



HHS Public Access

Author manuscript

J Obstet Gynecol Neonatal Nurs. Author manuscript; available in PMC 2014 January 12.

Published in final edited form as:

J Obstet Gynecol Neonatal Nurs. 2012 September ; 41(5): 650–658. doi:10.1111/j.1552-6909.2012.01392.x.

Asian American Midlife Women's Attitudes toward Physical Activity

Eun-Ok Im, PhD, FAAN [Professor and Marjorie O. Rendell Endowed Professor],

School of Nursing, University of Pennsylvania, Philadelphia, PA

Young Ko, PhD [Postdoctoral researcher],

School of Nursing, University of Texas at Austin, Austin, TX

Hyenam Hwang, MSN [Doctoral student],

School of Nursing, University of Texas at Austin, Austin, TX

Wonshik Chee, PhD [Research associate professor],

School of Nursing, University of Pennsylvania, Philadelphia, PA

Alexa Stuijbergen, PhD, FAAN [Dean and Professor],

School of Nursing, University of Texas at Austin, Austin, TX

Hannah Lee [Undergraduate research assistant], and

University of Texas at Austin, Austin, TX

Eunice Chee [Research intern]

School of Nursing, University of Pennsylvania, Philadelphia, PA

Abstract

Objectives—To explore Asian American midlife women's attitudes toward physical activity using a feminist perspective.

Design—A qualitative online forum study.

Settings—Internet communities/groups for midlife women and ethnic minorities.

Participants—A total of 17 Asian American women recruited through the internet using a convenience sampling method.

Methods—A six-month qualitative online forum was conducted using 17 online forum topics. The data were analyzed using thematic analysis.

Results—Three major themes related to Asian American midlife women's attitudes toward physical activity were extracted from the data: keeping traditions, not a priority, and not for Asian girls. Because Asian American midlife women were busy in keeping their cultural traditions, they rarely found time for physical activity. The women gave the highest priority to their children, and

Corresponding Information: Eun-Ok Im, PhD, FAAN, School of Nursing, University of Pennsylvania, Claire M. Fagin Hall, 418 Curie Boulevard, Philadelphia, PA 19104-4217, eunim@nursing.upenn.edu.

Disclosure

Part of a larger study funded by the National Institutes of Health (NIH/NINR/NHLBI) (R01NR010568). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

physical activity was the lowest priority in their busy lives. Also, the women were rarely encouraged to participate in physical activity during their childhoods, and they perceived that their weak and small bodies were not appropriate for physical activity.

Conclusions—Several implications for future development of physical activity promotion programs for this specific population have been suggested based on the findings.

Keywords

physical activity; attitudes; midlife; women; online forum; Asian American

It is statistically projected that Whites will comprise 64% of the U.S. population by the year 2020 (Slootmaker, Chinapaw, Schuit, Seidell, & Van Mechelen, 2009). In other words, one out of three Americans will be an ethnic minority within two decades (Slootmaker et al., 2009). Among these ethnic minorities, there are approximately 12 million Asians residing in the United States and about 3 million of them are women aged 40 to 60 years (U.S. Census Bureau, 2006). In addition, from 1990 to 2000, the rate of increase in the Asian population changed from 48% to 72% (U.S. Census Bureau, 2006). With the increasing number of Asian populations in the U.S., it becomes imperative for nurses to consider greater cultural competence in practice areas of women's health, where cultural attitudes greatly influence health promoting behaviors.

The Centers for Disease Control and Prevention (CDC) reported that Asian American adults meeting the recommended levels of lifestyle physical activity was significantly lower than that of the total U.S. population (CDC, 2003, 2004). Recent studies also indicated that the participation rate of midlife Asian American women in physical activity remains low (U.S. Department of Health and Human Services, 2008). The prevalence rates of cardiovascular diseases, type 2 diabetes, obesity, hypertension, and all-cause mortality among Asian American midlife women (that can be effectively reduced by increasing physical activity) have been reported to be much higher than those of White midlife women (CDC, 2003, 2004).

One of the reasons for the low physical activity level of Asian American midlife women is that most physical activity promotion programs are rarely culturally appropriate. Several cross-cultural studies of midlife women's physical activity indicated clear ethnic differences in attitudes toward and actual participation in physical activity (Berg, Cromwell, & Arnett, 2002; Korean National Internet Development Agency, 2009; Margetts, Rogers, Widhal, Remaut de Winter, & Zunft, 1999). However, with few investigations on Asian Americans, little is known about how Asian American midlife women uniquely view physical activity and what motivates them to participate in physical activity (Im, & Choe, 2004). This lack of knowledge could result in culturally inadequate or inappropriate physical activity promotion programs aimed at Asian American midlife women.

The purpose of this study was to explore Asian American midlife women's attitudes toward physical activity using a 6-month qualitative online forum. This study is a part of a larger study that explored midlife women's attitudes toward physical activity of four major ethnic groups of midlife women in the U.S. (White, Hispanic, African Americans, and Asians).

Herein, Asian American refers to those residing in the United States who have origins in the Far East, Southeast Asia, or the Indian subcontinent (U.S. Census Bureau, 2000). For example, Chinese, Korean, Asian Indian, Filipino, and Sri Lankan are included as Asian Americans. In this study, for the convenience of the approach, it was assumed that Asian American could be defined as one cultural group. However, this approach may be a major limitation of this study because of obvious sub-ethnic diversities within Asian Americans.

We used a feminist perspective as philosophical and theoretical basis of the study; we assumed that Asian American women's physical activity would be most comprehensively understood through considering the relationships among physical activity, the woman's body, and cultural ideals of health and beauty within the contexts of Asian patriarchal culture (Balsamo, 1996; Im, 2001). Asian American women have been implicitly educated and socialized to preserve their vital energy for childbearing and childrearing and to be ready for the role of wife and mother (Im, 2001; Zachariah, 2005). Consequently, Asian American women have been discouraged from participating in sports involving heavy physical activities (Im, 2001; Zachariah, 2005). In addition, low rates of participation in physical activity are due mainly to Asian women's interactions with their environments and frequently reflect biases from how they are viewed by others to how they view others. Finally, we considered Asian American ethnicity as a significant characteristic that influences women's physical activity and their attitudes toward physical activity, and we tried to disclose cultural contexts where Asian American women experience physical activity.

Methods

The study was approved by the Institutional Review Board of the institution where the researchers were affiliated. Only the findings from the online forum among Asian American midlife women are presented in this article. Findings from other ethnic groups can be found elsewhere (Im, Chee, Lim, Liu, & Kim, 2008; Im et al., 2010; Im et al., 2011).

Setting and Participants

The study announcement was made through both Internet communities for midlife women (ICMWs) and Internet communities for ethnic minorities (ICEMs). These two settings were chosen because they have been reported to be effective research settings for studies among midlife women (Baehring, Schulze, Bornstein, & Scherbaum, 1997; Barrera, Glasgow, McKay, Boles, & Feil, 2002; Bowker & Liu, 2001; Im, Shin, & Chee, 2008). A total of 2,309 ICMWs and 4,421 ICEMs were approached for the larger study. Then, potential participants were asked to visit the project website through the study announcements made in the both settings. Among the participants of the larger study, a total of 22 Asian American women were recruited for the online forum. By the end of the 6-month period, 17 women were retained. Six to 12 participants are recommended as the ideal number for a focus group discussion including this online forum method (Stevens, 1996). Thus, we considered that 22 Asian American women would be an adequate number of participants.

The inclusion criteria for this study were midlife Asian American women who (a) were aged 40 to 60 years; (b) were ambulatory and able to participate in all forms of physical activity;

(c) could read and write English; and (d) had access to the Internet. Those who had high cardiovascular and musculoskeletal risk factors such as (a) major signs or symptoms suggestive of pulmonary or cardiovascular disease (CVD); (b) history of a myocardial infarction, stroke, or type I diabetes mellitus; (c) blood pressure higher than 160/100 mm Hg; and (d) use of beta-blockers, Diltiazem, or Verapamil were excluded from the study. To check the exclusion criteria, we used the 7-item Physical Activity Readiness Questionnaire and several questions related to cardiovascular risk (e.g., a family history of CVD, current smoker, history of elevated cholesterol and blood pressure, and diabetes) that were developed and used in the study by Wilbur et al. (2006).

Sociodemographic characteristics and perceived health and menopausal status of the Asian American women are summarized in Tables 1 and 2. The mean age was 49.06 years (SD=5.86). About 88% had a college or graduate degree; 47% did not have a religion; 71% were employed; 53% reported that it was somewhat hard for them to pay basics with their current income; 59% had 1 or 2 children; 77% were born outside the United States (first-generation immigrants); 77% had a normal body mass index (BMI); 59% did not have a diagnosed disease; and 41% were post-menopausal.

Online Forum Topics

The online forum topics included 10 online forum topics on attitudes toward physical activity and seven topics on ethnic-specific contexts (Im et al., 2010). Each topic had several related introductory questions and prompts that were posted on the forum site in a serial fashion during the 6-month period. For instance, the topic of “recent change in physical activity and their influences on women’s daily life” had several prompts including “what changes did/do you experience in your physical activity recently?” “How do you think the changes in physical activity influence your body?” and “How do you think the changes in physical activity influence your mind?” The topics, introductory questions, and prompts were developed in previous studies (Im et al., 2008; Im & Choe, 2001). They were also refined based on reviews by five experts in the area of physical activity and two experts in qualitative research methods (mean feasibility/usability score=4.34, SD=.32 on a 5-point Likert scale from 1 to 5) (Im et al., 2010).

Data collection procedures

For the larger study, we developed a project website, following the recommendations by the Health Insurance Portability and Accountability Act (HIPAA) and SysAdmin, Audit, Network, Security Institute (SANS)/FBI. When a potential participant visited the website, she was asked to review the informed consent form and give her consent to participate in the study by clicking a button of “I agree to participate.” After providing consent, she was screened against the inclusion criteria. Only those who met the inclusion criteria were forwarded to the web-page of the Internet survey. At the completion of the Internet survey, she was asked about her intention to participate an additional 6-month online forum. When she clicked “I am interested in participating,” she was screened against the inclusion criteria. Only those who met the additional inclusion criteria were asked to participate in the forum, and they were emailed their user IDs and passwords at the initiation of the forum. The participants needed to use the user IDs and passwords whenever they logged in to the online

forum site. The participants were asked to visit the forum site whenever the topics were posted, and they were asked to add new topics that they wanted to discuss with other women. No new topics were added, but the women provided some feedbacks on the administration of the online forum.

Data analysis

The data collected in the online forum were saved in ASCII files and printed out as transcripts. Data were analyzed using the thematic analysis method by Braun and Clarke (2006) by four research staff members. The analysts read and re-read the transcripts for line-by-line coding, and they finalized the codes upon the agreement of all of them. A coding book summarizing the codes was generated. Using the coding book, categorization was performed by all the research staff members; categories that emerged from the internal cognitive process and reflexive thinking by analyzing contents and contexts were made by each of them. Then, the research team members formulated the relationships between categories by mapping associative links among the categories through a series of research team meetings. Finally, the research team identified themes common to the participants through an interactive process by involving reading and re-reading text to produce successively more abstract and refined ideas about domains of interest. During this process, the research team considered possible effects of variable contextual factors including variable health status, socioeconomic circumstances, families' responses and roles, stability of their daily lives, and social support networks on the women's physical activity. Also, they examined possible changes in women's attitudes toward physical activity and ethnic-specific contexts during the 6-month period of the online forums.

To ensure scientific rigor of the study, the research team used the standards of rigor in feminist research by Hall and Stevens (1991). Throughout the research process, the research team carefully examined the methodological and analytic decision trails that they created. Each of the research team members wrote chronological research diaries, memos, and field notes while they collected the data through the online forum. The research team also posted developing analytic categories on the online forum site in order to get the participants' feedback and increase credibility of the study. Also, throughout the data collection and analysis process, the research team continuously questioned research methods, goals, research questions, design, scope, analysis, conclusions, and impact of the study within the social and political environment. In addition, the research team had weekly group meetings to ensure the quality of data collection and analysis.

Results

Through the data analysis process, three major themes related to Asian American midlife women's attitudes towards physical activity were extracted: keeping traditions, not a priority, and not for Asian girls. The major themes are described with related sub-themes as follows.

Keeping Traditions

The first major theme of keeping traditions includes three sub-themes: keeping traditional foods, cultural networking and acculturating to the new country.

Keeping traditional foods—Asian American women said that they wanted to maintain their traditional culture, which was the most familiar. They preferred their traditional food, even after trying different cuisines in the United States and felt more connected to their culture by eating their traditional food. Most of the participants said that their main responsibility at home was to prepare traditional meals. One participant said:

When we were new immigrants, we experimented with different types of food more. Though we enjoy all different cuisines, we are going back to basic home cooked Indian food. I don't think there are any hardships or suffering. If we were to move to some "small town America," perhaps I might miss not having easy access to Indian grocery or Indian cultural programs.

Asian American women felt that physical activity was integrated into their daily lives with household chores such as cooking, cleaning, etc. They also mentioned that their White friends viewed physical activity as something added into their lives by going to the gym, taking a class, or going for a hike. Most of the participants also said that their culture highly valued family group activities, so any extra time in the day was reserved for the family. One participant said:

In the culture I am in we are more family oriented and have the typical family where the male is the head of the family and the female is responsible for stuff like cooking and looking after the kids. The major difference is in my culture we are very, very, family oriented, religious. Women in my culture don't dedicate time to go to the gym. In my culture there no concept of working out, women especially don't work out vigorously or go to the gym. As far as they are concerned, their exercise is cleaning the house and cooking.

Cultural networking—The Asian women mentioned that they maintained their ties to their respective cultures through TV programs, food, friends and community. They said that these connections made them feel comfortable because the connections gave them a sense of belonging to their respective societies and cultures. Some of the participants mentioned that they had difficulty participating in physical activity with those from other cultures because of language barriers and differences in cultural background. They said that being with a group or a class with a similar cultural background would be a positive influence on physical activity. One participant mentioned:

Culturally unique aspects, the only thing I do daily that is related to my culture is to watch Chinese TV program for about 1 hour in the evening. This is what connects me with what I was familiar with culturally. I also try to cook Chinese food for dinner as much as I can. ... I keep my original culture ties through TV, friends and community activities. It is a comfortable lifestyle for me other than work. I am a first generation immigrant and I still have some attachment with my original culture. The culturally unique aspects of my daily schedule make me become part

of the society and culture that I grew up with and keep a good balance in my daily life. It doesn't bother me at all and there is no concern.

Acculturating to the new country—Some of the women said that their life styles had changed because of their acculturation to the U.S. society. For example, they said that in their culture, walking was one of the main forms of daily physical activity. After immigrating, they adapted to the American culture of less walking and more driving because driving was more accepted and walking was not as common or as safe in the United States. Consequently, they felt that driving made them less active. One participant mentioned:

Like walking in the street to get to the grocery or to the nearby store or to a neighbor. That was something everyone does in the Philippines. But here in the US, one needs to take the car. Walking in the street (at least where I live) is not very common. Either it's not safe or people look at you as odd. So to deal with it, I just had to adapt to the American culture, take the car wherever I go, regardless of distance.

Not a Priority

The second major theme, not a priority, involved three sub-themes: kids first, not my own needs; intellectual activity first; and life events first.

Kids first, not my own needs—The priority in most of the participants' lives was the needs of their children, not their own needs. They felt that they should sacrifice their own needs, especially physical activity, to take care of and support their children. They wrote that this self-sacrifice fulfilled their responsibilities as Asian American midlife women in their social and cultural perspectives, and that they should play their parts as caregivers without any complaints. One woman wrote:

I think Asian women tend to look after the interests of their children first before themselves. I have been ignoring my own needs for quite a while now, especially in the area of exercise. I have not had regular exercise because my kids' schedules are so full of their activities. But [now] they are more independent, driving on their own, so I have no excuse.

Some of the women wrote that the burden of child care, which was considered to be the main responsibility of Asian women, lessened as their children grew up and did not need as much help. Subsequently, the women could focus on their own needs, like doing regular physical activity or taking some exercise classes, which they earlier gave up due to their child care duties. They thought that these duties were a highly valuable part of their lives. One woman wrote:

I am looking at an "empty nest" with my youngest son now a senior in high school. I am trying to view things in a larger perspective and not just how things affect my own family. In other words, I may have time for more than just my own family.... I think I would really like to join an aerobics class again or have regular weekly exercise.

Intellectual activity first—Most of the women mentioned that the Asian culture values physical activity differently than the western culture. Asian culture prioritizes intellectual activity over physical activity. They were taught that spending their time and energy on academic pursuits was more important than spending their time on physical activity. Even though this belief led them to sedentary lifestyles, which they believed were not good for their health, they did not consider physical activity as a priority in their daily lives. One woman wrote:

My culture does not view physical athleticism that highly, although western culture seems to regard this very highly. Many boys in my high school son's class spend much time and energy playing football or basketball, etc. My kids probably grew up thinking they must do well in academics/homework first and then spend any leftover time and energy in other activities. They chose music and drama to pursue in high school instead of sports. They also had limited socializing time.

Traditionally intellectual pursuits are commended highly in Asian culture. I think that is why my husband taught my boys chess and they compete in tournaments and are not too physical. However, we have had weight problems and that is not good.

Life events first—The women mentioned that even when they included physical activity in their daily schedules, it was frequently omitted due to family or social events. Many women felt that the tendency to compromise their schedules was more pronounced for them than in their male counterparts. To them, this was because women usually assumed full responsibility for family affairs. Subsequently, when they felt that there were conflicts between their duties and the necessity of physical activity, they easily gave up physical activity. One woman wrote:

My niece had a baby 10 days ago. This is the first baby in the next generation.... I just went to Boston to see the baby last weekend. My routine physical activity was affected due to this trip. ... Typically, women are involved more [in] family events and social events, which can easily affect participation in physical activity. I will give up my regular physical activity when there are schedule conflicts.

Not for Asian Girls

The third theme of not for Asian girls includes two sub-themes: lack of encouragement and weak and small.

Lack of encouragement—The women mentioned that their parents treated them differently than their male siblings. They felt that girls were not encouraged to participate in physical activity, including outdoor activities or competitive sports, compared to boys. Accordingly, they felt that they had a natural tendency to prefer indoor activities, like playing with dolls or helping with household chores. woman wrote:

From a young age a girl is not encouraged to participate in a lot of outdoor activity; she would rather stay at home and play with her dolls. On the other hand, boys always went out and played more.... As an Asian female, there was a clear line between what a girl can do and should not do. With girls, it was a more

conservative and indoor lifestyle. Girls were not encouraged to participate in most sport activities. Physical activity was not something meant for girls.

Weak and small—Some of the participants reported that their physical characteristics inhibited them from doing physical activity as a child. Because they were perceived as weak and small, or as a bad player, they were the last ones to be chosen for competitive physical team sports. They considered their physical character to be a disadvantage because it made them less interested in physical activity and made them want to “stay away from it.” As a result, they said that they preferred more solitary, non-contact activities:

I remember I had no confidence in my physical abilities even in elementary school. I was always the last to be chosen for the kickball team since I did not play well. I generally stayed away from competitive sports, even tetherball on the playground. I realize now I do not like competitive or physical sports because I was not encouraged to play and did not believe I could play well, even with practice. I do feel like that sometimes, Asian American woman are weaker than other races.

Discussion

Asian American midlife women’s attitudes toward physical activity can be best represented by the third major theme of the findings, not for Asian girls, although they are implicitly presented in the first and second major themes as well. Physical activity was perceived to be not for Asian American midlife women because their traditional cultural beliefs and values did not place a high priority in physical activity. Indeed, all the themes of this study reflect Asian American midlife women’s marginalized experience with physical activity in the United States; the women were marginalized/isolated by perceiving themselves as not suitable for physical activity, by keeping traditions in their daily lives rather than assimilating to the main stream and participating in physical activity, and by placing kids first and leaving their needs for physical activity behind. This marginalized experience was primarily due to their Asian cultural heritage, values, and beliefs that circumscribed their physical activity in U.S. society.

The first theme of keeping traditions can be frequently found in the literature on Asian Americans, especially Asian American midlife women, but not in the literature on physical activity. The literature demonstrates that in Asian cultures, women are supposed to take care of their family members and maintain traditions in their families (St. Hill, Lipson, & Meleis, 2002). Strong traditional gender roles influence the women’s participation in physical activity (Dyck & Dossa, 2007; Im & Choe, 2004). The first theme of keeping traditions is similar to findings in previous studies (Dyck & Dossa, 2007; Im & Choe, 2004; Pham, Harrison, & Kagawa-Singer, 2007) and adds new information on what keeping traditions in busy daily schedules could mean to these women. The women in this study devoted a number of hours to shopping for ethnic groceries, especially fresh foods, and preparing traditional foods, which is not usual for typical midlife women in the United States.

The second major theme of not a priority is similar to the findings of a few studies on Asian’s cultural values and beliefs related to physical activity. Asian culture is very well known for its emphasis on academic excellence and respect for intellectual activities rather

than physical activities (Im, 2001; Zachariah, 2005). Chang (2003, p. 94) even described the Chinese high expectations for education as “compulsive,” emphasizing the high value of education in Chinese culture. With the emphasis on education (that usually focuses on intellectual and academic abilities), Asian Americans tend to give the lowest priority to physical activity in their daily lives. Historically, physical activity was once devalued in the Confucian-based Asian cultures because physical activity, associated with manual labor, was usually performed by people of a lower social class and women (Im & Choe, 2004). These cultural values related to physical activity have been greatly influenced through contacts with the West, and migration to the West has assimilated people of Asian descent to Western culture (Im, Shin, & Chee, 2008). However, the devaluation of physical activity, especially in the forms of chores and household tasks, still continues among Asian American women (Im & Choe). All the Asian American participants of this study echoed that physical activity was not a priority in their lives, from their childhoods to the present.

The sub-theme of the second major theme, kids first, not my own needs, was also reported in the few studies on Asian Americans. The literature on physical activity is clear that across ethnic groups, women are hesitant to participate in physical activity during times when they need child care, and child care is one of the important contextual factors that influences physical activity (Im & Choe, 2004; Laffrey, 2000; Lai, 2003; Thompson, Anderson, & Bakerman, 2000). Especially among Asian Americans, needs of children were always the first priority (Im & Choe, 2001; Im, 2001; Zachariah, 2005), and women who place physical activity before their children can be harshly judged (Im & Choe, 2004).

The third theme, not for Asian girls, is similar to a study on Asian women’s body image and its association to their physical activity (Im & Choe, 2004). Korean American women in the United States related their physical activity to improved body self-image and appreciated the cosmetic effects of exercise (Im & Choe, 2004). Also, the theme of “not for Asian girls” could be interpreted in the contexts of social influences that have frequently been pointed out as an important predictor of physical activity in the literature (Prevc, Doupona, & Topic, 2009). In the literature, social influence means the opinion of family, friends, colleagues, health professionals, and the general opinion of society (Van der Ploeg, Van der Beek, Van der Woude, & Van Mechelen, 2004). Considering Asian cultural heritage that places family in the highest priority in women’s daily lives (Im, 2001; Zachariah, 2005), social influences, especially the influences of their families, could be much more influential to the women’s participation in physical activity than with other ethnic groups. Thus, within this context, it is easily understandable why the participants of this study who were not encouraged to be involved in physical activity by their parents during their childhood maintained their sedentary life styles to the present.

This study has several limitations due to inherent nature of a qualitative online forum design. The participants tended to be highly educated and employed. Furthermore, the participants included only five sub-ethnic groups of Asian Americans. Thus, the interpretation of the findings needs to be carefully considered. Also, theoretical saturation might have not been obtained because of asynchronous interactions during the 6-month online forum. Sometimes, both the participants and the researchers could not promptly and adequately respond to each other to reach satisfied mutual agreements.

Conclusion

Based on the findings, we propose the following implications for future development of physical activity promotion programs for Asian American midlife women. First of all, health care providers need to focus on motivating Asian American midlife with strategies that could include family members in physical activity. Providing childcare during physical activity would work very well for this specific population. Also, it would likely be more effective if the physical activity promotion program was incorporated into their daily household chores. When considering the second theme of the study (not a priority), a Web-based education program that the women could do at home would work for this population. The program also needs to be ethnic-specific, in the women's own language and with those from the same ethnic group. Finally, health care providers need to be aware of the tendency that Asian American midlife women might prefer specific types of physical activities that could accommodate their physical characteristics that were reflected in the sub-theme of the third major theme, weak and small.

References

- Baehring TU, Schulze H, Bornstein SR, Scherbaum WA. Using the world wide web: a new approach to risk identification of diabetes mellitus. *International Journal of Medical Informatics*. 1997; 46(1): 31–39. [PubMed: 9476153]
- Balsamo, A. *Technologies of the gendered body*. Durham, NC: Duke University Press; 1996.
- Barrera M Jr, Glasgow RE, McKay HG, Boles SM, Feil EG. Do Internet-based support interventions change perceptions of social support? An experimental trial of approaches for supporting diabetes self-management. *American Journal of Community Psychology*. 2002; 30(5):637–654. [PubMed: 12188054]
- Berg JA, Cromwell SL, Arnett M. Physical activity: Perspectives of Mexican American and Anglo American midlife women. *Health Care for Women International*. 2002; 23(8):894–904. [PubMed: 12487704]
- Bowker NI, Liu JH. Are women occupying positions of power online? *Demographics of chat room operators. Cyberpsychology Behavior, and Social Networking*. 2001; 4(5):631–644.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006; 3(2):77–101.
- Centers for Disease Control and Prevention. Prevalence of physical activity, including lifestyle activities among adults—United States, 2000–2001. *MMWR Morbidity and Mortality Weekly Report*. 2003; 52:764–768. [PubMed: 12917582]
- Centers for Disease Control and Prevention. Physical activity among Asians and Native Hawaiian or Other Pacific Islanders—50 States and the District of Columbia, 2001–2003. *MMWR Morbidity and Mortality Weekly Report*. 2004; 53(33):756–760. [PubMed: 15329650]
- Chang, BL.; Zhan, L. Chinese. In: St Hill, P.; Lipson, JG.; Meleis, AI., editors. *Caring for women cross-culturally*. Philadelphia, PA: F.A. Davis Company; 2003. p. 92-107.
- Dyck I, Dossa P. Place, health and home: gender and migration in the constitution of healthy space. *Health & Place*. 2007; 13(3):691–701. [PubMed: 17145198]
- Hall JM, Stevens PE. Rigor in feminist research. *ANS Journal of Advanced Nursing Science*. 1991; 13(3):16–29.
- Im EO. Nursing research on physical activity: A feminist critique. *Intonation Journal of Nursing Studies*. 2001; 38(2):185–194.
- Im EO, Chee W, Lim HJ, Liu Y, Kim HK. Midlife women's attitudes toward physical activity. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*. 2008; 37(2):203–213.
- Im EO, Choe MA. Physical activity of Korean immigrant women in the U. S.: Needs and attitudes. *International Journal of Nursing Studies*. 2001; 38(5):567–577. [PubMed: 11524103]

- Im EO, Choe MA. Korean women's attitudes toward physical activity. *Research in Nursing & Health*. 2004; 27(1):4–18. [PubMed: 14745852]
- Im EO, Ko Y, Hwang H, Yoo K, Chee W, Stuifbergen A, Walker L, Brown A, McPeck C, Chee E. "Physical Activity As a Luxury": African American Midlife Women's Attitudes toward Physical Activity. *Western Journal of Nursing Research*. 2011 Epub ahead of print.
- Im EO, Lee BI, Hwang H, Yoo K, Chee W, Stuifbergen A, Walker L, Brown A, McPeck C, Miro M, Chee E. "A Waste of Time": Hispanic Women's Attitudes toward Physical Activity. *Women and Health*. 2010; 50:563–579. [PubMed: 20981637]
- Im EO, Shin HJ, Chee W. Characteristics of Midlife Women Recruited Through Internet Communities/Groups. *Computers, Informatics, Nursing*. 2008; 26(1):39–48.
- Korean National Internet Development Agency. [Accessed March 10, 2009] Family Internet usage statistics. Available at <http://isis.nida.or.kr/sub02/>
- Laffrey SC. Physical activity among older Mexican American women. *Research in Nursing & Health*. 2000; 23(5):383–392. [PubMed: 11052392]
- Lai, MH. Unpublished doctoral dissertation. Taipei Medical University; Taiwan, Taipei: 2003. A study of the physical activity experience among perimenopausal women without regular exercise.
- Lin YC, Huang LH, Young HM, Chen YM. Beliefs about physical activity--focus group results of Chinese community elderly in Seattle and Taipei. *Geriatric Nursing*. 2007; 28(4):236–244. [PubMed: 17711788]
- Ma, WF. Physical activity for adults with anxiety disorders in Taiwan. Poster session presented at the CHPR Persons with Chronic and Disabling Conditions Research Conference; Austin, TX. 2005.
- Margetts BM, Rogers E, Widhal K, Remaut de Winter AM, Zunft HJ. Relationship between attitudes to health, body weight, and physical activity and level of physical activity in a nationally representative sample in the European Union. *Public Health Nutrition*. 1999; 2(1A):97–103. [PubMed: 10933629]
- Pham KL, Harrison GG, Kagawa-Singer M. Perceptions of diet and physical activity among California Hmong adults and youths. *Preventing Chronic Disease*. 2007; 4(4):1–12. Retrieved from http://www.cdc.gov/pcd/issues/2007/oct/pdf/07_0074.pdf.
- Prevc P, Doupona Topic M. Age identity, social influence and socialization through physical activity in elderly people living in a nursing home. *Collegium Antropologicum*. 2009; 33(4):1107–1114. [PubMed: 20102055]
- Slootmaker SM, Chinapaw MJ, Schuit AJ, Seidell JC, Van Mechelen W. Feasibility and effectiveness of online physical activity advice based on personal activity monitor: Randomized controlled trial. *Journal of Medical Internet Research*. 2009; 11(3):e27. [PubMed: 19674956]
- St Hill, P.; Lipson, J.; Meleis, AI. *Caring for Women Cross-Culturally: A Portable Guide*. Philadelphia, PA: FA Davis; 2002.
- Stevens PE. Focus groups: Collecting aggregate-level data to understand community health phenomena. *Public Health Nursing*. 1996; 13(3):170–176. [PubMed: 8677232]
- Thompson P, Anderson L, Bakerman R. Effects of racial socialization and racial identity on acculturative stress in African American college students. *Cultural Diversity and Ethnic Minority Psychology*. 2000; 6:196–210. [PubMed: 10910532]
- U.S. Census Bureau. *The Asian population: 2000*. Census 2000 brief. Washington, DC: U.S. Census Bureau; 2000.
- U.S. Census Bureau. *2006 American community survey*. Minneapolis, MN: Minnesota Population Center; 2006.
- U.S. Department of Health and Human Services. *Physical activity guidelines for Americans*. 2008. Retrieved from <http://www.health.gov/paguidelines/pdf/paguide.pdf>
- Van der Ploeg HP, Van der Beek AJ, Van der Woude LH, Van Mechelen W. Physical activity for people with a disability: a conceptual model. *American Journal of Sports Medicine*. 2004; 34(10):639–649.
- Wilbur J, McDevitt J, Wang E, Dancy B, Briller J, Ingram D, Zenk SN. Recruitment of African American women to a walking program: Eligibility, ineligibility, and attrition during screening. *Research in Nursing & Health*. 2006; 29:176–189. [PubMed: 16676339]

Zachariah, R. East Indians. In: Lipson, JG.; Dibble, SL., editors. Culture and clinical care. San Francisco, CA: The University of California San Francisco Nursing Press; 2005. p. 146-162.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Callouts

1. Asian American midlife women felt that they should sacrifice their own needs, especially, physical activity, to take care of and support their children.
2. When Asian American women felt that there were conflicts between their duties and the necessity of physical activity, they easily gave up physical activity.
3. Asian American women felt that compared to boys, girls were not encouraged to participate in physical activity, including outdoor activities or competitive sports.

Table 1

Background Characteristics of the Participants (N=17)

Characteristics	n (%)
Age (Mean \pm SD)	49.06 \pm 5.86
<i>Education</i>	
High school	2 (11.8)
College	5 (29.4)
Graduate degree	10 (58.8)
<i>Religion</i>	
Protestant	3 (17.7)
Catholic	1 (5.9)
None	10 (58.8)
<i>Marital status</i>	
Married/partnered	15 (88.2)
Non-married/partnered	2 (11.8)
<i>Employment</i>	
Yes	12 (70.6)
No	5 (29.4)
<i>Income level (difficulty in paying the basics)</i>	
Very hard	0 (0.0)
Somewhat hard	9 (52.9)
Not hard	8 (47.1)
<i>No. of children</i>	
None	4 (23.5)
1–2	10 (58.8)
3–5	3 (17.7)
More than 5	0 (0.0)
<i>Country of birth</i>	
United States	4 (23.5)
Outside United States	13 (76.5)
<i>Sub-ethnicity</i>	
Chinese	6(35.3)
Korean	6(35.3)
Asian Indian	3(17.6)
Filipino	1(5.9)
Sri Lankan	1(5.9)
<i>Social support^a (Mean \pm SD)</i>	2.53 \pm 1.23
<i>Walkability of community^b(Mean \pm SD)</i>	4.29 \pm 1.53
<i>Length of stay in United States (yrs)(Mean \pm SD)</i>	19.54 \pm 11.10
<i>Level of acculturation (Mean \pm SD)</i>	11.54 \pm 2.79

Note.

^a 1=none of the time, 4=most of the time.

^b₁=awful, 6=excellent.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 2

Perceived health and menstrual status of the participants (N=17)

Characteristics	n (%)
<i>Body mass index (BMI)(kg/m²) (Mean±SD)</i>	23.46±3.87
<i>Category of BMI</i>	
Normal (<25)	13 (76.5)
Overweight (25 to <30)	3 (17.7)
Obese (≥ 30)	1 (5.9)
<i>General health^a (Mean±SD)</i>	3.88±0.60
<i>Having diagnosed disease</i>	
Yes	7 (41.2)
No	10 (58.8)
<i>Taking medicine</i>	
Yes	6 (35.3)
No	11 (64.7)
<i>Menopausal status</i>	
Premenopause	3 (17.7)
Early perimenopause	6 (35.3)
Late perimenopause	1 (5.9)
Postmenopause	7 (41.2)

Note.

^a 1=very unhealthy, 5=very healthy.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript