sexual behavior varies among the three samples with Laotians having the highest percentage (21%), Cambodians the lowest (1.1%) and Vietnamese in the middle (8.8%).

Drug Behavior

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Intravenous drug use is considered high-risk AIDS behavior, especially when needles are shared and when intravenous drug users engage in sexual activities.

The results indicated that the incidence of unsafe drug use is low among the Cambodians (1.1%) and Vietnamese (0%). The low incidence is comparable to other Asian groups, such as

Chinese (1%), Japanese (0%) and Filipinos (0%). However, the Laotian sample showed a high percentage of unsafe drug use (11%), which played a significant part in the total incidence of "Unsafe AIDS behaviody. Intravenous drug use was practiced by individuals who were using the following drugs: PCP/hallucinogens, cocaine, heroin, downers, quaaluds, methadone and speed. Laotians had a higher rate of drug use in general than the Cambodians and Vietnamese. This may be attributable to a greater tolerance of substance use in parts of their native country, associated with the production of opium in the region bordering Burma.

Alcohol consumption has been shown to be incompatible to most Asians because of physiologic or enzymatic makeup of the body. It is therefore common for Asians not to consume alcohol on a regular basis. The results seemed to confirm the above medical generalization. An extremely small percentage of the Cambodians (8%) and Vietnamese (6.8%) are frequent drinkers, 3-4 times per week. The results are comparable to a similar study of the Chinese sample (5% frequent drinkers).

The Laotian sample has a higher percentage of alcohol consumption (18% frequent drinkers) than the Vietnamese and Cambodian samples. It is interesting to note that the Laotian sample is also the one with the highest incidence of drug use. However, the significance of alcohol consumption in relation to drug use was not established. The results could be a matter of idiosyncracy in the sample rather than in the larger Laotian popualtion. Further studies will have to be done to establish or generalize beyond the sample.

High-risk AIDS Behavior

p. 53 High-risk AIDS behavior varied among the three samples, with the Laotian sample having the highest incidence 26.4% and the Cambodians the lowest (5.7%), Vietnamese being in the middle (8.8%). For the Cambodian and Vietnamese samples, the incidence of high risk behavior is comparable to studies done on the Chinese (3.6%), Japanese (8.1%) and Filipinos (6%). High risk behavior was more prevalent among sex behavior rather than drug behavior for the Chinese, Japanese, Filipinos, Cambodians and Vietnamese.

High-risk AIDS behavior is significantly related to unsafe sex and unsafe drug use (which correspond with the operationalized definitions). In addition, for some of the samples, high-risk behavior is related to marital status (Cambodians), income (Laotians) and change in sex behavior in the past year (Laotians). The single/unmarried, the low-income, and those who changed their sex behavior in the past year have a greater chance of being in the high-risk group than their counterparts.

The Laotian sample seemed to differ a great deal from the other Asian groups in two areas: a higher rate of high risk AIDS behavior (26.4%) and a high component of unsafe drug behavior (41.6%) in the totality of high risk behavior. In addition to a higher rate of unsafe drug use, Laotians had a higher rate than Vietnamese and Cambodians in: non-use of a condom, multiple sex partners, and high risk sexual partners.

Another possible contributing factor to account for the higher rate of unsafe behavior among Laotians is a possible oversampling of homosexual and bisexual men and intravenous drug users due to unforeseen sampling circumstances. A consequence of the sampling method, which required interviewing of adults in randomly assigned households, was that two of the 21 buildings sampled yielded a total of 16 interviews (17.6% of all interviews). Of the 16 respondents, 13 (81.3%) were found to engage in high risk behavior. Informed community sources confirm that these two buildings happen to house a community of Laotian homosexual and bisexual men and that their distribution is not representative of the rest of the sampled buildings. Due to the size of the sample and limited knowledge of the wider Laotian community, it would be difficult to demonstrate mathematically the degree of oversampling of the high risk population in the study sample. This issue would warrant further investigation.

VIII. CONCLUSION AND RECOMMENDATIONS

p. 54

This study has yielded baseline information regarding the Southeast Asian community's knowledge about AIDS, sexual behavior, drug behavior, attitude/opinions about AIDS, ways of reaching the community, and overall high-risk AIDS behavior. Research questions that were posed by health officials include:

1. Is there a relationship between AIDS Knowledge and high risk behavior?
2. Who are the high-risk individauls?
3. What is the community's understanding/opinion/attitude toward the AIDS issue?
4. How can we best reach the community for preventive measures?

This report is an attempt to provide answers to the above questions. The following conclusions are drawn based on the study. In order to provide concise and direct responses, there are instances of over-simplifying the results. Readers are asked to refer to the original data and the full-text for comprehensive information.

Relationship Between AIDS Knowledge and High-risk Behavior

AIDS Knowledge is defined as knowledge about the known ways of AIDS transmission; an 18-item scale of close-ended questions was used in assessing the concept. High-risk AIDS behavior is defined as a composite of sexual activities and drug behavior which have been identified as contributing factors to high-risk. According to the results of the survey from three samples (Vietnamese, Laotians, and Cambodians) of Southeast Asian community in San Francisco, AIDS Knowledge did not show a significant relationship with high-risk AIDS behavior. Respondents with high score on AIDS Knowledge seem to be just as likely to be in the high-risk group as those in low AIDs Knowledge.

The overall AIDS knowledge in all three samples is critically low, which means that the Southeast Asian community's understanding of AIDS is minimal. Although respondents are knowledgeable about the major ways of transmitting AIDS, many cannot distinguish the myths and fallacies about AIDS transmission. Knowledge about AIDS is significantly related to gender and education in all three samples. Women are more likely to score low in AIDS knowledge than

men. Level of education is correlated with AIDS knowledge: low level of education corresponds with low level of AIDS knowledge. Other factors that have shown significant relationship to AIDS knowledge in one or more of the samples are income, marital status and age.

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Recommendations:

1. Special outreach efforts should be made to reach Southeast Asian communities to increase their knowledge and understanding of AIDS.
2. In addition to traditionally known high risk groups, AIDS education should target women, people with a low level of education, the single/unmarried, and people over age 30.
3. The content of AIDS education should focus upon clarification and correction of misinformation about how AIDS is transmitted.

High Risk Behavior

High risk behavior is manifested significantly in sexual activities. Intravenous drug use is presently not a significant factor in the Cambodian and Vietnamese communities; however, the Laotian sample showed unsafe drug use as a major contributing factor to high risk behaviors.

The three samples varied greatly in incidence of high risk behavior with the Laotian sample having an extremely high rate of 26%, in contrast to 8.8% among Vietnamese and 5.5% among Cambodians. Among Laotians, in addition to intravenous drug use, other major risk factors were: unprotected homosexual activities, multiple sex partners, and sex with high risk partners.

The high risk groups most in need of targeted intervention are Southeast Asian homosexual and bisexual males. Experience has shown that the most effective approach is through the use of peer groups to provide support for safer drug and sexual behavior and to reinforce reduced risk behaviors. Peer groups also provide the interpersonal support essential to maintain behavior changes already made and to prevent relapse to old habits.

Recommendations:

1. Special efforts with bilingual staff should be made to reach high-risk groups, especially homosexual and bisexual men, to encourage safe sex practice and discourage intravenous drug use.
2. Behavioral interventions must include bilingual HIV counseling and testing, one-on-one counseling services, support and counseling groups and periodic planned follow-up contacts.
3. Peer counseling should be encouraged as a method of reaching high-risk individuals. Special effort should be made to engage Southeast Asian peer counselors who are themselves members of high-risk groups to function as facilitators..
4. The formation of peer facilitated groups, patterned after the concept of self help groups, should be encouraged and supported among Southeast ASian high-risk groups.

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5. Counseling should move beyond the provision of general information about AIDS transmission and focus upon personalized risk assessment, the effectiveness of specific risk reduction strategies, and skill building in risk reduction behaviors.
6. A focus of AIDS outreach should be places where high-risk groups and sex industry workers congregate, such as particular street corners, bars, coffee and noodle shops, massage parlors and hotels.
7. HIV testing should be encouraged as part of the overall AIDS prevention outreach effort.
8. The unexpectedly high rate of unsafe behavior found in the Laotian community calls for special attention. Further research is needed for a more definitive knowledge and understanding of the role of AIDS in the Laotian community.

Opinion/Attitude Towards AIDS and Means of Reaching the Community

Although knowledge about AIDS is not significantly high in the Southeast Asian community, there is consensus that AIDS is a major health problem facing the community and the larger society. There is fear that the respondents' immediate family members may be exposed to AIDS. The heightened fear is compounded with the low level of knowledge regarding the disease, leading to either a fatalistic/apathetic attitude (as reflected in a large number of “Don't Know” responses) or extreme attitude/opinion regarding AIDS. For example, most respondents would not keep children in schools where AIDS children are identified; most respondents agree that individuals with AIDS should be quarantined and publicly identified; and most respondents feel that there is nothing one can do about AIDS.

In terms of how to reach the community, the study showed that previous efforts to reach the community through mass media slogans and messages have not been successful. Respondents preferred that AIDS information be disseminated through community agencies and TV/radio programs. They also prefer that the information be in their native language rather than English. When ask about AIDS education to children under 18, a majority of respondents would support such effort and would like to be partners to teachers.

Recommendations:

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12. AIDS education programs should be mounted in Southeast Asian communities utilizing the full range of ethnic media, with heavy emphasis upon ethnic TV/radio programming.

13. The popularity of videotapes for recreational use in Southeast Asian communities should be exploited by including AIDS information in tapes that are most frequently rented.

14. Bilingual health educators should reach out to collectivities of Southeast Asians, such as in their workplaces, schools, temples, churches and other community based facilities.

15. Schools which have a high enrollment of Southeast Asian children should be included in the outreach effort to impart AIDS information as part of the sex education curriculum.

16. Organizations that serve Southeast Asian communities must be involved in efforts to provide AIDS education presentations and literature to their constituencies in their native language.

17. Educational methods and materials should be sensitive and relevant to the level of education of the targeted groups.