An Academic-Community Partnership to Explore High Smoking Prevalence in Filipina Girls

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Abstract

Smoking prevalence for Asian-Americans (AA) is low compared to non-AAs; however in Hawai`, the prevalence of smoking among Filipina high school girls is more than double that of Japanese high school girls. This study explored socio-cultural factors facilitating or serving as barriers against tobacco use among Filipina girls. Representatives from four community organizations, recognized for their work with Filipinos, were engaged throughout the research to facilitate the project and to ensure cultural relevance. Eleven focus groups (n=88), led by peer facilitators, discussed smoking. Twelve cultural key informants interpreted results presented from the transcripts. **Results:** Self-reported reasons why Filipina girls may smoke included the need to cope and to fit in. School and family responsibilities were commonly stated as barriers to smoking among Filipina girls. Nonetheless, many girls said they were given cigarettes from family members who smoked. Cultural key informants recommended conducting research on a larger sample of Filipina girls and offering family and school-based tobacco prevention programs. **Conclusion:** Collaboration with a variety of community partners helped provide rich qualitative data and findings regarding socio-cultural factors associated with smoking and recommendations to prevent smoking among Filipina girls. The role of family in preventing and promoting tobacco use needs further exploration. Family appears to be a promising area to explore future interventions to prevent smoking among Filipina girls.

Keywords: smoking, Filipinos, adolescents, females, Asian-American

Introduction

Filipinos in the US and Hawai`i

Filipinos comprise the second largest Asian American (AA) ethnic group in the United States (Hoeffel et al., 2010). Since 2000, there has been a 38% increase among the Filipino population residing in the U.S. (Melegrito, 2011). While the state of California has the largest *number* of Filipinos at 1,195,580 (Melegrito, 2011), Hawai`i has the largest *percent* of Filipinos composing 23% of the state's population (US Census Bureau, 2005). Filipinos are the fastest-growing AA group in Hawai`i due to the continuous immigration from the Philippines and high birth rates (US Census Bureau, 2005).

Smoking Among Filipina Girls

Filipino youth report a much higher use of tobacco than other AA youth, and Filipina girls have an especially high prevalence. In Hawai`i, aggregated data from the 2005, 2007, and 2009 Youth Tobacco Survey (N=4,200) suggests that 9.9% of Filipina high school girls smoked, compared to 5.6% of Japanese and 5.3% of

Chinese girls respectively (HHDW, 2012). While smoking prevalence fell for all high school girls in Hawai`i between 2003 and 2005, it rose for Filipina girls from 12.4% to 13.7% (Pobutsky, 2007).

National data comparing smoking rates between boys and girls among Asian sub-groups reveal differential patterns between boys and girls depending on ethnicity. Thirty-day smoking prevalence for Filipinos age 12 to 17 is higher for girls (8.9%) than boys (5.8%) (Baluja, Park, & Myers, 2003; Hawaii DOH, 2005; US Census Bureau, 2002). Furthermore, the age of smoking initiation among Filipinos is almost the same for boys (12.6 years) and girls (12.8 years), whereas boys start smoking earlier in most other ethnic groups. For example, among Chinese Americans, boys begin smoking at 11.6 years, while girls began at 13.5 years (US DHHS, 2005).

Past studies that have investigated smoking among AA youth have common limitations. The literature reveals that Filipinos were not specifically targeted in the study sample, and/or valid measures of cultural or ethnic identity were not used. These studies have recommended conducting culture-specific research to investigate cultural attitudes, norms, and expectations regarding smoking (Asbridge, Tanner, & Wortley, 2005; Kim, Ziedonis, & Chen, 2007). Furthermore, few studies have examined the different influences of smoking behavior among individual gender-ethnic subgroups , and researchers have recommended further exploration of how psycho-cultural factors. e.g., self esteem, ethnic identity, and family and peer influences, related to smoking differ between males and females in each ethnic group (Faucher, 2003; Hanson, 2005; Kaholokula, Braun, Kana`iaupuni, Grandinetti, & Chang, 2006; Nichols, Birnbaum, Birnel, & Botvin, 2006; Spruijt-Metz, Gallaher, Unger, & Anderson-Johnson, 2004).

Due to the ethnic differences in tobacco use among AA ethnic groups, some studies have examined cultural factors associated with smoking. Strong family connections and support, and positive family functioning (which are important in some cultures) are protective against sexual activity, violence, and smoking, among Filipino youth (Chung et al., 2007; Cunanan, Guerrero, & Minamoto, 2006; Guerrero et al., 2009;. Weiss, Garbanati, Tanjasiri, Xie, & Palmer, 2006; Willgerodt, 2008). Acculturation factors, e.g., language spoken and length of time in U.S., are associated with smoking, since acculturated AAs, especially females, have higher smoking rates than less acculturated AAs (An, Cochran, Mays, & McCarthy, 2008; Asbridge et al., 2005; Chen, Unger, Cruz, & Johnson, 1999; Choi, Rankin, Stewart, & Oka, 2008; Chung et al., 2007; Hofsetter et al., 2004; Kim et al., 2007; Weiss & Garbanati, 2006). Filipina girls may be more acculturated than other AAs, such as Koreans or Chinese, because of the long-term U.S. occupation in the Philippines and the wide use of English in this country (An et al., 2008; Baluja et al., 2003; Chen et al., 1999; Choi et al., 2008; Chung et al., 2007; Sasaki, 2009). Weak cultural identity is positively correlated with delinquent behaviors, including smoking, among Filipino youth (Guerrero et al., 2010).

Study Aims and Conceptual Framework

The aim of this study was to investigate knowledge, attitudes, perceptions, and sociocultural factors related to the high tobacco use among Filipina girls in Hawai`i. This study used community-partnered approaches including focus groups with Filipina high school girls led by peer facilitators. This project used a socio-ecological model (McLeroy, Bibeau, Steckler, Glanz , 1998) to categorize the factors related to youth smoking identified in the previous studies and to guide the inquiry to identify knowledge, attitudes, perceptions, and sociocultural factors that may be related to smoking among Filipina girls. The determinants of youth smoking encompassed individual, interpersonal, social, and environmental-level influences (Figure 1).

This study employed community-partnered research, derived from a Community-based Participatory Research (CBPR) approach (Suarez-Balcazar et al., 2004), used to address the

Figure 1

Conceptual Framework: Female Youth Smoking

	Facilitators of smoking	**Culture**	**Barriers to smoking**
Individual	▪ SES – low ▪ Self image - low ▪ Academic achievement - poor ▪ Behavioral coping skills - non productive		▪ Academic achievement - high ▪ Behavioral coping skills-Productive
Interpersonal	▪ Peer – smoking ▪ Family – smoking		▪ Peer - non smoking ▪ Family – connectedness, authoritative
Social	▪ Norms - pro-smoking		▪ Norms - anti-smoking
Environmental	▪ Media - pro-smoking ▪ Accessibility – high		▪ Media - anti-smoking ▪ Accessibility – low

complex issue of ethnic and gender disparities in youth smoking. Specifically, the project was guided by community representatives and assisted by a number of community groups. Data was collected using focus groups led by youth peer educators involved in tobacco education. A community panel helped interpret the data and develop recommendations for action. Community representatives were involved in the dissemination of findings. To our knowledge, a community and academic partnership has not been implemented (before this study) to investigate smoking among Filipina girls. Involving community partners may serve to support the future development of relevant tobacco use prevention and cessation interventions tailored to Filipina girls in Hawai`i, who are not being reached by current programs.

Methods

Developing Community Partnerships

A Filipina health educator and community organizer approached a university researcher to consider conducting a study on smoking among Filipina girls. The organizer has been working in various capacities with advocacy and community groups serving Filipinos in Hawai`i. As a community champion, the organizer searched for partnership opportunities to address and solve community concerns. The research investigator agreed to seek funds for the project. The initial research team, comprised of a community organizer and a youth tobacco researcher, met with their respective collaborative networks representing Filipino-serving organizations and youth tobacco prevention and control organizations. Leaders of these organizations had observed first-hand the high smoking prevalence among Filipina girls, and expressed an interest in addressing the problem. These organizations promote the Filipino culture and community, youth health, and tobacco prevention and control initiatives in Hawai`i. The organizations were recognized and respected for their community-driven work in addressing social and health disparity issues. They were critical to the success of the study, assisting with participant recruitment, question refinement, focus groups facilitation, data interpretation, and recommendation development.

A total of six organizations were involved. Specifically, two National Cancer Institute-funded Community Network Programs were involved: the Asian American Network of Cancer Awareness, Research, and Training-Hawai`i (AANCART) and `Imi Hale Native

Hawaiian Cancer Network. AANCART-Hawai`i's advisory board was comprised of representatives of health, social service, and educational organizations serving Filipinos in Hawai`i. The Student Equity, Excellence, and Diversity (SEED) program at the University of Hawai`i conducts educational and support programs in middle and high schools to foster physical and emotional well-being among students from underrepresented communities, including Filipinos, to access and succeed in higher education. Another key partner was Nursing Advocates and Mentors, Inc. (NAMI), an association of Filipino nurses, health professionals, and leaders who advocate for and support the training of health professionals in Hawai`i and worldwide. Two tobacco programs also served as research partners. REAL (not an acronym), a program of the Cancer Research Center of Hawai`i, is an internationally recognized, youth-led, anti-smoking project that focuses on advocacy to prevent and control tobacco use among teens. The Coalition for a Tobacco Free Hawai`i (CTFH) is Hawai`i's only independent organization dedicated to education, policy, and advocacy to control tobacco.

These six organizations were chosen as partners for several reasons, including that their missions and/or current initiatives aligned with the aims of this research, and these organizations themselves were well partnered. Also, these organizations welcomed an assessment of possible factors related to smoking among Filipina girls, which might eventually lead to the identification and implementation of relevant strategies to better serve their program participants. These partnering organizations have adopted advocacy approaches, often serving as lead agencies with their respective organizational partners, and they also have the ability to mobilize other potential partners.

Focus Groups with Filipina Girls

Focus group research was determined to be the most appropriate tool to address the study aims. Focus groups are appropriate when gathering data about culture and ethnicity, because cultural values or group norms may emerge as information is being shared (Kitzinger, 1995). Indeed, focus group research has been recommended to elucidate cultural attitudes related to smoking among females of different ethnicities, so that gender-specific strategies to prevent or stop smoking within ethnic groups may be developed (Kaholokula et al., 2006). Focus groups are compatible with the CBPR approach because participants, especially those who have historically disadvantaged backgrounds, are active individuals in the research process, with their focus group perspectives providing a critical contribution to the project (Minkler & Wallerstein, 2003).

Eleven focus groups were conducted at two schools on Kauaʻi and three schools on Oahu in May-June 2009. Each session lasted 45-60 minutes. Following preferences expressed by the schools, focus groups on Kauaʻi were conducted during school hours, while focus groups on Oahu were conducted after school.

IRB

Institutional Review Boards of the University of Hawai`i and the Hawai`i Department of Education approved this project. Parents/ guardians were notified of the study through a letter sent home with the students. Parents were required to give written consent for their child's participation, and students gave written assent prior to their participation.

Participants

Eighty-eight students participated in 11 focus groups. Staff from the SEED program, REAL, and CTFH worked with high school counselors and teachers to recruit students in schools with a high representation of Filipinos in their student body. Depending on the school, participants were from the after-school programs affiliated with the partnering organizations or students in health educations classes. Within the high schools, the only inclusion criteria were that participants were female.

Facilitators

Five peer facilitators were trained to co-facilitate the focus groups. Peer facilitators were young adult undergraduate females who were full or part-Filipino. Three were members of Project REAL as teenagers and; therefore, very familiar with youth tobacco control issues while having

leadership and community activism skills. A young adult Filipino male research assistant (ED) who is active with leadership groups in the Filipino community referred the two other facilitators. Peer facilitators attended a four-hour training by `Imi Hale on focus group research, at which they each practiced leading a mock focus group and recording data (Braun, Tsark, Santos, Aiaoto, & Chong, 2006).

At least two facilitators were present at each focus group, with one person serving as the recorder, and the other leading the discussion. A research assistant helped with the groups as well, leaving during the discussion portion of the focus group. It was important that the research team implementing the procedures in the community, including the focus group facilitators, be young and female to maintain an open atmosphere for discussion among the girls.

Measures

Two instruments were created to collect data. The semi-structured focus group guide included a script for facilitators and 10 open-ended focus group questions. A one-page questionnaire collected demographic data on age, grade, ethnicity (full or part-Filipino), Filipino language(s) spoken, migration status, and personal and parental smoking status. Project partners with expertise in Filipino culture, youth tobacco prevention, and focus group methodology helped develop these tools. This collaboration with project partners, including the youth trained as focus group facilitators, assured that questions were understandable, compatible with Filipino culture and teen girls, and relevant to youth tobacco prevention. The youth also helped with the overall comprehension and flow of the script. Thus, the final guide was crafted to reflect the most relevant questions with optimal organization and comprehension, tailored to the age level and culture of the participants.

Prior to each focus group, the demographic questionnaire was distributed, and participants were given a few minutes to complete it. The focus group questions started with an icebreaker, and then progressed from broad to specific questions about tobacco use, factors facilitating use, factors preventing use, and recommendations for tailored programs. For example, participants were initially asked, "Please name a female who is a healthy role model for you. How does she maintain her health?" They were then asked to think of someone they knew who smoked and share reasons why those people may have started and continued to smoking. Participants were then asked to think of a female their age who smoked and possible reasons for it, including cultural reasons. Participants were asked who might influence them to smoke or not smoke. Girls were asked where they obtained cigarettes, checked brand recognition, and solicited opinions on tobacco advertising and brand. Finally, we asked for ideas for programs that might prevent or stop girls from smoking and what might make them appealing.

Each of the 10 focus group questions included probes to ensure saturation of themes and explore disconfirming cases. For example, for the question asking who influenced the participant to smoke or not smoke, three probes were included. These probes asked why those people identified would influence them to smoke or not, how they think their family influences them to smoke or not, and how they think friends influence or not influence them to smoke.

Key concepts were written on posted paper to ensure that ideas were captured correctly. To thank them for their participation, participants received a $5 gift certificate from a smoothie store and anti-smoking campaign items relevant to teen girls (pen-highlighter, lip gloss, and a mirror).

Data Analysis

Audio recordings were transcribed and then coded independently by the principal investigator and the research assistant. Transcriptions were compared to the notes taken by the recorders to confirm and expand the transcriptions. A deductive process guided the initial coding where each coder used broad categories—"facilitators towards smoking," "barriers against smoking," and "smoking-reduction strategies" related to the research aim, noting the frequency of codes under each theme.

Coders compared their results, and after agreeing on the transcribed passages fitting these general themes, an inductive process guided the coding. Each coder identified sub-themes independently, compared coding results with each other, and they found they were in agreement regarding almost all sub-themes and codes. A matrix was created to reflect the coding and frequencies.

Frequency of identified themes, or codes, was counted within each of the 11 focus groups, and across each focus group. Within each focus group, the number of participants who made at least one comment that was consistent with a coded theme was recorded. The number of focus groups that contained a given coding theme was also recorded. Although the number of participants in a focus group who discussed a theme was recorded, the unit of analysis was the number of focus groups in which a particular theme was discussed. We chose this analytic plan because to account for the extent to which individuals could influence responses within the focus group.

Working with Community to Interpret the Findings

Sometimes community partners choose not to be involved in the data analysis Hence a key role of the community partnership and a key step of the research is involving community partners in interpreting and synthesizing the focus groups. . Joint data interpretation illuminates various perspectives to contextualize and enrich the results. Ideally, academic and community partners work collaboratively on data analysis and interpretations of findings, but often community partners are included prominently in data interpretation and not analysis (Cashman et el, 2008).

The coding and summary process was not able to involve community representatives. In lieu of community involvement in this key research step, the researchers created summary matrices of the results. The researchers presented the result matrices to the community partners for further interpretation and contextualization (Cashman et al., 2008). NAMI organized a meeting with adult cultural key informants to help interpret the findings. The adult key informant meeting was attended by four men and eight women who were NAMI nurses and family members of the NAMI nurses.

The meeting was held in the evening after working hours at the Filipino Community Center. Summary matrices from the focus group results were presented, with the PI facilitating the discussion, and the research assistant recorded it. These Filipino adults were asked to share their interpretations of the results based on their experiences and observations as past smokers, their experiences of the smoking environment in the Philippines, and other family smoking-related experiences. This discussion highlights the significant contributions of community partners in the data interpretation stage. As a result of this process, participants shared ideas on further research questions and recommendations for future interventions (Cashman et al., 2008).

Results

Participants

Ninety seven percent (n=85) of the girls who participated in the focus groups completed the demographic questionnaire. Participants were comprised of 23 ninth graders, 27 tenth graders; 21 eleventh graders, and 14 twelfth graders. Their mean age was 15.9±2 years, 58 (68%) identified themselves as full Filipino and 26 (31%) as part-Filipino. About a third (36%) were born in the Philippines, and 45% reported speaking a Filipino language (Ilocano, Tagalog, Visayan) at home. Ninety three percent (n=79) reported that they did not smoke in the past 30 days, four (5%) smoked on 4-5 of those days, one (1%) smoked on 10-19 of those days, and one (1%) smoked on all 30 days. About two-thirds (64%) reported that their parents did not smoke. Among the 32 who reported that their parents smoked, 15 (47%) reported that at least one parent smoked on all 30 days.

Focus Group Findings

Participants' responses covered three areas of inquiry—facilitators of smoking, barriers to smoking, and smoking prevention

recommendations. Specific sub-themes were identified as related to Filipina girls' smoking (Tables 1 and 2).

Self-reported facilitators of smoking. All groups mentioned the belief that girls smoked as a way to cope with stressful situations and relationships. One participant described the stress of school and family expectations: "I know this girl, she's real smart, but it's the stress of being smart and people depending on her [that compels her to smoke]." Five groups identified rebellion as a reason why girls smoke. One girl explained, "In Filipino tradition, Filipinos are so controlled by their parents, and when they are controlled, they want to be free so they try all kinds of things."

Girls in nine groups mentioned that easy access facilitated smoking. They mentioned that they were very familiar with how to obtain cigarettes. The most common way was to ask for them or steal them from older family members and friends. One girl talked about getting cigarettes from older people: "We are all underage. I don't understand how you get it either, but seems like everybody has [access]. Seems like everyone has older friends, because they all have [cigarettes]." Seven groups also mentioned being able to buy cigarettes from merchants selling snacks from vans in their neighborhoods and near their schools.

Social influences were also discussed when asked why girls their age would smoke. In ten focus groups, participants said that other girls smoke to fit in or be popular, seven groups said that girls smoked to be cool, and six groups indicated that boyfriends could influence them to smoke.

Seven groups indicated that their family and friends would influence their smoking behavior when asked what would personally influence them to smoke or not. Furthermore, participants in six groups said that smoking was a norm among both family and friends. A girl described, "Yeah, you see it everywhere, everyone in [family gatherings] is always smoking." Moreover, being around smokers had an influence on smoking beliefs: "I see my family, sister, boyfriends. I see parents doing it, so we may think it is OK because they are all doing it."

*Barriers against smoking***.** Participants in nine groups recommended athletics as a way to prevent girls from smoking. Participants in seven groups each mentioned academic drive and participation in school clubs as deterrents to smoking. One teen explained why activities prevented smoking: "If you're busy doing stuff and having fun, period, then you won't really have time for smoking. You're not even thinking about trying it."

Table 1

Self-Reported Facilitators Of Girls Smoking (n=11 focus groups)

Theme	Number of Focus Groups
Coping	
Stress and relationships	11
Rebellion	5
Social influences	
Fit in and popularity	10
Be cool	7
Norm among family & friends	6
Boyfriends	6
Access	
Family & older friends	9
Snack vans	7

Eight groups talked about having responsibilities within and to one's family, and six groups described family expectations and norms as smoking deterrents. Participants in five groups reported that parents had talked specifically about having witnessed a family member suffer through health complications that resulted from smoking, which kept them from wanting to smoke. For reasons outside of the family, participants in seven groups said they didn't smoke because they were aware of the health

risks associated with smoking or that they tried smoking and did not like it.

Smoking prevention recommendations. Ideas about smoking prevention programming included providing educational information to girls. The girls and adult key informants suggested that programs provide facts, statistics, and emotional consequences. Participants suggested programs in which girls would see diseased lungs and meet people who have been harmed by tobacco and/or can drive home the message that smoking is unhealthy, uncool, and makes you ugly. Programs targeting parents were also recommended because many parents smoke, and they could also convey anti-smoking messages to their children. Both groups recommended and expressed willingness to participate in further study of this issue.

Table 2

Barriers Against Girls Smoking (n=11 focus groups)

Theme	Number of Focus Groups
School activities	
Athletics	9
Academics--grades and school activities	7
Family	
Family responsibilities	8
Expectations and norms against smoking	6
Health consequences of family members	5
Boyfriends	6
Aware of health risks or tried and did not like	7

Results from Cultural Key Informants

The findings from the focus groups were presented to the twelve cultural key informants from NAMI, who shared their observations and interpretations related to facilitators toward and barriers against smoking among the study participants. The adults confirmed findings from the youth focus groups that tobacco use among family members could influence youths' use of tobacco. They also confirmed their belief that the younger generation of girls smoked to be popular and cool, to demonstrate rebellion, and in response to stress (especially from family), and peer pressure. They also suggested that some girls take up smoking to suppress appetite. The group was also prompted to share other reasons, especially cultural, as to why Filipino girls may smoke. They noted that adults usually are more familiar than youth with traditional cultural values and are willing to articulate how cultural values relate to smoking. Participants described the Philippines as "tobacco friendly," explaining that tobacco production and smoking are prevalent there, and that tobacco use is not stigmatized, especially among the elders. Therefore, Philippine immigrant families tend to be more accepting of smoking, perhaps explaining the higher prevalence among Filipino girls in Hawai`i. Three other participants explained that many Filipino parents work multiple jobs, which reduces their ability to supervise their child's activities, and they may be oblivious to their child's smoking habits.

When asked to brainstorm ideas for effective and culturally appropriate recommendations for smoking prevention programs, adults suggested educational programs that incorporated graphic representations of the emotional and physical complications of smoking (n=4), fun activities (n=2), and elements of leadership and advocacy (n=1). Noting that 36% of parents of the focus group participants smoked, key informants recommended increasing smoking awareness among Filipino parents, especially the mothers. They explained that mothers should be targeted because, in the traditional Filipino household, they are more vocal than fathers and more likely to discuss smoking with their children.

Overall, many of the themes that were identified were in line with the conceptual framework (presented in Figure 1) guiding this study. Various individual, interpersonal, social, and

environmental-level factors were found to be related to smoking, as expected, among Filipina girls.

Discussion

This study uncovered some potential ethnic-gender factors related to smoking among Filipina girls, while highlighting the complexity of ethnic and gender influences related to smoking. Studies have recommended conducting culture-specific research to investigate attitudes, norms and expectations regarding smoking (Kim et al., 2007; Asbridge et al., 2005). Although the information provided by teen Filipina girls in this study appeared to be pertinent to girls in general, rather than to Filipina girls specifically, the adult key informants provided cultural interpretations of the findings. An example is that the girls stated seeing many people around them smoking, while the adults informed us that tobacco use is less stigmatized in the Philippines among males and females.

Previous studies have identified peer influences (Nichols et al., 2006; Unger et al., 2001; West, Sweeting, & Ecob, 1999), family factors (Mitschke, Matsunaga, Loebl, Tatafu, & Robinett, 2008; Nichols et al., 2006; Griesler, Kandel, & Davies, 2002), social norms (Nichols et al, 2006; Botvin et al., 1993; Bauman, Gilbert, Elizabeth, & Baker, 1992), and culture (Mitschke et al., 2008; Maxwell, Bernaards, & McCarthy, 2005; Hofsetter et al., 2004;; Chen et al., 1999) as psychosocial determinants of youth smoking. Furthermore studies have found that psychosocial determinants of youth smoking vary by both gender and ethnicity (Kaholokula et al., 2006; Nichols et al., 2006; Hanson, 2005; Unger et al., 2001*)*. For example, AAs are less likely to be influenced to smoke by their peers compared to Whites (Unger et al., 2001). Filipinos are considered more acculturated to the American culture than other AA groups who immigrate to the U.S., such as Korean or Chinese Americans (Baluja et al., 2003; Chen et al., 19993). Acculturation to the American culture is thought to be associated with relatively high smoking rates among Filipina girls.. In the Philippines, the U.S. occupation (from 1898 to 1946), followed by the military and economic influence (from 1946 to the present), and the wide use of the English language may have contributed the acculturation of this population.

This study found that Filipina girls identified family as a stronger influence, both toward and against smoking, than peers. This finding differed from the expected effect of acculturation, which suggests that peers, rather than family, serve as a greater influence toward or against smoking). The girls and adult key informants acknowledged that high family expectations to be responsible at home and in school are protective against smoking. On the other hand, both groups also explained that cultural acceptance of smoking and feelings of stress from high family expectations may lead Filipina girls to smoke. The cultural key informants also recommended family based interventions to prevent smoking. Strong family connections, support, and positive family functioning, are protective against risk behaviors (e.g., sexual activity, violence, and smoking) among Filipino youth (Chung et al., 2007; Cunanan et al., 2006; Guerrero et al., 2010; Weiss et al., 2006; Willgerodt, 2008). Positive family functioning and self image were associated with not smoking among Filipino youth in Los Angeles (Weiss et al., 2006). In light of this study's findings and previous findings on smoking and family influences for Filipino youth, the role of the family as a determinant of smoking among Filipina girls deserves further study.

Although the study sample was a respectable size for focus groups research (88 participants in 11 focus groups), responses may not reflect the perceptions of all Filipino girls in Hawai`i. Participants in this study were recruited from leadership clubs, and only 7% of participants admitted to lifetime????smoking. Acculturation level was represented only by place of birth (about a third were born in the Philippines) and language spoken at home (about half spoke a Filipino language at home), and cultural identity was not examined.

A major strength of this study was the partnership with community members who

assisted, participated, and/or provided support in most aspects of the research, from conceptualization to recruiting participants, gathering the data and interpreting, and contextualizing the findings. These partnerships contributed to obtaining rich descriptive findings from a respectable number of Filipina girls participating in the focus groups. Participation of key partners facilitates subsequent involvement in future efforts to develop, conduct, and disseminate interventions to reduce smoking among Filipina girls in Hawai`i.

Recommendations

Positive family functioning and self-image have been associated with smoking among Filipino youth (Weiss et al., 2006), while correlations between cultural identity and self-esteem has also been found (Phinney & Chavira, 1992; Umana-Taylor et al., 2003). Cultural identity is protective against use of tobacco, drugs, and alcohol among other minority ethnic groups (Nichols et al., 2006). Future studies should explore specifically how ethnicity is related to smoking among Filipina girls and examine the role of cultural identity as a protective factor against smoking among Filipina girls. Family influences and how they work to both prevent and encourage Filipina girls to smoke, also need to be more specifically studied. The extent and manner in which cultural identity and family influences relate to smoking among Filipina girls should be studied in a larger sample (as recommended by the adult key informants) and should employ quantitative measures of acculturation, cultural identity, and family influences for Filipina girls.

Interventions to help Filipina girls avoid or give up smoking should address cultural identity and family influences. Such programs may include the entire family and, especially mothers, as recommended by the adult key informants, and apply evidence based smoking prevention messages. A family based smoking prevention program targeting Filipina girls, while also helping adults to quit, would uphold values of filial piety and respect toward older family members. At the same time, a discussion of social norms to not smoke would be included. Messages may include the damaging effects of direct tobacco use and second hand smoking, especially on women of reproductive age and children. Addressing smoking and cultural identity would also include that smoking, especially among young women, is not a Filipino tradition, but rather an introduced habit (Mitschke et al., 2008). The affirmation of cultural expression by communicating and delivering culturally relevant programming can be legitimizing and empowering relative to standard health promotion strategies (Finau, 2000), including smoking prevention among Filipina girls.

The parental role in influencing positive behaviors should be stressed in a family-based smoking prevention intervention. High parental expectations for children's behaviors and parents' role as positive models are protective factors that should be emphasized since these were key findings of this study. Reducing the practice of older family members offering cigarettes to teens, while providing smoking-cessation programs for parents and teens should also be included. In these ways, family-based interventions can strengthen protective factors and build a positive identity among Filipina girls to not smoke.

Conclusion

Smoking prevalence among Filipina girls in Hawai`i and nationally is high compared to girls in other AA subgroups. Sociocultural factors serving as barriers against and facilitators toward tobacco use among Filipina girls in Hawai`i were explored through this descriptive study supported by key community collaborations through focus group methodology. Several possible reasons for the high smoking prevalence among Filipina girls were identified, and several involved culture and family. Although more research is needed to elucidate the role culture and family play in smoking among Filipina girls, family-oriented interventions may hold promise for tobacco prevention and control in this group.

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