

Commentary: Utilizing Community-Engaged Approaches to Investigate and Address Hmong Women's Cancer Disparities

By

Shannon M.A. Sparks, PhD¹
Pang C. Vang, RN, CHES, MEd²
Beth Peterman, BS, MSN, APNP-BC²
Lisa Phillips, MEd, CHES³
Mayhoua Moua⁴

Hmong Studies Journal, 15(1): 1-18.

Abstract

Cancer is a growing concern for women in the Hmong community. Hmong women experience poor health outcomes for both cervical and breast cancer, largely due to low rates of screening and resultant late-stage at diagnosis. Both breast and cervical cancer screening are complicated by a multitude of social, cultural and environmental factors which influence health care decision-making and can otherwise serve to restrict access. We argue that community-engaged research, an orientation which prioritizes collaborative, equitable partnerships and community voice in identifying both problems and solutions, can be a valuable approach to helping address cancer health disparities for Hmong women. Using the Milwaukee-based "Healthy Hmong Women" project as a case example, we detail how the community-engaged approach implemented by the project partners was critical in identifying factors contributing to Hmong cancer disparities and appropriate interventions, as well as the overall acceptance and success of the project. Specifically, we discuss how this approach: (1) promoted community investment and ownership in the project; (2) facilitated the integration of local perspectives and experiences; (3) built capacity to address cancer screening disparities; (4) facilitated the creation of interventions targeting multiple ecological levels; and (5) framed the community as the foundation and driver of positive change.

¹ Department of Civil Society and Community Studies, School of Human Ecology, University of Wisconsin–Madison, Madison, Wisconsin

² Institute for Urban Health Partnerships, College of Nursing, University of Wisconsin-Milwaukee, Milwaukee, WI

³ City of Milwaukee Health Department, Milwaukee, WI

⁴ Moua Consulting Group, Milwaukee, WI

Introduction

In recent years, awareness of and attention to health disparities in Hmong communities in the United States (U.S.) has been increasing. Based on a growing collection of regional and local studies, we know that Hmong-Americans suffer from elevated rates of cancer, cardiovascular disease, diabetes, hepatitis, hypertension and gout (Smalkoski et al., 2012; Xiong et al., 2013). However, to date there have been no large scale studies examining Hmong health disparities, and little data exists to evaluate the prevalence or burden of these diseases nationally (Smalkoski et al., 2012). What research does exist tends to focus on specific diseases or specific communities with large Hmong populations, or includes Hmong as one of several populations of interest.

The reasons behind this relative neglect of Hmong Americans in the health disparities literature are twofold. First, while the Hmong population has increased significantly over the past two decades, they still constitute only a very small percentage (.08%) of the U.S. population (Pfeifer & Yang, 2013). Consequently, the Hmong tend to get lumped together with other Asian/Pacific Islander (API) groups for purposes of research and data reporting. This practice leads to the second problem. The API population has the lowest all-cause mortality rate of any racial ethnic group in the United States (Population Reference Bureau, 2002), thus any disparities in health experienced by Hmong Americans get masked by their inclusion within the broader API category (Ro, 2002).

Cancer is one area of concern where significant disparities have been masked by their inclusion within the comparatively low cancer-risk API category. While overall cancer rates in the Hmong community are lower than those for Asian Pacific Islanders (API) or non-Hispanic whites (NHW), Hmong demonstrate elevated rates of several cancers, most notably liver, stomach, nasopharyngeal, and cervical as well as leukemia (Mills, Yang, & Riordan, 2005). And unfortunately, for many of these cancers, the Hmong experience poorer health outcomes, a consequence of low screening rates and resultant diagnosis at later disease stage (Mills et al., 2005; Yang, Mills, & Dodge, 2006).

For Hmong women, cervical and breast cancer are of particular concern. Hmong women exhibit rates of invasive cervical cancer that are particularly high. Incidence and mortality rates in all age groups are elevated, and overall are more than three times the API rate and four times the rate of NHWs (Mills et al., 2005; Yang, Mills, & Riordan, 2004). Hmong women are also less likely to have their cancers diagnosed at a more readily treatable, in situ stage – only 55% of Hmong cervical cancers are discovered in situ, compared with 68% and 82% of API and NHW women, respectively (Yang et al., 2004). While breast cancer incidence rates are lower compared to API and NHW populations, Hmong breast cancer patients also tend to be diagnosed at a significantly later stage (9.3% in situ for Hmong compared to 40% and 46% for API & NHW women, respectively), similarly resulting in poorer breast cancer outcomes (Mills et al., 2005; Warner et al., 2012).

Critical to improving both cervical and breast cancer health outcomes for Hmong women are regular screenings and, in cases where disease is discovered, prompt

treatment. Five-year survival rates are quite high (>90%) for women whose cancer is discovered in situ, but drop quickly as the cancer spreads. However, cancer screening efforts presuppose a Western orientation to health and illness; they are difficult to interpret from the traditional Hmong perspective that equates illness with the presentation of physical symptoms, and challenging to implement in the context of Hmong views of illness and the body as private matters (Culhane-Pera & Xiong, 2003; Schroepfer, Waltz, Noh, Matloub, & Kue, 2010). Consequently, cervical and breast screening rates for Hmong women are very low. In a study of breast and cervical cancer screening utilization among Hmong women in California, Yang and colleagues found that only 27.7% of Hmong women reported ever receiving a Pap Test, while only 15.8% reported ever receiving a mammogram (Yang et al., 2006).

Key to improving screening rates and cancer health outcomes for Hmong women is a deep understanding of the local context that impacts decisions about screening and treatment. Central to this are culturally-informed understandings of health, beliefs about cancer as a disease, its cause and meaning, and the consequences of action and inaction. Also relevant are perceptions of – and access to – Western medicine and the role of family in decision-making regarding utilization of health care resources. Finally, other factors that impact health care access such as insurance, literacy, and socio-economic status are also important considerations in Hmong cancer health disparities.

This paper details the importance of a multi-year community-based research partnership to the development and success of a program in Milwaukee, Wisconsin to improve breast and cervical cancer screening rates for Hmong women. The development of this program – known locally as “Healthy Hmong Women” – was guided by the Milwaukee Consortium for Hmong Health, a coalition of academics, community-based organizations, clinics, and members of the Hmong community. The Consortium utilizes a community-engaged approach in its work with the Milwaukee Hmong community, an orientation that prioritizes collaborative, non-hierarchical partnerships and community voice in identifying and solving problems. This approach is reflected not only in the processes utilized by the Consortium to ascertain local perspectives, needs, and priorities and develop and implement interventions, but also in the engaged nature of the specific intervention selected. This paper discusses the importance of such community-engaged approaches to understanding the socio-ecological context within which health and health disparities are produced, and identifying and developing interventions that improve health outcomes. In addition, we describe the role of community-engaged approaches in building trust with the community, facilitating community ownership of the project, and building community capacity to address health outcomes.

The Socio-Ecological Context of Hmong Cancer Disparities

Health and illness, at both the individual and community level, are closely linked to the larger socio-ecological environment. They are a product of a variety of aspects of the environment – physical, social, cultural, economic, political, and historical – both directly and as a result of interactive effects between the environment and the individual (Green, Richard, & Potvin, 1996; Stokols, 1996). Consequently, health and health disparities are

locally produced but distally influenced, an outcome of fit between multiple aspects of the individual or community and multiple dimensions of the environmental context (Grzywacz & Fuqua, 2000; Stokols, 1996).

The socio-ecological environment influences health in two key ways. First, it shapes understandings of health and illness and culturally-appropriate reactions to illness. Secondly, it frames the universe of options available to individuals and families as they make decisions regarding the maintenance of health and the treatment of illness (Berman, Kendall, & Bhattacharyya, 1994; Denham, 2002; Schumann & Mosley, 1994). Such health decisions are influenced by the family's culture and collective beliefs about the world and characteristics of the community setting, as well as more pragmatic issues such as cost, access, distance, conflicting responsibilities, etc. (Frye, 1991; Grzywacz & Fuqua, 2000; Wenger, 1995).

Hmong understandings of illness generally, and cancer more specifically, figure prominently into decisions about cancer screening and treatment. Cancer is viewed as a new disease, one that they were never exposed to in their homeland and for which they do not even have a name (Baisch, Vang, & Peterman, 2008; Schroepfer et al., 2010; Vang, 2008). While there is increasing awareness of it as a disease, there is a lack of understanding of its causes and consequently significant fear. More traditional Hmong may view cancer as spiritual in origin and consequently seek out a traditional healer. Others may view it as within the purview of Western medicine, but incurable and untreatable, essentially a death-sentence (Culhane-Pera & Xiong, 2003; Schroepfer et al., 2010).

Cancer is challenging to address in the Hmong community because, in the early stages where it is more likely to be successfully treated, it is "invisible" or "silent," presenting few if any symptoms. In the traditional Hmong view of illness, an individual must be feeling ill or sick to seek treatment (Schroepfer et al., 2010; Vang, 2008) – there is no conception of an illness that could be developing invisibly within the body without causing symptoms. Therefore, it can be difficult to convince a Hmong individual to undergo screening for disease in the absence of symptoms, particularly if the procedures are viewed as embarrassing or risky (Culhane-Pera & Xiong, 2003).

Cancer screening procedures involving the breasts or reproductive organs tend to be particularly problematic for women (Culhane-Pera & Xiong, 2003). Traditional Hmong are modest and view the body as private (Schroepfer et al., 2010). Furthermore, sex and sexual organs are culturally silent issues that are rarely discussed (Yang et al., 2004). Consequently, Hmong women are often extremely embarrassed and uncomfortable with the intrusiveness of a gynecological exam, particularly if it is conducted by a male physician (Vang, 2008; Yang et al., 2004). In addition, Hmong women who are not yet married or are beyond their childbearing years often do not find gynecological exams (and the associated Pap test) warranted or appropriate (Fang, Lee, Stewart, Ly, & Chen, 2010; Vang, 2008).

Screening access is further complicated by linguistic and literacy barriers, as well as low rates of insurance. While rates of English literacy among younger Hmong women in the U.S. are high, many older Hmong women have limited English proficiency.

Consequently, translators are needed for interactions with Western medical professionals. The availability and quality of translators varies significantly, however, creating communication barriers for Hmong women with limited English proficiency (Fang & Baker, 2013; Lor, Khang, Xiong, Moua, & Lauver, 2013). In addition, there is a lack of specific terminology in the Hmong language for discussing cancer and health care screening which creates challenges for translators trying to explain procedures and diagnoses to their Hmong-speaking clients (Fang & Baker, 2013). Hmong women may face additional barriers accessing health care resources due to low rates of insurance. Census 2010 data indicate that less than 50% of the Hmong population has private insurance, and 15% are completely uninsured, which can lead to barriers or delays in accessing screening (Pfeifer & Yang, 2013). Even those with insurance, however, may not prioritize their own health needs. As Fang and Baker (2013) note, traditional Hmong values dictate that women should place the needs of their children, husband and in-laws above their own, thus Hmong women overwhelmed by other family and household responsibilities may neglect their own health needs.

Utilization of Community-Engaged Approaches to Reduce Cancer Health Disparities

To be effective and accepted in communities, health promotion and intervention programs must be designed with a deep understanding of the socio-ecological context of people's lives. In regards to cancer, this includes understanding culturally-mediated beliefs regarding etiology, prevention and treatment, where cancer prevention "fits in" with regard to daily life priorities, as well as linguistic and economic barriers and other factors (Meade, Menard, Luque, Martinez-Tyson, & Gwede, 2011). This deep attention to socio-ecological contexts impacting health and health disparities is best accomplished through methodologies which prioritize engagement with communities to identify their concerns, needs and priorities and develop research and interventions that directly respond to these community-identified needs.

Community-engaged research refers to a collection of epistemological approaches to research which share a commitment to giving people a voice in identifying and solving problems affecting their communities (Culhane-Pera et al., 2010). For the purposes of this paper, we will utilize the term community-based participatory research (CBPR). CBPR is a model of community-engaged research commonly used in health disparities research. Minkler and Wallerstein (2003, p. 4) describe it as

... a collaborative approach to research [that] equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities.

Central to CBPR is the creation of collaborative, non-hierarchical partnerships comprised of community members, researchers, organizational representatives, and other key stakeholders. These partnerships practice shared decision-making and emphasize mutual

ownership of all stages of the research process (Minkler & Wallerstein, 2003). In addition, they recognize that all partners bring relevant knowledge and expertise to the partnership and that co-learning is a critical aspect of a successful partnership (Israel, Eng, Schulz, & Parker, 2005). This has the effect, as Hartwig, Calleson, and Williams (2006) note, of transforming research from "a relationship where researchers *act upon* a community ... to one where researchers *work side by side* with community members."

While research is central to the process, ultimately its goal is to produce knowledge that can lead to action. Consequently, CBPR emphasizes building upon a community's existing strengths and resources, capacity-building within the community, and long-term commitments from all partners (Israel et al., 2005; Minkler & Wallerstein, 2003). And, because CBPR recognizes community members as cultural experts and key partners in the research process, the research and programming it generates is more valid, effective, and relevant to the community and has more sustainable outcomes (Culhane-Pera et al., 2010; Tung Thoa Nguyen et al., 2006).

CBPR has been utilized in many minority and immigrant communities in the U.S. to investigate cancer disparities and design and implement effective, community-based cancer interventions (Adams, 2007; Christopher, Gidley, Letiecq, Smith, & McCormick, 2008; Luque, Mason, Reyes-Garcia, Hinojosa, & Meade, 2011; Luque, Rivers, et al., 2011; Tung T Nguyen et al., 2010; Tung Thoa Nguyen et al., 2006; White, Haas, & Williams, 2012). These commonly integrate lay education, health worker or navigation models that train community members to provide services and programming. In a few cases, these have been layered with other programs to create multi-level interventions targeting multiple ecological levels. CBPR is likewise being increasingly utilized in Hmong communities to investigate and address a number of health concerns. To date, cancer has been the most common target of CBPR efforts (Fang & Baker, 2013; Kagawa-Singer, Tanjasiri, Valdez, Yu, & Foo, 2009; Schroepfer et al., 2010; Tanjasiri et al., 2001), although mental health (Collier, Munger, & Moua, 2012), domestic violence (Yoshihama & Carr, 2002), and immunization utilization (Baker, Dang, Ly, & Diaz, 2010) have also been investigated.

The Milwaukee Consortium for Hmong Health: A Case Example

Key to improving Hmong women's cancer health outcomes is finding ways to increase knowledge of cancer as a disease and the importance of early screening and detection in ways that are culturally and linguistically appropriate (Tanjasiri et al., 2007). For the past five years, my colleagues and I have been working with the Milwaukee community – home to the fourth largest Hmong population (11,904) in the US (Pfeifer & Yang, 2013) – to improve screening rates and cancer health outcomes for Hmong women. Key to our success has been a slow process of partnership-building with the Milwaukee Hmong community and the utilization of a community-engaged approach since the partnership's inception that prioritizes the needs, perspectives and voices of the community.

In 2008, academic and community partners working on this health issue established the Milwaukee Consortium for Hmong Health to facilitate engagement with the Hmong

community around women's cancer health and wellness and build capacity to address this issue. As has been detailed elsewhere (Sparks and Vang, accepted), the Consortium grew out of a small partnership between the University of Wisconsin-Madison and the House of Peace Community Nursing Center in Milwaukee (part of the University of Wisconsin-Milwaukee Institute for Urban Health Partners) investigating anecdotal reports of high rates of cervical cancer and late stage at diagnosis in the Wisconsin Hmong population. Today, the Consortium includes 20+ members representing numerous academic institutions, local and national non-profits, state and local government, Hmong-serving clinics and organizations and the local Hmong community. This broad representation allows us to build upon the diverse knowledge and resources of these different players and pool the limited capacity of each member.

The Consortium's mission is to "engage the Hmong community of Milwaukee for positive change regarding women's cancer health and wellness" more broadly. It operates from the premise that the Hmong families in the community are central to identifying strategies to address barriers to cancer screening and implementing solutions. The Consortium serves primarily as an advisory board, providing important guidance and feedback on the mission, vision, and priorities as well as Consortium education, research and outreach efforts. Specifically, the group works to (1) provide communication, education and outreach on cancer issues; (2) build capacity to address cancer issues; and (3) address barriers to and encourage cancer screening and follow-up.

Community Dialogues

One of the first priorities of the Consortium after its establishment was to assess the perspectives and needs of the Milwaukee Hmong community in relation to women's cancer health. While many of the Consortium members had extensive experience in the community and a sense of barriers to cancer screening and treatment, we felt it was important to engage the Hmong community directly in discussions and priority-setting regarding future strategies. Our goal was to facilitate community ownership and alignment of the Consortium with community needs and priorities. Thus, in the fall of 2008, the Consortium sponsored a series of three facilitated community dialogues to (1) discuss how understandings of cancer and perceptions of risk affect decision-making regarding cancer screenings, and (2) explore with community members effective ways to overcome barriers to accessing cancer screening and treatment.

These community dialogues resulted in a set of six community recommendations aimed at improving Hmong women's health outcomes which are guiding the Consortium's efforts moving forward. These recommendations, which are detailed in Sparks and Pang (accepted), are summarized in Table 1.

Table 1: Community Recommendations for Overcoming Barriers to Accessing Cancer Screening & Treatment

1.	Provide in-depth information and education about the importance and consequences of annual exams
2.	Explore ways to make annual exams a "requirement"
3.	Ensure that annual exams are affordable
4.	Ensure that Hmong women have access to female doctors
5.	Offer a peer education program
6.	Offer a free community-based clinic

Lay Health Education

Community recommendations 1 and 5 – which center on the idea of peer education and information sharing around preventive health and cancer screening – framed the development of “Healthy Hmong Women” (*“Poj Niam Hmoob Kev Noj Qab Haus Huv”*) which the Consortium launched in 2011. This two-year lay health education pilot project was modeled after lay health promotion programs successfully utilized in other API communities to increase cancer literacy as well as access to and rates of cancer screening (Kagawa-Singer et al., 2009; Lo et al., 2010; T.-U. N. Nguyen et al., 2008; T.-U. N. Nguyen, Tran, Kagawa-Singer, & Foo, 2009; Tanjasiri et al., 2007).

“Healthy Hmong Women” takes a two-pronged approach, providing both lay cancer health education to the greater Milwaukee Hmong community and support to Hmong women recently diagnosed with breast or cervical cancer. For our lay health education module, we trained seven local bilingual/bicultural Hmong women as community health workers (CHWs). Our CHWs conduct small, family-based workshops educating Hmong women and their families about cervical and breast cancer, cancer prevention and screening tests. Women due and eligible for breast and/or cervical cancer screening are encouraged to get screened and connected with resources to access screening and translation services if needed. The CHWs have also conducted several large community education luncheons, one of which was specifically designed to engage Hmong men in the conversation about women’s cancer screenings, an addition considered important by the community given the role of men in health care decision making for women in their family (Parker & Neng, 1999).

To work with newly diagnosed cancer patients, we trained two Hmong cancer survivors as community health mentors (CHMs). The CHMs provide emotional and instrumental support to Hmong women with cervical or breast cancer after their diagnosis. Utilizing their own cancer diagnosis and treatment experiences, these survivors provide support to Hmong women facing the beginning of their own cancer journey and

encouragement to engage in recommended treatments. Evaluation of both the CHW and CHM programs is currently underway.

Importance and Value of Community-Engaged Approaches

The community-engaged approach utilized by the Consortium in its work with the Hmong community has been beneficial in many ways:

1. **This approach has promoted community investment and ownership in the Consortium and its work.** The process of involving and engaging the community since the Consortium's inception has established two-way communication between the Hmong community and providers and academics, providing an opening and forum for discussion and priority-setting with the community. Consequently, while the Consortium was initially established by outside entities, the community is now well represented in its membership and is coming to see the Consortium as part of the community itself. In addition, because the Hmong community views itself as helping to direct the Consortium's work, that work is legitimized within the Hmong community. The Consortium and its academic partners are understood to be working to further the community's goals rather than imposing their own agenda upon the community.
2. **Engagement with the community has facilitated the integration of local perspectives and experiences.** From the outset, the Consortium recognized the need to understand the community's perspective on – and understanding of – cancer and cancer screening, and the community dialogues were a valuable part of this process. We were able to identify an array of barriers to screening and treatment specifically faced by Hmong women in Milwaukee, understand their priorities for action, and design interventions with these in mind. Consequently, Consortium initiatives fit with the community's needs and priorities because they have been designed in direct response to the perspective and insights that emerged through the community dialogues. In addition, we have continued to respond to issues and concerns brought forth by the community and our lay health educators during our implementation process and adjust accordingly.
3. **We have been able to build capacity in the community to address cancer screening disparities through community engagement.** Participants in our project have indicated to us that, prior to the Consortium-sponsored community dialogues and lay health education workshops, Pap tests and mammograms were not part of their conversations. They emphasized, however, that it was important for Hmong women to talk with one another and share their health experiences, and the community dialogues and health education workshops provide a valuable opportunity and safe environment to start doing so. In addition, by training a cadre of local bilingual/bicultural Hmong women as community health workers with expertise in cancer and cancer screening, we are helping increase capacity within the Hmong community to improve cancer health literacy and cancer screening rates and continue these conversations.

4. **We have put in place interventions and resources aimed at addressing barriers to access at multiple ecological levels.** While “Healthy Hmong Women” is primarily about peer lay health education and creating change at the individual level, the range of partners that we have brought into the Consortium has increased our capacity to address a range of other critical barriers to screening tied to lack of insurance, cost, language barriers, etc. Multilevel interventions which target the contextual determinants of health at multiple ecological levels are important to successfully addressing disparities in health (Trickett & Beehler, 2013), and our engaged approach has facilitated the inclusion of partners and resources that are able to address a greater range of health determinants.
5. **The community is framed as the foundation and driver of positive change rather than a barrier or “high risk” public.** Too often, the culture or beliefs of minority and immigrant communities are construed as being at the root of their health problems, and populations consequently constructed as “at risk.” Culturally-rooted health beliefs, for example, may be framed as erroneous or incorrect, and blamed for the existence of health disparities. However, culture can also be an asset that can be leveraged to improve health and well-being, as in the case described here. By engaging the community in identification and prioritization of needs, barriers, and modes of intervention, the community settled upon a strategy that builds upon a cultural strength – the utilization of peer networks for the communication of information. Thus, by training Hmong community health workers, important health information is being introduced into existing lay networks and reproduced through a traditional mode of communication (i.e., women’s peer networks). These networks are thus constructed as an asset and important frame for facilitating change rather than a barrier.

Summary and Conclusion

The community-engaged approaches utilized by the Consortium and the “Healthy Hmong Women” project – (1) community dialogues and (2) lay health education – have in our view been critical to the acceptance and success of the Consortium and the project. The process has been critical in identifying factors within the community contributing to the production of Hmong cancer disparities and identifying appropriate interventions. And, as a result of this process, we are engaged in work that fits with the priorities and needs of the community and is consequently building community capacity. The community health workers and community health mentors have become important resources in the community, and have had success in increasing cancer health literacy and intent to screen. While the ultimate impact of the project on rates of screening and treatment initiation are still being assessed, it is clear that the project has been successful in increasing awareness of breast and cervical cancer as issues of concern in the Hmong community and encouraging conversations about these diseases. In addition, the community has indicated that it sees value in the peer health education model and has already pushed to expand the scope of the intervention to include men and other pressing health concerns. To this end, the Consortium is in the process of broadening our CHW program to engage Hmong men more integrally in conversations and workshops focusing on women’s cancer health and

preventive screenings. In addition, we are integrating other cancers such as liver cancer which disproportionately affect Hmong men into our lay health education curriculum and workshops and planning to train men as CHWs. Our hope and goal is that the community will increasingly guide and drive the Consortium's health improvement efforts. As the community's partners, our aim is to support *their* goals, priorities and agenda.

References Cited

- Adams, M. Lou. (2007). The African American Breast Cancer Outreach Project: Partnering with Communities. *Family & Community Health*, 30, S85–S94. Retrieved from http://journals.lww.com/familyandcommunityhealth/Fulltext/2007/01001/The_African_American_Breast_Cancer_Outreach.11.aspx
- Baisch, M. J., Vang, P. C., & Peterman, B. R. (2008). An Exploration of Hmong Women's Perspectives on Cancer. *Asian Nursing Research*, 2(2), 82–91.
- Baker, D. L., Dang, M. T., Ly, M. Y., & Diaz, R. (2010). Perception of barriers to immunization among parents of Hmong origin in California. *American Journal of Public Health*, 100(5), 839–45. doi:10.2105/AJPH.2009.175935
- Berman, P., Kendall, C., & Bhattacharyya, K. (1994). The Household Production of Health: Integrating Social Science Perspectives on Micro-level Health Determinants. *Social Science and Medicine*, 38(2), 205–215.
- Christopher, S., Gidley, A. L., Letiecq, B., Smith, A., & McCormick, A. K. H. G. (2008). A Cervical Cancer Community-Based Participatory Research Project in a Native American Community. *Health Education & Behavior*, 35(6), 821–834.
- Collier, A. F., Munger, M., & Moua, Y. K. (2012). Hmong mental health needs assessment: a community-based partnership in a small mid-Western community. *American Journal of Community Psychology*, 49(1-2), 73–86. doi:10.1007/s10464-011-9436-z
- Culhane-Pera, K. A., Allen, M., Pergament, S. L., Call, K., Adawe, A., de la Torre, R., ... Yang, T. T. (2010). Improving Health through Community-Based Participatory Action Research. *Minnesota Medicine*, 93(4), 54–57.
- Culhane-Pera, K. A., & Xiong, P. (2003). Hmong Culture: Tradition and Change. In K. A. Culhane-Pera, D. E. Vawter, P. Xiong, B. Babbitt, & M. M. Solberg (Eds.), *Healing by Heart: Clinical and Ethical Case Stories of Hmong Families and Western Providers* (pp. 11–70). Nashville, TN: Vanderbilt University Press.
- Denham, S. A. (2002). The household production of health. In *Family Health: A Framework for Nursing*. Philadelphia, PA: FA Davis Company.
- Fang, D. M., & Baker, D. L. (2013). Barriers and Facilitators of Cervical Cancer Screening among Women of Hmong Origin. *Journal of Health Care for the Poor and Underserved*, 24(2), 540–55. doi:10.1353/hpu.2013.0067

- Fang, D. M., Lee, S., Stewart, S. L., Ly, M. Y., & Chen, M. S. (2010). Factors associated with pap testing among Hmong women. *Journal of Health Care for the Poor and Underserved*, 21(3), 839–50. doi:10.1353/hpu.0.0338
- Frye, B. A. (1991). Cultural themes in health-care decision making among Cambodian refugee women. *Journal of Community Health Nursing*, 8(1), 33–44. doi:10.1207/s15327655jchn0801_4
- Green, L. W., Richard, L., & Potvin, L. (1996). Ecological foundations of health promotion. *American Journal of Health Promotion*, 10(4), 270–81. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10159708>
- Grzywacz, J. G., & Fuqua, J. (2000). The social ecology of health: Leverage points and linkages. *Behavioral Medicine*, 26, 101–115.
- Hartwig, K., Calleson, D. C., & Williams, M. (2006). Unit 1: CBPR – Getting Grounded. In The Examining Community-Institutional Partnerships for Prevention Research Group (Ed.), *Developing and Sustaining Community-Based Participatory Research Partnerships: A Skills Building Curriculum*. Retrieved from www.cbprcurriculum.info
- Israel, B. A., Eng, E., Schulz, A. J., & Parker, E. A. (2005). Introduction to Methods in Community-Based Participatory Research for Health. In B. A. Israel, E. Eng, A. J. Schulz, & E. A. Parker (Eds.), *Methods in Community-Based Participatory Research for Health* (pp. 3–26). San Francisco: Jossey-Bass.
- Kagawa-Singer, M., Tanjasiri, S. P., Valdez, A., Yu, H., & Foo, M. A. (2009). Outcomes of a Breast Health Project for Hmong Women and Men in California. *American Journal of Public Health*, 99 Suppl 2, S467–73. doi:10.2105/AJPH.2008.143974
- Lo, P., Fang, D. M., Ly, M. Y., Stewart, S., Lee, S., & Chen Jr, M. S. (2010). Access to Adequate Healthcare for Hmong Women: A Patient Navigation Program to Increase Pap Test Screening. *Hmong Studies Journal*, 11, 1–29. Retrieved from <http://www.hmongstudies.org/LoetalHSJ11.pdf>
- Lor, M., Khang, P. Y., Xiong, P., Moua, K. F., & Lauver, D. (2013). Understanding Hmong women's beliefs, feelings, norms, and external conditions about breast and cervical cancer screening. *Public Health Nursing (Boston, Mass.)*, 30(5), 420–8. doi:10.1111/phn.12043
- Luque, J. S., Mason, M., Reyes-Garcia, C., Hinojosa, A., & Meade, C. D. (2011). Salud es vida: development of a cervical cancer education curriculum for promotora outreach with Latina farmworkers in rural Southern Georgia. *American Journal of Public Health*, 101(12), 2233–5. doi:10.2105/AJPH.2011.300324
- Luque, J. S., Rivers, B. M., Gwede, C. K., Kambon, M., Green, B. L., & Meade, C. D. (2011). Barbershop Communications on Prostate Cancer Screening Using Barber Health

Advisers. *American Journal of Men's Health*, 5(2), 129–139.
doi:10.1177/1557988310365167

Meade, C. D., Menard, J. M., Luque, J. S., Martinez-Tyson, D., & Gwede, C. K. (2011). Creating Community-Academic Partnerships for Cancer Disparities Research and Health Promotion. *Health Promotion Practice*, 12(3), 456–462.

doi:10.1177/1524839909341035

Mills, P. K., Yang, R. C., & Riordan, D. G. (2005). Cancer incidence in the Hmong in California, 1988-2000. *Cancer*, 104(12 Suppl), 2969–74. doi:10.1002/cncr.21525

Minkler, M., & Wallerstein, N. (2003). *Community-Based Participatory Research for Health*. San Francisco: Jossey-Bass.

Nguyen, T. T., Love, M. B., Liang, C., Fung, L.-C., Nguyen, T., Wong, C., ... Woo, K. (2010). A pilot study of lay health worker outreach and colorectal cancer screening among Chinese Americans. *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education*, 25(3), 405–12. doi:10.1007/s13187-010-0064-3

Nguyen, T. T., McPhee, S. J., Bui-Tong, N., Luong, T.-N., Ha-Iaconis, T., Wong, C., ... Lam, H. (2006). Community-Based Participatory Research Increases Cervical Cancer Screening among Vietnamese-Americans. *Journal of Health Care for the Poor and Underserved*, 17(2), 31–54. doi:10.1353/hpu.2006.0078

Nguyen, T.-U. N., Tanjasiri, S. P., Kagawa-Singer, M., Tran, J. H., Foo, M. A., & Ngoc Nguyen, T. U. (2008). Community Health Navigators for Breast- and Cervical-Cancer Screening Among Cambodian and Laotian Women: Intervention Strategies and Relationship-Building Processes. *Health Promotion Practice*, 9(4), 356–367.
doi:10.1177/1524839906290251

Nguyen, T.-U. N., Tran, J. H., Kagawa-Singer, M., & Foo, M. A. (2009). *The Southeast Asian Breast Health Navigation Report*. *Breast Cancer Research*. Garden Grove, CA.

Parker, M., & Neng, L. (1999). Culturally Responsive Health Care: The Example of the Hmong in America. *Journal of the American Academy of Nurse Practitioners*, 11(12), 511–518. doi:10.1111/j.1745-7599.1999.tb01220.x

Pfeifer, M. E., & Yang, K. (2013). Hmong Population and Demographic Trends in the 2010 Census and 2010 American Community Survey. In M. E. Pfeifer & B. K. Thao (Eds.), *The State of the Hmong American Community* (pp. 8–20). Washington, DC: Hmong National Development.

Population Reference Bureau. (2002). *Racial and Ethnic Differences in U.S. Mortality*. Washington, DC. Retrieved from <http://www.prb.org/Publications/Articles/2002/RacialandEthnicDifferencesinUSMortality.aspx>

- Ro, M. (2002). Moving forward: addressing the health of Asian American and Pacific Islander women. *American Journal of Public Health*, 92(4), 516–9. Retrieved from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1447107&tool=pmcentrez&rendertype=abstract>
- Schroepfer, T. A., Waltz, A., Noh, H., Matloub, J., & Kue, V. (2010). Seeking to Bridge Two Cultures: The Wisconsin Hmong Cancer Experience. *Journal of Cancer Education*, 25(4), 609–16. doi:10.1007/s13187-010-0102-1
- Schumann, D. A., & Mosley, W. H. (1994). The Household Production of Health. *Social Science & Medicine*, 38(2), 201–4. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8140446>
- Smalkoski, K., Herther, N. K., Xiong, Z. B., Ritsema, K., Vang, R., & Zheng, R. (2012). Health Disparities Research in the Hmong American Community: Implications for Practice and Policy. *Hmong Studies Journal*, 13(2), 1–31.
- Sparks, S. M. A., & Vang, P. C. (accepted). The Development of the Milwaukee Consortium for Hmong Health: Capacity Building Through Direct Community Engagement. *Progress in Community Health Partnerships: Research, Education, and Action*.
- Stokols, D. (1996). Translating Social Ecological Theory into Guidelines for Community Health Promotion. *American Journal of Health Promotion*, 10(4), 282–298.
- Tanjasiri, S. P., Kagawa-Singer, M., Foo, M. A., Chao, M., Linayao-Putman, I., Lor, Y. C., ... Vang, X. (2001). Breast Cancer Screening among Hmong Women in California. *Journal of Cancer Education*, 16(1), 50–54. Retrieved from [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=11270901](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt= Citation&list_uids=11270901)
- Tanjasiri, S. P., Kagawa-Singer, M., Foo, M. A., Chao, M., Linayao-Putman, I., Nguyen, J., ... Valdez, A. (2007). Designing Culturally and Linguistically Appropriate Health Interventions: The “Life is Precious” Hmong Breast Cancer Study. *Health Education & Behavior*, 34(1), 140–153. doi:1090198105285336 [pii] 10.1177/1090198105285336
- Trickett, E. J., & Beehler, S. (2013). The Ecology of Multilevel Interventions to Reduce Social Inequalities in Health. *American Behavioral Scientist*, 57(8), 1227–1246. doi:10.1177/0002764213487342
- Vang, C. Y. (2008). *Cancer and Health Screening Experiences: Hmong Women in the Milwaukee Area*. Milwaukee, WI.
- Warner, E. T., Tamimi, R. M., Hughes, M. E., Ottesen, R. A., Wong, Y.-N., Edge, S. B., ... Partridge, A. H. (2012). Time to diagnosis and breast cancer stage by race/ethnicity. *Breast Cancer Research and Treatment*, 136(3), 813–21. doi:10.1007/s10549-012-2304-1

- Wenger, A. F. Z. (1995). Cultural context, health and health care decision making. *Journal of Transcultural Nursing*, 7(1), 3–14. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8716100>
- White, K., Haas, J. S., & Williams, D. R. (2012). Elucidating the Role of Place in Health Care Disparities: The Example of Racial/Ethnic Residential Segregation. *Health Services Research*, 47(3pt2), 1278–1299. doi:10.1111/j.1475-6773.2012.01410.x
- Xiong, Z. B., Smalkoski, K., Herther, N. K., Ritsema, K., Vang, R., & Zheng, R. (2013). Health Disparities Research in the Hmong American Community: Implications for Practices and Policies. In M. Pfeifer & B. Thao (Eds.), *The State of the Hmong American Community* (pp. 42–46). Washington, DC: Hmong National Development.
- Yang, R. C., Mills, P. K., & Dodge, J. L. (2006). Cancer Screening, Reproductive History, Socioeconomic Status, and Anticipated Cancer-Related Behavior Among Hmong Adults. *Asian Pacific Journal of Cancer Prevention*, 7(1), 79–85. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16629521>
- Yang, R. C., Mills, P. K., & Riordan, D. G. (2004). Cervical cancer among Hmong women in California, 1988 to 2000. *American Journal of Preventive Medicine*, 27(2), 132–8. doi:10.1016/j.amepre.2004.04.003
- Yoshihama, M., & Carr, E. S. (2002). Community Participation Reconsidered. *Journal of Community Practice*, 10(4), 85–103. doi:10.1300/J125v10n04

About the Authors:



Shannon Sparks, PhD, is an Assistant Professor in the Department of Civil Society and Community Studies in the University of Wisconsin-Madison School of Human Ecology. Dr. Sparks was trained as a cultural and medical anthropologist at the University of Arizona, where she received her doctorate in 2007. She is an applied, qualitative researcher whose work examines social determinants of health and health disparities as well as health care decision making and barriers to care. Dr. Sparks has been a member of the Milwaukee Consortium for Hmong Health since its inception, and is the academic partner for the Consortium's "Healthy Hmong Women" project.

Pang Vang is a registered nurse and a certified health educator specialist with a master's degree in health education. She has expertise with health education program planning, assessment, implementation, and evaluation. Pang has been a key member with the Milwaukee Consortium for Hmong Health since its inception. Her passion is engaging communities to achieve maximal health and wellbeing.

Beth Peterman is a Family Nurse Practitioner at the UW-Milwaukee (UWM) College of Nursing and the Nursing Center Director for the UWM House of Peace Community Nursing Center. She is also a clinical instructor for the College of Nursing. Beth has a Master's Degree in both

Nursing and Business Management and has worked in community health, the hospital setting, as well as in the private sector as a clinical consultant. Her passion in nursing is focused on community, social justice and health inequity issues in both health and health care delivery. She has been a member of the Milwaukee Hmong Consortium for Health since its inception in 2006 and is the project manager for the Consortium's "Healthy Hmong Women" project.

Lisa Phillips has worked for the City of Milwaukee Health Department since December 1999 and has been the Wisconsin Well Woman Program manager since January 2008. Lisa has been involved with the Milwaukee Consortium for Hmong Health for the past several years in many capacities. Lisa has been involved in public health her entire working career and is compassionate about providing excellent breast and cervical cancer screening to women who are underinsured or uninsured. Lisa's goal is to ensure that all women who are eligible have access to the Wisconsin Well Woman program and that barriers to receiving these services are non-existent.

Mayhoua Moua owns and operates Moua Consulting Group, LLC in which she provides consultation on culture and diversity and Hmong language interpretation and translation services. Mayhoua's interpretation service allows her to interact with Hmong patients in clinics and hospital settings where she sees first-hand health concerns affecting the Hmong community. Prior to her consulting business, Mayhoua worked in the non-profit social service sector for fourteen years assisting Hmong refugees to resettle and adapt to western ways of life, including job training and employment placements, family strengthening programs, and leadership development for women and girls. Mayhoua has been involved with the Milwaukee Consortium for Hmong Health since 2007 and is currently the Community Health Worker Coordinator.