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Barriers to Health Care Access in 13 Asian American Communities

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Abstract

Objective: To obtain and discuss in-depth information on health care use in Asian Americans (AAs).

Methods: Nineteen focus groups were conducted in 174 adults from 13 AA communities in Montgomery County, Maryland. MAX QDA software was used to analyze qualitative data.

Results: Financial, physical, communication, and cultural attitudes were 4 major barriers to accessing health care. Underrepresented communities reported unique additional barriers, such as lack of screening opportunities and interpretation services due to lack of resources in the communities.

Conclusions: Future studies, public health policy, and funding resources should consider including underrepresented AA subgroups and reflect their needs.

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Keywords

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Asian Americans (AAs) are often labeled as a "model minority" because of their perceived successful adaptation to American life perhaps due to their higher income and education levels than those of other minority groups.^{1–3} This erroneous perception, usually derived from limited studies focusing on large AA communities (6 AA subgroups (Asian Indian, Chinese, Filipino, Japanese, Korean, and Vietnamese) on which the Census collects and reports data separately), often masks the social and economic needs of this growing population. This group often struggles as other ethnic minorities do, with employment opportunities, language and cultural barriers, and the necessary skills to navigate the American system effectively.⁴

This is particularly the case in health care access in AAs in the United States. For example, AAs are more likely to be uninsured than whites are. According to the national data, the uninsured rate for non-Hispanic whites is 12%, whereas it is 17% for AAs in 2004–2006.⁵ Moreover, the uninsured rates can be much higher when examined more precisely by subgroups of AAs: for instance, 31% of Korean Americans, 21% of Vietnamese Americans, 20% of other South Asian Americans, 16% of Chinese Americans, and 14% of Filipino Americans are uninsured.⁵ Studies indicated that AAs who were uninsured had 40% fewer visits to physicians compared with those with health insurance,^{6,7} and uninsured AAs are also less likely to have a regular source of care.⁷ Thirty percent of Vietnamese men surveyed perceived cost as a barrier to hepatitis B testing,^{8,9} and Korean women identified cost of screening as an important barrier to receiving clinical breast examinations and mammograms.¹⁰ Even when AAs have health insurance, expensive out-of-pocket payment for care can be prohibitive for many individuals. For example, 80% of Cambodians suggested that cost was a barrier to seeking mental health services.¹¹

Access to health care in AAs could also be compromised due to logistical barriers such as long wait times, transportation, and child care. Chinese and Vietnamese participants reported that they did not want to wait longer than 45 minutes for an appointment,^{7,12,13} and 18% of Vietnamese immigrants and refugees also cited long wait time and taking time off work (11%) as barriers.⁸ Studies indicated that AA women reported transportation and child care as barriers to health care.^{7,13–16}

The language ability necessary to arrange a physician's appointment, explain symptoms, and understand diagnosis and treatment is an essential skill for effective health care use. Many AAs lack such language skills, thus imposing another barrier to health care access. Fifty-seven percent of Cambodian women reported difficulty getting medical care because of difficulty in finding interpreters.¹⁴ Sometimes, children serve as interpreters, which poses other problems, such as up-setting of the family power dynamic, general embarrassment, incorrect or incomplete communication when children lack the appropriate medical terminology, and delay of care in the elderly who do not want to bother their working children for assistance.^{7,12,13,15–18} In terms of information and education, participants expressed a need for prompt communication about test results and written health education

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materials and prescription information in their native language.^{12,13,15,19} Other studies reported language as a barrier for preventive screenings,^{8,10} and less English proficiency was a predictor for higher traditional health practices.^{7,16,20}

Studies have reported AAs' general preference of having AA physicians over physicians of different racial/ethnic background or of having female physicians for intimate cares. Vietnamese American participants reported they would have increased odds of having a rectal exam if they would see Vietnamese doctors regularly.²⁰ Three quarters of Cambodian American women studied preferred a female physician for gynecological exams.¹⁴

When in need of health care, many AAs use complementary and alternative medicine (CAM). Over 75% of AA participants responded that they had used some form of CAM in the past year, most commonly herbal therapies.²¹ Being uninsured and having experienced a delay in Western care increased the likelihood of using CAM as well.^{7,13,15,16,21} In a sample of foreign-born Vietnamese women, those who had spent fewer years in the United States, those with less education and English proficiency had statistically significant higher use of CAM.²⁰ Misconceptions of Western medicine can also explain the high levels of CAM use among the AA population.^{7,12} Western medicine was described by participants as more potent and with greater side effects than the CAM methods.^{12,13,15}

Few studies have comprehensively examined issues related to health care access in diverse AA communities. These limited studies, generally focused on larger AA subgroups, mostly attributed the lack of access and use of health care services in America to lack of health insurance, time, transportation, and language. However, it is unclear how cultural attitudes influence health care use in AAs, how they perceive and are able to cope with barriers, and how they respond to their health care needs. This study seeks to understand the factors that influence access to health care among 13 different AA communities in the state of Maryland at a deeper level by extending the study sample to underrepresented AA communities in addition to bigger groups (we refer underrepresented communities as AA communities that do not belong to large 6 communities on which the Census collects data separately). We also include diverse populations in terms of gender and age to better represent AA communities. Additionally, by using focus group design, we seek to expand knowledge into a deeper level that may not otherwise be obtained from surveys.

METHODS

We conducted 19 focus groups with members from 13 AA communities in Montgomery County, Maryland, in order to assess their health and health care needs. More specifically, we asked about barriers to health services, such as access to preventive and curative care, physician preference, and use of complementary or alternative medicine, along with suggestions on improving access to health care. We chose focus groups as our data collection method because it is a highly effective method using a planned discussion in a nonthreatening environment that would be less accessible without the interaction found in a group.^{22,23} Human subjects' approval for collecting these data was provided by University of Maryland Institutional Review Board (IRB).

Sample

Our sampling strategy is a combination of a purposive stratified and convenience sampling to recruit members of a hard-to-reach population, stratifying on the basis of gender, agegroup, and their membership with faith-based or community-based organizations.²⁴ This sampling scheme was designed to capture a diverse and broad range of health care needs. The present study aimed to recruit 8–10 participants for each focus group. In total, 19 focus groups were conducted with 174 members from 13 AA communities in Montgomery County, Maryland. Out of 13 AA communities, Asian Indian, Chinese, Filipino, Japanese, Korean, and Vietnamese are considered to be larger AA communities, and the rest of AA communities including Burmese, Cambodian, Indonesian, Nepali, Pakistani, Taiwanese, and Thai are referred to as underrepresented communities. Eligibility criteria were adults 18 years old or older who lived in Montgomery County for more than 6 months. Detailed characteristics of our sample from each community are laid out in Table 1.

Recruitment

Recruiting participants from hard-to-reach communities (especially those AA groups who were underrepresented) was very challenging. We worked with community leaders and student assistants from each subgroup who had existing rapport with the respective communities. They helped us with recruitment of participants, translation of documents needed for focus groups, and interpretation during focus groups. We posted flyers across the campus to recruit student assistants from these communities. Most of our participants were recruited through personal contacts of these community leaders and students, and some of participants were recruited through flyers or other advertisement and with assistance from the county government. Thus, a partnership among the research team, community leaders, and the county government was a key factor in making this very challenging task possible. In Montgomery County, Maryland, where our research team conducted the research, 14% of the total population is AA, and the 6 large AA communities constitute 87% of AAs in Montgomery County, Maryland. The remaining 13% are referred to as underrepresented communities.²⁵

Data Collection

The research team developed a moderator's guide that was used in all focus groups. First, we developed a list of topics and questions and prioritized them based on literature review and flow of discussion. Finally, we sent the moderator's guide to 2 experts in AA health issues (who served as consultants for the project) for their review and feedback.

We conducted focus groups from May 2007 to August 2007. Each focus group lasted one and a half to 2 hours. Most of the focus groups were moderated by one person who has had 18 hours of prior experience in conducting focus groups in diverse populations such as racial/ethnic minorities, women, and adolescents. The principal investigator was present at all focus groups to ensure that topics were thoroughly covered. The note-takers who received 2-hour training on note-taking methods and their roles took careful and systematic notes. Data were collected mostly on weekends due to participants' preferences and at convenient locations for participants. Focus groups were conducted in English or their native language based on participants' preference. We asked their preference before each focus group and

arranged for interpretation when necessary. We received signed informed consent from each participant before the focus group took place. All focus groups were audio-recorded with consents.

Data Analysis

The entire focus group sessions were transcribed immediately after meeting, and transcripts were compared with notes as needed to assure completeness of data. Then, interpreters reviewed each transcript and audiotape to add transcriptions that were not in English and to interpret any cultural expressions.

The research team met after each focus group and reviewed every procedure. Strengths and weaknesses of each focus group were discussed to improve upcoming focus groups. Prior to data analysis, we developed an analysis plan delineating the categories that would best answer our research question. These broad categories, namely financial, physical, and cultural barriers, guided the data analysis. We used Max QDA, a qualitative data analysis software program, to organize the data, the categories, and emergent themes. Under each of these categories distinct themes emerged that better described multiple aspects of each preidentified barrier. For example, although financial barrier was a predefined category in our analysis plan, themes such as lack of health insurance and out-of-pocket expenses emerged during the analysis. Moreover, during the analysis it became clear that preference for physician and the use of Cam were recurrent themes in every community discussion and influenced individuals' health service access. Therefore, we assigned them their own category.

After completion of data analysis for each group, we wrote a report for each community. Once the drafts were written, everyone in the research team reviewed and commented on the report that was then circulated among interpreters and community members who participated in focus groups for their feedback. We provided summaries from 19 groups if findings from analysis were very similar across groups, and some discrepancies or unique findings in certain group(s) are presented separately or specifically quoted.

RESULTS

Characteristics of Participants

Characteristics of study participants are shown in Table 1. One hundred seventy-four individuals (79 males and 94 females, 1 missing gender information) from 13 AA subgroups participated in the study. Age of participants was almost evenly distributed. Because we recruited many community leaders and health care professionals in order to obtain more accurate and representative information, participants' education, income level, and health insurance status are likely to be higher than those of average individuals in each community. When we asked various questions to participants, we not only asked them to answer their own thoughts, but also encouraged them to discuss their perceptions of their community members and their respective communities as a whole.

Factors That Hinder Access to Preventive and Curative Health Care

Financial barriers to health care services access.—Lack of health insurance. All AA communities studied overwhelmingly identified the inability of community members to afford health insurance or obtain it through their employment as the main barrier in health care access. Participants reported that their most vulnerable community members, such as low-income and unemployed individuals, students, retirees who did not qualify for Medicare, and undocumented migrants, lacked health insurance. One participant explained many elders face the insurance coverage gap after retirement. "Many people are older, like at my age God forbid if I'm laid off, I'm not qualified for Medicare, but I'm not qualified for any health insurance. I have to buy the health insurance...." Moreover, participants reported that a sizable percentage of young AAs work in low-wage jobs, such as in restaurants, in home-based business, and in child care. These individuals often do not get health insurance benefits from their employers. According to participants, individuals who lack health insurance are also less likely to obtain preventive routine and screening procedures. "There are a lot of Taiwanese people who don't have health insurance. So they don't normally go for regular physical checkups. And because of not doing that they don't know what their problems [are] until it becomes serious, and by that time it becomes too late."

Expensive out-of-pocket payment for care.—According to participants, for many AAs the high cost of medical expenses, insurance co-payments, and the cost of prescription medication are often decisive factors of whether to seek or medical care or not. "They have insurance, but the portion that they have to pay is more than they think they can afford.... Some people can afford co-pay but when they look at the prescription drug that they have to buy, it costs more expensive." Taiwanese community mentioned that some of their members travelled to their native country to undergo expensive medical and dental treatment because it is more affordable. Most communities do not have the resources to travel frequently to their countries. When they do, some bring back prescription medication in case they get sick so that they can self-medicate. "I know that medicine from Thailand is so cheaper than from here, so many Thai people get the medicine from Thailand."

Physical Barriers to Health Care Services Access

Lack of transportation.—According to participants, many AAs, particularly elders, do not often have access to transportation. Taxis can be very expensive, and for those who lack language skills or have mobility difficulties, using public transportation is a challenge. Therefore, many elders rely on other family members for transportation to medical appointments. "Most of those elderly, they stay at home just waiting for their children to come home. They really don't have much in the way of going out or transportation, so any health needs, they have to make an arrangement or wait for their children to bring them to the office."

Schedule conflict with medical appointments.—Participants in most communities commented on the challenge of obtaining a medical appointment when sick. Some participants mentioned that many AAs were not able to schedule appointments during the day and preferred night or after-hours appointments. Many consider that when they are sick they need to see the doctor on that same day. However, they reported that appointments were

often given at a later date. "When you get sick, you call the physician, they can't give you an appointment for the next couple of days so what you do, you go to the drug store, you buy something over the counter."

Communication Barriers to Health Care Services Access

Language barrier.—Many AAs are not comfortable speaking in English and expressed difficulty in communicating with physicians. This was particularly the case for many elders and recent migrants. "We don't know English as much.... We can't express ourselves to ... the physician. One can tell them in Nepali, but don't know exactly the words in English."

Health literacy.—Even Asians who have a relatively good command of the English language have difficulty in describing symptoms, understanding the physician's explanation and treatment, and reading prescription labels. "It's a problem when they got the result from the scan, from the x-ray, or others. Even if some of them know some English, the medical and technical terms are difficult."

Cultural Attitudes About Health and Health Care

Receiving routine checkups and regular preventive care is not a cultural

norm.—Participants in most communities reported that going to the physician on a regular basis for routine checkups and preventive care is not the norm in their countries of origin. They are used to going to the physician only when they are very ill for curative, rather than preventive, care. This cultural practice associated with a lack of awareness of preventive care often prevails even after immigrating to the United States and often has an adverse bearing on younger generations. According to participants, this is in part due to a general unawareness of the importance of preventive care among community members. One participant explains, "People don't have the habit of visiting doctors on a regular basis to have blood test or urine test. They don't take preventive actions, and they don't tell until the problem becomes very bad."

Women face multiple barriers.—According to participants, women are less likely to seek preventive health care. This is attributed to a combination of factors. Participants reported that women have a strong preference for female physicians when they need "intimate" health care. "A special issue, like OB-GYN, we prefer to go to woman. Even if they are still virgin or already have a baby, we prefer woman, not man." Therefore, those seeking health care in a public clinic or hospital have little control over the gender of the health care provider assigned to them. Moreover, some communities concurred that women tend to go to the gynecologist during their pregnancy only. "That [is] a big problem with our (Indonesian) people. They don't, they haven't seen the doctor since their last delivery. Oh, it was 30 years ago, whatever."

Preference for physicians.—Participants from most communities reported that individuals with or without insurance alike prefer physicians who are also Asian. Participants explained that many AAs perceive Asian physicians as more understanding and knowledgeable about the diseases that afflict them. Moreover, they also perceive them as more culturally sensitive, and many are able to communicate in their native language. "I see

the increasing number of the Taiwanese people that prefer to go to Taiwanese doctors because they explain more in their language."

Use of Complementary and Alternative Medicine (CAM)

Most AA communities use CAM to manage a diversity of illnesses. Participants in most communities reported that the use of traditional medicine is ingrained in their culture and, as a result, may be preferred over Western medicine. "Even though people have insurance, some people from Taiwan think there are some Chinese medicines that are very effective, and they may not try to go see the doctor." According to participants, CAM may be used to replace Western medical treatment if access to health care is not possible. However, the vast majority of participants concurred that some CAM treatments are used temporarily, and if symptoms do not subside in 3 days, they usually seek medical care. "For me, I think traditional medicines are there to help the first couple of days of the symptoms 'cause I have a rule for myself: 3 days, not well, taking whatever it is, then that's when I go to the doctor."

AA communities use a wide range of CAM treatments. Overall, the CAM treatments reported by multiple communities were the use of Tiger Balm (topical ointment to relieve pain), Chinese medicine and herbs used in teas, acupuncture, homeopathy, meditation, and coining (stroking highly lubricated skin with a smooth edge such as coin or spoon to alleviate symptoms of muscle discomfort, headaches, and fever through improved blood circulation). We also observed a preference for specific CAM treatments for some communities. For example, many Burmese people use rubbing; the Indonesian community uses Jamu (Indonesian herbal mix in tea), Telon (for stomach ache), and Minyak kayu putih (eucalyptus or cajput oil); and coining is popular in the Cambodian community. Some underrepresented communities such as Burmese, Cambodian, Indonesian, and Thai counsel with monks or pastors for their mental health needs. Some of CAM treatments, such as acupuncture, are often covered by health insurance plans and, thus, are more accessible to those with insurance.

Unique Additional Barriers for Underrepresented Groups

Underrepresented communities mentioned that they rely on health fairs for screening and health information. However, most underrepresented communities do not have health fairs because of lack of resources. Due to their relatively short history of immigration to the United Sates and small population sizes, faith-based organizations (FBOs) or community-based organizations (CBOs) do not exist or are not as active as the larger AA groups. Therefore, they often miss the opportunities to be screened compared to the large subgroups. Burmese and Indonesian communities were more likely to miss these kinds of opportunities to be screened.

Another important barrier for underrepresented groups is lack of interpretation service at the health care setting and lack of educational materials in their own language. Interpretation services are offered in some instances, but it is limited mainly to languages of the larger AA groups such as Chinese, Hindi, Korean, and Vietnamese. Therefore, underrepresented groups' individuals have a hard time communicating with health professionals. This is a

serious problem because misunderstanding due to language may directly be related with violating appropriate medication directions or interpreting test results.

DISCUSSION

Based on our knowledge, the present study is one of the first few studies, in terms of breadth and depth of the contents and number of subgroups involved, in the study of AA health care in the United States. The findings of our focus groups unveiled opportunities and challenges for improving health in diverse AA communities. Furthermore, we report additional unique barriers that underrepresented community members confront.

Our findings are consistent with previous studies in a few AA subgroups.^{6–11,13–16,26} We found that many participants do not have access to health care services due to the lack of financial resources, such as lack of health insurance and high out-of-pocket expense for medical appointments and prescription medication. More importantly, many are not able to afford preventive services that could be often expensive. Some communities have well-established organizations or religious establishments (ie, church and temples) that organize health fairs and other activities. These events serve as a venue where some screenings—bone density, blood glucose, and blood pressure—are offered at no cost. On the other hand, some underrepresented and small communities seldom have resources to organize health events. Therefore, low-income AAs in underrepresented communities tend to miss opportunities to be screened free or at lower cost. Participants from these groups recommended offering inexpensive access to screenings through public health facilities. Also recommended were arranging mobile units to come to the CBOs or FBOs and serve in underrepresented communities.

Physical barriers also limit AAs' access to health care. For example, lack of transportation was especially problematic for elders who cannot drive or/and speak English. However, those AAs with access to transportation may also experience difficulties accessing health care at the right time due to having long-hour jobs or inflexible working schedules. Our findings are consistent with a few previous studies done in some AA subgroups.^{7,8,12–14,20}

Language is an important barrier for AAs seeking care. Several previous studies also noted this as a main barrier to access to health care in AAs.^{8,12,14,17,18,20} Extending translation services and educational materials to languages of underrepresented AA groups may help. Underrepresented community members suggested that establishment of formal community/ government liaison that is bilingual (eg, health promoters) can provide assistance with health information.

The barriers or cultural backgrounds identified in our study as influencing factor for use of health care are consistent with population characteristics, environment, and health behaviors that are a part of the Behavioral Model and Access to Medical Care proposed by Andersen. 27

Although participants in our study were not selected randomly, our research team has tried its best to recruit a representative sample that includes a wide spectrum of AAs. Moreover, all participants in this study are from the same geographic region. We had to restrict our sample to the residents of Montgomery County, Maryland, because funding source approved the current study for the jurisdiction of Montgomery County. Due to these limitations, study results may not be generalizable to AAs across the United States. Lastly, due to the fact that our sample was mostly hard-to-reach populations, the majority of our participant recruitment was done with help of FBOs and CBOs. Therefore, we might have overrepresented populations with stronger social capital than typical community members. This might have underestimated our results.

Based on the findings of the present study, the research team recommends increasing culturally and linguistically appropriate health resources. Expanding the supply of AA health professionals may be one way. Additionally, increasing provision of Asian multicultural and multilinguistic competency training and awareness of unique AA health needs for non-Asian health professionals may improve access to health care for AAs. For example, hepatitis B is a disease that is more prevalent in AA community than in other racial/ethnic communities. With testing and vaccination, this disease can be prevented at an early stage; however, if not prevented earlier, it can develop into chronic hepatitis B or liver cancer. If non-Asian health professionals know that AAs are more vulnerable to the disease, they may recommend this testing at the routine checkups and prevent further development of disease.

We also recommend awareness education to AAs on the importance of preventive care. Throughout our focus groups, we learned that many AAs have misconceptions about appropriate use of the health care system. A majority of them acknowledged that they use health care only when they become very ill and reported that this is a common phenomenon in their home countries. Preventive care such as cancer screening and blood pressure, cholesterol, and glucose level monitoring was not done regularly. Numerous literatures suggest higher prevalence of diabetes in AAs than in other racial/ethnic groups,^{28–31} and cancer and heart disease are top leading causes of death for AAs.^{32–34} Awareness education on preventive care may dramatically improve the financial and time burdens associated with caring for ill family members, and it may increase quality of life.

Given that elimination of health disparities is an overarching goal of Healthy People 2010 and is likely to be a continuing goal of Healthy People 2020, identifying factors that affect health disparities is critical. Differential access to health care is one of the key contributing factors to health disparities³⁵ because it affects preventive care and delays receiving appropriate care at a right time. It affects the incidence, mortality, and survival rates of certain diseases that are more prevalent in AA populations, which leads to high costs in medical care. Future studies should include both large and underrepresented AA subgroups, and more attention is needed to this fast-growing AA population. Public health policy and funding resources should reflect these efforts.

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REFERENCES

- 1. Ho C, Jackson J. Attitudes towards Asian Americans: theory and measurement. J Appl Soc Psychol 2001;31:1553–1581.
- 2. Wong P, Lai CH, Nagasawa R, Lin T. Asian Americans as a model minority: self-perceptions and perceptions by other racial groups. Sociological Perspectives 1998;41:95–132.
- 3. Yee AH. Asians as stereotypes and students: misconceptions that persist. Edu Psychol Rev 1992;4:95–132.
- 4. Hirschman C, Wong M. The extraordinary educational attainment of Asian Americans: a search for historical evidence and explanations. Social Forces 1986;65(1):1–27.
- Kaiser Foundation and Asian & Pacific Islander American Health Forum (online). Race, Ethnicity & Health Care: Fact Sheet Available at: http://www.apiahf.org/downloads/April2008FactSheet.pdf. Accessed July 16, 2008.
- Sohn L, Harada ND. Time since immigration and health services utilization of Korean-American older adults living in Los Angeles County. J Am Geriatr Soc 2004;52(11): 1946–1950. [PubMed: 15507077]
- 7. Ma GX. The Culture of Health: Asian American Communities in the U.S Westport, CT: Greenwood Publishing Group; 1999.
- Choe JH, Taylor VM, Yasui Y, et al. Health care access and sociodemographic factors associated with hepatitis B testing in Vietnamese American men. Journal Immigr Minor Health 2006;8(3):193– 201.
- Ma GX, Shive SE, Fang CY, et al. Knowledge, attitudes, and behaviors of hepatitis B screening and vaccination and liver cancer risks among Vietnamese Americans. J Health Care Poor Underserved 2 2007;18(1):62–73. [PubMed: 17337798]
- Han Y, Williams RD, Harrison RA. Breast cancer screening knowledge, attitudes, and practices among Korean American women. Oncol Nurs Forum Nov-Dec 2000;27(10):1585–1591. [PubMed: 11103377]
- Wong EC, Marshall GN, Schell TL, et al. Barriers to mental health care utilization for U.S. Cambodian refugees. J Consult ClinPsychol 2006;74(6):1116–1120.
- Ngo-Metzger Q, Massagli MP, Clarridge BR, et al. Linguistic and cultural barriers to care. J Gen Intern Med 2003;18(1):44–52. [PubMed: 12534763]
- 13. Ma GX. Barriers to the use of health services by Chinese Americans. J Allied Health Summer 2000;29(2):64–70. [PubMed: 10874332]
- 14. Jackson JC, Taylor VM, Chitnarong K, et al. Development of a cervical cancer control intervention program for Cambodian American women. Journal Community Health 2000;25(5):359–375.
- 15. Ma GX, Du C. Culturally competent home health service delivery for Asian Americans. Journal of Home Health Care Management & Practice 2000;12(5):16–24.
- Torsch VL, Ma GX. Cross-cultural comparison of health perceptions, concerns, and coping strategies among Asian and Pacific Islander American elders. Qual Health Res 7 2000; 10(4):471– 489. [PubMed: 11010073]
- Free C, White P, Shipman C, Dale J. Access to and use of out-of-hours services by members of Vietnamese community groups in South London: a focus group study. Fam Pract 1999; 16(4):369– 374. [PubMed: 10493707]
- Pang EC, Jordan-Marsh M, Silverstein M, Cody M. Health-seeking behaviors of elderly Chinese Americans: shifts in expectations. Gerontologist 2003;43(6):864–874. [PubMed: 14704386]
- Ma GX, Fleisher L. Awareness of cancer information among Asian Americans. J Community Health 4 2003;28(2):115–130. [PubMed: 12705313]

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- Jenkins CN, Le T, McPhee SJ, et al. Health care access and preventive care among Vietnamese immigrants: do traditional beliefs and practices pose barriers? Soc Sci Med 1996;43(7): 1049– 1056. [PubMed: 8890405]
- An-Fu H, Wong MD, Goldstein MS, et al. Complementary and alternative medicine use among Asian-American subgroups: prevalence, predictors, and lack of relationship to acculturation and access to conventional health care. J Altern Complement Med 2006; 12(10):1003–1010. [PubMed: 17212572]
- 22. Krueger RA. Focus Groups: A Practical Guide for Applied Research Newbury Park, CA: Sage; 1988.
- 23. Morgan DL. Focus Groups in Qualitative Research Newbury Park, CA: Sage; 1998.
- 24. Kuzel A Sampling in qualitative inquiiy. In: Crabtree B, W M, eds. Doing Qualitative Research: Research Methods for Primary Care Thousand Oakes, California: Sage Publication; 1999:31–44.
- 25. US Census Bureau. American Community Survey Available at: http://www.census.gov/acs/www/ index.html. Accessed July 16, 2008.
- 26. Kaiser Foundation. Health Insurance Coverage and Access to Care among Asian Americans and Pacific Islanders: Kaiser Commission on Medicaid and Uninsured; 2000 Available at: http:// www.kff.org/uninsured/upload/Health-Insurance-Coverage-and-Access-to-Care-Among-Asian-Americans-and-Pacific-Islanders.pdf. Accessed September 22, 2008.
- 27. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? J Health Soc Behav 3 1995;36(1):1–10. [PubMed: 7738325]
- McBean AM, Li S, Gilbertson DT, Collins AJ. Differences in diabetes prevalence, incidence, and mortality among the elderly of four racial/ethnic groups: Whites, Blacks, Hispanics, and Asians. Diabetes Care 10 2004;27(10):2317–2324. [PubMed: 15451894]
- 29. McNeely M. Type 2 diabetes prevalence in Asian Americans: results of a national health survey. Diabetes Care 2004;27:66–69. [PubMed: 14693968]
- Office of Minority Health and Health Disparities. Asian Americans & Pacific Islanders in Maryland: Population and Health Data: Maryland Department of Health and Mental Hygiene; 2006.
- Venkataraman R, Nanda NC, Baweja G, et al. Prevalence of diabetes mellitus and related conditions in Asian Indians living in the United States. Am J Cardiol 10 1 2004;94 (7):977–980. [PubMed: 15464696]
- 32. National Center for Health Statistics. Health, United States 2006. With Chartbook on Trends in the Health of Americans Hyattsville, MD 2006.
- McCracken M, Olsen M, Chen MS Jr., et al. Cancer incidence, mortality, and associated risk factors among Asian Americans of Chinese, Filipino, Vietnamese, Korean, and Japanese ethnicities. CA Cancer J Clin Jul-Aug 2007;57(4):190–205. [PubMed: 17626117]
- 34. President's Advisory Commission on Asian Americans and Pacific Islanders. Report to the President and the Nation. Asian Americans and Pacific Islanders Addressing Health Disparities: Opportunities for Building a Healthier America 2003 Available at: http://www.cdc.gov/omhd/ Highlights/2006/HMay06AAPI.htm. Accessed August 5, 2007
- 35. Committee on Monitoring Access to Personal Health Care Services. Access to Health Care in America Washington, D.C.: Institute of Medicine; 1993 ISBN 0-309-04742-0.

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Table 1

Characteristics	=	%	Characteristics	=	%
Ethnic Background			Gender		
Asian Indian	9	3.5	Male	<i>4</i>	45.4
Burnese	٢	4.0	Female	94	54.0
Cambodian	14	8.1	Missing	-	0.6
Chinese	12	6.9	Education		
Filipino	8	4.6	Less than high school	13	7.5
Indonesian	26	14.9	High school graduate	4	25.3
Japanese	٢	4.0	Bachelor's degree	39	22.4
Korean	Ξ	6.3	Master's/Doctoral degree	65	37.3
Nepali	6	5.2	Missing	13	7.5
Pakistani	17	9.8	Arrival in United States		
Taiwanese	25	14.4	Prior 1980	36	20.7
Thai	22	12.6	1981–1990	23	13.2
Vietnamese	10	5.7	1991–2000	32	18.4
<u>Age Range</u>			2001 -	23	13.2
18–19	3	1.7	US born	47	27.0
20–29	31	17.8	Missing	13	7.5
30–39	26	14.9	<u>Marital Status</u>		
40-49	23	13.2	Married	81	46.5
50-59	31	17.9	Divorced/widowed	12	6.9
60–64	17	9.8	Never married	32	18.4
65+	34	19.5	Missing	49	28.2
Missing	6	5.2	Health insurance		
Annual Household Income			Yes	131	75.3
<\$40,000	51	29.3	No	29	16.7
\$40,000-\$79,999	41	23.6	Missing	14	8.0
\$80,000	61	35.0			
Missing	21	12.1			