**Abstract**

Despite surviving extreme forms of violence, torture, and other traumas during the Khmer Rouge genocide and forced migration, Cambodian Americans experience devastating health inequities and barriers to health access in the United States (U.S.). From the perspective of Cambodian American community health workers (CHWs), we explored three aims in this community-based participatory research (CBPR), qualitative study: Cambodian Americans’ understanding of health, community health work strategies that improve health access of Cambodian Americans, and action steps that improve health access for Cambodian Americans. From 2014 to 2016, our two-phased study spanned seven U.S. states, which included a focus group (n=5) and 16 semi-structured interviews. Participants identified an indigenous concept of health, and micro-level (e.g., service navigation, peer education) and mezzo-level interventions (e.g., community building, coalition work) to improve health access. Finally, Khmer Health Advocates, a community-based health advocacy organization, served as a vital study partner in this CBPR study.

Keywords: Community health work; Cambodian Americans; Health inequities; Public health social work; Community-based participatory research

What is known about this topic

* Community health work is a viable strategy to improve health access.
* Cambodian Americans experience health inequities.
* Cambodian American community health workers improve health outcomes for their communities.

What this paper adds

* Cambodian American community health workers negotiate social, economic, cultural, historical, and political dimensions to address the health inequities experienced by their communities.
* Cambodian American community health workers employ mezzo-level strategies (e.g., community organizing, coalition building) to systematically improve the health status of their communities.
* Community health workers may be instrumental partners for participatory action research projects.

Cambodian Americans experience significant barriers to health access, which is defined within this study as having available resources to improve their social determinants of health (e.g., education, socio-economic status, housing, stress, employment). Similar to other marginalized communities, these barriers contribute toward disproportionately negative health outcomes for Cambodian Americans. Although some disparities may be inevitable due to the Khmer Rouge genocide (1975 – 1979) and forced migration that followed, systematic and avoidable factors that contribute to poor health outcomes (i.e., health inequities) remain, which are unfair and unjust (Whitehead 1992).

Cambodians experienced significant trauma and abuse (e.g., murder, rape, robbery, disease, starvation) during the genocide and their time in refugee camps (Chan 2004, Mollica *et al.* 1993). Approximately 195,000 Cambodians fled to the United States (U.S.) between 1975 and 1990 (NCAHI, 2007), they were primarily poor, limited in formal education, from rural areas, non-professional, and mostly female, single-parent families with young children (Cambodian Genocide Project 2010, Das 2007, NCAHI 2012). As of 2015, Cambodian Americans live with higher rates of poverty, lower median annual household and personal income, and lower post-high school educational attainment compared to all other Asian communities and the general U.S. population (Pew Research Center, 2017).

Cambodian Americans experience higher rates of cardiovascular disease, cancer, diabetes, hypertension, post-traumatic stress disorder, and depressive disorders when compared to both the U.S. general adult population and other Asian immigrants matched by gender, age, income and urbanicity (Berthold *et al*. 2014, Grigg-Saito *et al*. 2008, Marshall *et al*. 2016, Wong *et al*. 2011). Despite living in the United States for nearly forty years, these inequities persist and result in premature death and suffering. Health researchers, policymakers, and health care professionals may more effectively reduce these health inequities by better understanding how Cambodian Americans experience health, and identifying community-based strategies that improve their wellness.

One group of stakeholders that uniquely understand these experiences are community health workers (CHWs) who live and work among Cambodian American communities. Often defined as a “frontline public health worker who is a trusted member or has an unusually close understanding of the community served,” CHWs typically function as:

A liaison, link, and intermediary between health and social services and the community to facilitate access to services… A community health worker also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities, including outreach, community education, informal counseling, social support, and advocacy (American Public Health Association [APHA] 2018, para. 2).

Though many CHWs have practiced for decades, their work is often understood simply as health care navigation and peer education (Rosenthal *et al*. 2010) without a formal recognition of the breadth of their work.

Many studies have shown that Cambodian American CHWs decrease the fragmentation of health care, decrease overall health care costs, and improve health outcomes across a diverse range of health conditions, such as cancer, diabetes, and Hepatitis B (California Health Workforce Alliance 2013, Nguyen *et al*. 2008, Renfrew *et al*. 2013, Taylor *et al*. 2013a, Taylor *et al*. 2013b); however, their ability to build and strengthen their communities’ capacity remains understudied. Cambodian American CHWs’ understanding of their communities’ lived experiences and what is most needed at the community level are essential to ameliorating their communities’ health status. This study’s aims include: enhancing knowledge about Cambodian Americans’ understanding of health, identifying community health work strategies that improve health access, and developing action steps that improve health access for Cambodian Americans.

**Conceptual Framework: Public Health Social Work & Participatory Research Methods**

We employed a public health social work framework for this study. Due to the broad applications of this framework (Addy *et al.* 2015, Ashcroft 2014, Jackson 2015, Keefe 2010), we applied the public health social determinants of health perspective with social work micro (e.g., health navigation with individuals, counseling, peer education) and mezzo (e.g., community organizing, coalition building) practice approaches in how Cambodian American CHWs worked to improve their communities’ experience of health access through social determinants.

Aligned with our framework, this study incorporated a community-based participatory research (CBPR) approach (Hick 1997) that fostered participant empowerment and the explication of indigenous voices, who are marginalized (Healy 2001, Kemmis & McTaggart 2005, Wallerstein & Duran 2003). The balance between action and research in CBPR promotes improving the health status of vulnerable and disadvantaged populations for this study (Berge *et al*. 2009, Kelly 2005, Olschansky 2012). Framed within CBPR principles, this study accessed the knowledge, perspective, and experience of Cambodian American CHWs so that they may articulate a definition of health from their experience, along with how best to improve health that respects the needs of Cambodian Americans and the challenges they face.

**Methodology**

In alignment with CBPR principles (Israel *et al*. 2008), this study was co-developed with Khmer Health Advocates (KHA), a Cambodian American health advocacy organization in operation since the 1980s. Due to their national recognition, KHA ideally served as a resource to engage voices from diverse Cambodian American communities through trusted networks and community expertise. After planning meetings and discussions on how best to conduct this study, KHA personnel were identified to participate as co-investigators by their intimate knowledge of the following: the Khmer culture, the Khmer Rouge genocide and its impact on Cambodians, and research in the field of community health work in Cambodian American communities. Collaboratively, our research team formulated the following research questions:

* From the perspective of Cambodian American CHWs, what does health mean to Cambodian Americans who are served by CHWs?
* What do Cambodian American CHWs understand about the experience Cambodian Americans have with health access in the United States?
* What action steps may address the health access needs of Cambodian Americans?

Further, our team co-designed qualitative methods that reflect CBPR principles, including a two-phased approach to data collection (e.g., focus group and semi-structured interviews) and analyses, outreach to potential participants through community networks, peer debriefing of study findings to ensure cultural and structural competency, and post-study action steps.

**Sample**

A sample of Cambodian American CHWs (N=21) from seven U.S. states participated in this study. To establish trust and mutual respect in participant recruitment, KHA informed individuals about the study and introduced our research team. One week post-KHA contact, the lead author followed-up and completed a phone screening. If participants met the inclusion criteria and expressed willingness to participate, our team completed informed consent forms in person whenever possible (e.g., focus group, in-person interviews). For any interview not completed in-person, our research team sent an informed consent form by email or fax, reviewed the consent form by phone, and asked the participant to sign and mail signed copies prior to scheduling an interview.

All participants met the following inclusion criteria: 1) Cambodian and/or combination of Cambodian and another ethnic/racial identity, 2) at least 18 years of age, 3) self-identification in practice of community health work, defined by the APHA, with at least one year of experience, and 4) fluency in English and Khmer. Focus group participants (n=5) were purposively selected by KHA for their expertise, experience, and knowledge in community work. Interview participants (n=16) were identified by both a purposive and snowball sample by KHA and focus group participants.

**Data Collection**

The focus group was held in-person at the KHA office at the end of 2014 and the 16 interviews spanned from the fall of 2015 to early 2016. The focus group allowed participants to discuss their experiences with the communities they serve, such as the quality of health, health access, and interactions between Cambodian Americans and U.S. institutions (e.g., health care, education). This data collection phase defined relevant concepts, such as a culturally-tailored definition of a community health worker for Cambodian Americans, and generated ideas that were constructed into questions for a semi-structured interview guide employed in a second phase of data collection. These interviews were conducted through one of three formats: in-person, Skype application phone, or Skype application video. In-person interview data was collected by a digital recorder, while Skype application interviews were recorded with the Amolto Call Recorder for Skype version 2.9. The University of Connecticut Institutional Review Board (IRB) approved this study with informed consent of all participants prior to any data collection.

**Data Analysis**

Digital recordings were transcribed verbatim using Microsoft Office Word 2013 software. Transcriptions and data analyses were maintained with NVivo version 10. The use of this software facilitated a two-cycle inductive coding process that included several coding methods (holistic, structural, descriptive, and process coding) and cataloged memos as an audit trail for the decisions made during data analyses. This two cycle coding process strengthened credibility and trustworthiness, while facilitating how this study evolved through CBPR methods (Saldaña 2013).

The first coding cycle consisted of holistic codes, which aided in early stage categorizations of topic ideas and relevant concepts. This strategy served particularly useful in the focus group to develop key initial concepts (e.g., diverse roles of CHWs) that were used to develop the semi-structured interview guide. The second coding cycle included structural, descriptive, and process codes to highlight differential aspects to participant responses for the interviews and a second analysis of the focus group. During this second cycle, the interviews were coded first, and emerged themes were used to recode the focus group. We implemented this process to strengthen the robustness of the data.

The second cycle elemental coding methods allow researchers to deepen understanding of participant responses (Saldaña 2013). For this study, structural codes provided a method to group similarities, differences, and relationships between participants, such as successful or unsuccessful strategies to improve the health of their communities (Saldaña 2013). Descriptive codes generated relevant topics (e.g., the role of health care policy in health access). Finally, process codes facilitated conceptualization of how events impacted actions over time, such as how the Khmer Rouge genocide led to the internalization of silence. After each coding cycle, emerged codes and themes were peer debriefed with KHA and two experts in the field of Cambodian American health research. We chose this methodical process to promote transparency, trustworthiness, and transferability – vital components to any rigorous, credible qualitative study (Padgett 2008).

**Findings**

**Participant Demographics**

Of all participants, 20 completed and returned the demographic survey (see Table 1). [INSERT TABLE 1 HERE] The average age of participants was 48.7 years; ages ranged from 26 to 69 years. All participants were foreign-born, fluent in both Khmer and English, and lived across seven U.S. states: California, Connecticut, Louisiana, Massachusetts, Minnesota, Oregon, and Rhode Island. The majority of participants had at least an associate’s degree (85%) and spent an equal amount of time speaking Khmer and English in their work (60%). There was a wide variance in household income and size, ranging from living in poverty (~US$12,000/year) to having a middle-class income (~US$60,000/year), which reflected available funding for their community health work and whether or not participant households had additional income from other household members. The average length of community health work practice was 13.1 years. In total, this study encompassed nearly 300 years of community health work experience.

**Results**

Participants reported that healing within their communities required attention to social, economic, cultural, historical, and political dimensions. Narratives emerged for three generations of Cambodian Americans: the adult (i.e., elders/older generation) and child survivors (i.e., middle generation) of the Khmer Rouge and the current generation of Cambodian American children raised in the United States (i.e., younger adults/new generation). Participants described the holistic nature of their community health work in their native culture of Khmer, which denotes both their language and ethnicity. Study participants described how they understand what health means to their communities and the strategies they use to combat the enduring health inequities their communities experience. These strategies targeted the social, economic, political, cultural, and historical factors that negatively affect the health of Cambodian Americans. Finally, participants recognized the value of health care navigation, group peer education, and community practice, which promoted a holistic approach that improved health and wellness across diverse generations of Cambodian Americans.

**Theme 1: The Khmer concept of health.** Participants frequently spoke of health as a reciprocal relationship between individual and community wellness, which includes one’s family. The Khmer concept of health expands beyond identifying and treating biological disease and illness. They defined health with the following concepts: mind-body-spirit, holistic, financial, and emotional. One younger generation participant described the Khmer concept of health in the following words, “Health to Cambodians is a very comprehensive idea. Everything is involved with health: your spiritual health, your mental health, and your body…[it] is not separated.”[P01] A middle generation participant shared her thoughts with the following, “I don’t think many people [in the United States] make the connection between the physical health and mental health.”[P20]

Participants also defined health through activities of daily living and social connections that include relationships, employment, daily tasks, community participation, physical activity, and family relationships. One middle generation, male CHW described his understanding of these factors that contribute to health, “Health right [now] is the most important [thing] in our communities.  So when you’re healthy, you can work [and] you can make money.  You can support your families.”[P28] A female, middle generation participant confirmed this viewpoint, “To them [Cambodian Americans], the majority of them, I think as long as they can get up and go to work and their physical activity is normal, to them, that’s healthy.”[P09]

CHW participants naturally defined their personal health as intimately connected to their community health work. They also reported a reciprocal exchange of healing, an older generation, female participant reflected, “To heal you is to heal me. When I help, I give support [to my community] that makes me feel good, like I did something good to the society and [my help is] not wasted.”[P24] This natural exchange of healing between CHWs and their community residents reflect the communal values inherent within Khmer culture.

**Theme 2: Micro-level interventions and skills.** The participants in this study shared many examples of their efforts and how they improve health within their communities and address the health access barriers their communities face. The common foundational elements that emerged across the various examples of community health work include cooperation, flexibility, creativity, commitment, patience, and trust. One middle generation participant described his work:

It takes a lot of [peer] explanation and education and outreach to the community to sort of keep doing the same thing for years and years and then sooner or later you will get some kind of result. But don’t expect a result within one or two years during your [peer] educational effort[s] or strategies or activities, because it takes a long time because the community is less literate than any other community, there’s a lot of mistrust, toward…outsiders.[P10]

Many participants described trust as an essential concept to effective community health work. One younger generation, male participant highlighted the concept of trust as what “breaks or makes our people in the community.”[P17]

Although the participants of this study shared many identity dimensions with their Cambodian American communities, and would often consider themselves as insiders to their community, they were also careful to acknowledge that their status as CHWs required constant negotiation and efforts to build trust. One middle generation, male participant shared how he views his role as a CHW:

You have to have a person who is committed to having their heart inside the community and be willing to take in a lot of extra work and extra emotional feelings that come with it as well. So it’s a lot of services, projects, programs, and everything else that are sort of in a box of a community health worker.[P10]

A male, younger generation participant who has worked within his community for a couple of years noted, “I think it took some time to get to know the population and community that I was working with, I think it takes some time to build trust…and respect their space.”[P17]

Participants deeply valued how best to positively impact their Cambodian American communities’ health status. A middle generation, female participant highlighted how communities may benefit from systematic access to CHWs:

Each community should have a…community health worker representing their community full time, and be able to pick up a patient and accompany them to their [health care] visit…hire a familiar face, somebody who understands their culture.[P09]

Cambodian American CHWs remain effective by working in a range of settings to best address the diverse needs of their community members. One middle generation participant described how she sees her work with Cambodian Americans:

Navigating the health care system, the health insurance system, the social services system. It’s pretty much [the] essential[s] of life, because you need the shelter, you need your income, you need your food, [and] you need your good health. So when they come with that and because they are refugee[s] or immigrant[s], how do they get their naturalization or their U.S. citizenship?  So they will come asking for help at different stages at their acculturation or integration in [U.S.] society….that [is] the portion that I do.[P11]

Cambodian American CHWs sought to create positive changes for both Cambodian Americans and the U.S. society. The same participant further shared an example of how both Cambodian Americans and the U.S. health care system may benefit when she received unexpected feedback from a community member:

There was a woman who give me feedback a couple of years later, “All of things you teach me, that you told me about what I am eating or why I need to take the medications that I didn’t follow through with [in the past], I [used to] end up in the emergency room so many times...but now, I am making some changes so I am not in the emergency room anymore.”[P11]

This example highlights how Cambodian Americans may experience better health while reducing the burden of cost and service on the U.S. health care system through the efforts of Cambodian American CHWs in individual health care navigation and group peer education.

**Theme 3: Mezzo-level interventions and skills.**In addition to micro-level interventions and skills, participants shared mezzo-level strategies that they deemed essential to community health work, such as community organizing and coalition development. To ameliorate health access barriers, Cambodian American CHWs often employ a diverse range of community practice skills. Participants described how they build community collaborations and coalitions amongst diverse communities with shared experiences. These efforts help to address the shared challenges that Cambodian American communities face in the United States by bringing greater public awareness through collective action and resource-sharing to address common goals and sustain change efforts.

One younger generation participant described how a portion of his community health work is devoted to organizing and sustaining a collaborative community effort between his Cambodian American community, the local health center where he works, and the local elementary school system. This non-conventional, community collaboration addresses the health and education needs of Cambodian American youth through changes within the local elementary school curriculum. On a weekly basis and during school hours, Cambodian American youth learn and experience activities about Khmer culture and successful strategies to stay both mentally and physically healthy. The participant described how this work was successful with youth, and how their family and community experienced ongoing, positive effects.

There’s a lot of change [in] their [i.e., youth] emotional state changes. When they come to the program, they are very happy, they are excited to learn. They go home and they introduce to their parents the Khmer words that they’ve learned in class.  They [youth] go back, they share all these things that their parents never see them do, and so we introduce the [Khmer] culture, a language that they might not have been taught.…that’s what is [also] being helped with the elders.…the elders and grandchildren [are] disconnected, when the grandchildren go home and share what they learn at school in the program, it provides some connection [between elders and youth]. It gives grandparents hope too, that the language and culture has not been lost at this day, at this time in the United States. When we bring the language and culture to the elementary students, we hope it inspires them, to motivate them to [do] more and more [with their culture of origin], to work the way they can, and to know where they came from.[P17]

This example highlights an opportunity to improve health access through the reciprocal exchange of Khmer culture between Cambodian American youth and elders that occurs both at the local elementary school setting and within the home. This participant described how such efforts are only possible through the collaboration of invested community stakeholders.

Beyond community collaborations, participants also identified efforts to develop coalitions that focus on changing the structures of U.S. institutions and policies. A younger generation, male participant described the complexity inherent to coalition work with multiple partners and organizations as stakeholders.

People have their own agendas [when it comes to improving one’s community].  It’s hard to find out if they’re doing it [community work] because they have these personal agendas or are they doing it really or sincerely feel that it’s the best for the community.  Having to work and develop these private and public partnerships, there’s people that can [help] in the public realm, public officials that may be very attached or feeling like they need to give or do something because some private person have given them something that may have benefitted them in the past.  I come across a lot of these little things in the work that I do and sometimes you’re like, “Oh, that doesn’t look like [a good thing], that looks like a landmine, like a minefield and you don’t want to step into all of that!”  But it sucks, because those people have the power to change things, so you have to think creative ways that may take a little bit longer to make things happen.[P19]

This same participant further described how collaboration with elected officials may not be as successful as developing community partnerships for innovative projects that meet multiple demands. One example involved his work in developing community gardens within public housing settings:

[Due to personal agendas] you wouldn’t [directly] talk to the mayor or the [public] housing authority or something, but another creative approach is: how do we couple community gardens with this need within the housing authority of the tenants? Thinking sort of outside the box or thinking creatively. That has been part of my success. Just making those connections happen where people didn’t see those things happening.[P19]

From this perspective, this participant envisioned many possible benefits of community gardens within public housing that serve to increase health access, which include: increasing community access to healthy foods, fulfilling monthly community service quotas to maintain residence within public housing, developing skills that public housing residents may transfer to employment opportunities, and expanding the built public space to be a healthier environment.

Community collaboration and coalition building require the navigation of diverse social, economic, and political forums. One older generation participant shared how he viewed his leadership roles in these arenas as a bridge to the residents in his community:

You have to be able to hear about things and sit and have a voice on different boards, so that you can be a voice for the people. The underserved community that I report to [and] serve and want to represent within the community. Otherwise they wouldn’t have a shot of getting anything.[P14]

Without these vital mezzo-level strategies, the sustained efforts of CHWs and their communities would remain fragmented and unsuccessful in making longitudinal changes to the Cambodian American experience of health access.

**Discussion**

The Cambodian American CHWs in this study employed a range of tactics to improve the health and wellness of their communities. Although these strategies included micro-level interventions (e.g., health care navigation, peer education) that are often discussed in community health work literature (Fedder *et al.* 2003, Felix *et al.* 2011, Rosenthal *et al.* 2010), an essential theme from this study’s participants include how they navigate multiple U.S. institutions (e.g., elected officials, schools, health centers) to strengthen community building and coalition efforts. These mezzo-level interventions address health inequities from a systems perspective and at the neighborhood level (Ingram *et al.* 2008), which complement the micro-level interventions that are more frequently recognized within community health work (Taylor *et al.* 2013a).

Cambodian American CHWs were often not formally educated in these mezzo-level interventions and did not use professional terms (e.g., community organizing, capacity building) that researchers, academics, and trained practitioners would employ to describe these activities. The community organizing and community building that participants described are two efforts essential for coalition formulation; the former includes strategies to effect social change through power and the later “implies building relationships among all the diverse sectors of the community” (Gamble & Weil, 2010, p. 327). Despite the lack of formal training in coalition formulation, participants often described a natural desire in developing these skills due to the communal values rooted in their culture and an explicit aspiration to have a greater collective impact to improve their communities’ health status.

According to participants, solutions that address health inequities should be contextualized to their communities’ cultural and historical experiences in the United States. Gaining access to these community members’ multi-generational lived experience is no simple feat. CHWs are one particular group of trusted stakeholders who may better understand this lived experience and navigate the needs of Cambodian American communities with outsiders, such as U.S. health care providers and politicians of non-Cambodian descent (Cherrington *et al.* 2010). Since trust is essential to the implementation of interventions with communities who have experienced marginalization, CHWs remain ideal partners for any number of efforts to address health inequities, such as improving health care, conducting health research, and developing policy provision (Ingram *et al.* 2008).

This study emphasizes the importance of a shared sense of identity and commitment between Cambodian American CHWs and their communities (Landers & Stover 2011). Additionally, most study participants lived and worked in their communities. Primarily in non-profit settings, their work included voluntary and paid roles. Through these bonds, Cambodian American CHWs uniquely understand their communities’ marginalized lived experience. Economic, social, and political support to maintain these relational bonds may support Cambodian American CHWs’ efforts to guide U.S. health researchers, policymakers, and health care professionals to effectively address longstanding health inequities.

Upon the completion of this study, action steps were discussed and negotiated between the academic and community researchers. Agreed upon action steps included a two-page issue brief of the findings for participants and other Cambodian American community stakeholders, joint publication of this study, and the development of an archive of participant audio recordings at the National Cambodian Heritage Museum and Killing Fields Memorial. The overarching hope of these steps is to increase the visibility of Cambodian Americans’ lived experience and honor their cultural, historical, and present-day lived experience through oral history so that future generations may benefit from past and present day sacrifices.

**Implications**

Though this study focused on Cambodian American CHWs and their communities, these themes may not be limited to solely these communities. Participants often described how their efforts with Cambodian Americans are aligned in their work with other immigrant and refugee communities because they experience similar structural barriers (e.g., immigration status, poverty, cultural and linguistic, housing, employment, education) that exacerbate health inequities. Despite potential differences in cultural contexts across diverse racial and ethnic communities, Cambodian American CHWs’ overarching target is to improve health access through both micro and mezzo interventions. Therefore, the knowledge and skills that Cambodian American CHWs employ are potentially transferable with modifications tailored to other marginalized communities.

Finally, the completion of this study was possible through the commitment and mutual collaboration of the community researcher partners at Khmer Health Advocates. As recognized local and national leaders, their trusted networks and longstanding experience were invaluable in all stages of the research process. Future studies, particularly those with a CBPR approach, will largely benefit in negotiating reciprocal, longitudinal partnerships with community organizations that have sustained a long-term commitment to those who are most vulnerable and marginalized.

**Limitations**

Although the purposive and snowball sampling methodology supported the access of Cambodian American CHWs across the United States, participant recruitment was less successful in communities that are smaller and have very limited resources for community health work. Despite multiple outreach attempts by the research team and participant word-of-mouth, this sampling methodology was less successful in accessing some pockets of Cambodian Americans. Since study participants lived across seven states, including the two with the highest Cambodian American densities (California and Massachusetts), we believe that the findings are transferable and relatable for many Cambodian Americans across the United States.

Another limitation worth considering is how we employed CBPR within this study. CBPR exists along a spectrum within research designs, from community involvement in research activities (e.g., goal formulation, needs assessment) to community-led research methods (e.g., community members formulate research questions, conduct data collection/analysis, and report findings). For this study, we agreed to balance several vital goals: the identified community needs through partnership with KHA staff, feasibility for a study of this magnitude, and role of scientific rigor. In balancing these goals, the level of community participation for this study was limited to peer debriefing in the areas of data collection and analysis. Future studies may incorporate different methodological protocols (e.g., CHWs as co-researchers in data collection and analysis) when employing a CBPR approach with Cambodian Americans or other marginalized communities.

**Conclusion**

Community health work provides opportunities for multi-layered and collaborative interventions that address health inequities systematically. For Cambodian American communities, understanding health and wellness requires a cultural, historical, and structural contextualization. Although the content of such interventions may differ between communities, the process to create, develop, institute, and evaluate effective solutions may be aligned and requires the involvement and leadership of community members and key stakeholders.

References

Addy, C. L., Browne, T., Blake, E. W., & Bailey, J. (2015). Enhancing interprofessional education: Integrating public health and social work perspectives. *American Journal of Public Health, 105*(S1), S106-S108.

American Public Health Association. (2018). Community health workers. Retrieved from https://www.apha.org/apha-communities/member-sections/community-health-workers

Ashcroft, R. (2014). An evaluation of the public health paradigm: A view of social work. *Social Work in Public Health, 29*(6), 606-615.

Berge, J. M., Mendenhall, T. J., & Doherty, W. J. (2009). Using community-based participatory research (CBPR) to target health disparities in families. *Family Relations, 58*(4), 475-488. doi:10.1111/j.1741-3729.2009.00567.x

Berthold, S. M., Kong, S., Mollica, R. F., Kuoch, T., Scully, M., & Franke, T. (2014). Comorbid mental and physical health and health access in Cambodian refugees in the US. *Journal of Community Health, 39*(6), 1045-1052*.* doi:10.1007/s10900-014-9861-7

California Health Workforce Alliance. (2013). Taking innovation to scale: Community health workers, promotores, and the triple aim. Retrieved from http://www.chhs.ca.gov/InnovationPlan/\_Taking%20Innovation%20to%20Scale%20-%20CHWs,%20Promotores%20and%20the%20Triple%20Aim%20-%20CHWA%20Report%2012-22-13%20(1).pdf

Cherrington, A., Ayala, G. X., Elder, J. P., Arredondo, E. M., Fouad, M., & Scarinci, I. (2010). Recognizing the diverse roles of community health workers in the elimination of health disparities: From paid staff to volunteers. *Ethnicity & Disease, 20*, 189-194.

Fedder, D. O., Chang, R. J., Curry, S., & Nichols, G. (2003). The effectiveness of a community health worker outreach program on healthcare utilization of west Baltimore City Medicaid patients with diabetes, with or without hypertension. *Ethnicity & Disease, 13*, 22-27.

Felix, H. C., Mays, G. P., Stewart, M. K., Cottoms, N., & Olson, M. (2011). The care span: Medicaid savings resulted when community health workers matched those with needs to home and community care. *Health Affairs, 30*(7), 1366-1374.

Gamble, D. N., & Weil, M. (2010). *Community practice skills: Local to global perspectives.* New York, NY: Columbia University Press.

Grigg-Saito, D., Och, S., Liang, S., Toof, R., & Silka, L. (2008). Building on the strengths of a Cambodian refugee community through community-based outreach. *Health Promotion Practice, 9*(4), 415-425. doi:10.1177/1524839906292176

Healy, K. (2001). Participatory action research and social work. *International Social Work, 44*(1), 93-105. doi:10.1177/002087280104400108

Hick, S. (1997). Participatory research: An approach for structural social workers. *Journal of Progressive Human Services, 8*(2), 63-78.

Ingram, M., Sabo, S., Rothers, J., Wennerstrom, A., & Guernsey de Zapien, J. (2008). Community health workers and community advocacy: Addressing health disparities. *Journal of Community Health, 33*, 417-424.

Israel, B. A., Schulz, A. J., Parker, E. A., Becker, A. B., Allen, A. J., & Guzman, J. R. (2008). Critical issues in developing and following community-based participatory research principles. In M. Minkler & N. Wallerstein (Eds.), *Community-Based Participatory Research for Health: From Process to Outcomes* (2nd ed., pp. 47-62). San Francisco: Jossey-Bass.

Jackson, K. (2015). Public health social work: Now more than ever. *Social Work Today, 15*(6), 12. Retrieved from http://www.socialworktoday.com/archive/111715p12.shtml

Keefe, R. H. (2010). Health disparities: A primer for public health social workers. *Social Work in Public Health, 25*(3-4), 237-257.

Kelly, P. J. (2005). Practical suggestions for community interventions using participatory action research. *Public Health Nursing, 22*(1), 65-73.

Kemmis, S., & McTaggart, R. (2005) Participatory Action Research: Communicative Action and the Public Sphere. In N. Denzin and Y. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (3rd ed., pp. 559-603). Thousand Oaks, CA: Sage Publications.

Landers, S. J., & Stover. G. N. (2011). Community health workers–practice and promise. *American Journal of Public Health, 101*(12), 2198.

Marshall, G. N., Schell, T. L., Wong, E. C., Berthold, S. M.,Hambarsoomian, K., Elliott, M. N., Bardenheier, B. H., & Gregg, E. W.(2016). Diabetes and cardiovascular disease risk in Cambodian refugees. *Journal of Immigrant Minority Health, 17*(1). doi:10.1007/s10903-014-0142-4

National Cambodian American Health Initiative [NCAHI]. (2007). *Health emergency in the Cambodian community in the United States.* Retrieved from Khmer Health Advocates, West Hartford, CT.

National Cambodian American Health Initiative [NCAHI]. (2012). *The continuing health crisis in the Cambodian American community.* Retrieved from Khmer Health Advocates, West Hartford, CT.

Nguyen, T-U N., Tanjasiri, S. P., Kagawa-Singer, M., Tran, J. H., & Foo., M. A. (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

Olschansky, E. (2012). The use of community-based participatory research to understand and work with vulnerable populations. In M. de Chesnay & B. A. Anderson (Eds.), *Caring for the vulnerable: Perspectives in nursing theory, practice, and research* (pp. 305-312). Burlington, MA: Jones and Bartlett Learning.

Padgett, D. K. (2008). *Qualitative methods in social work research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Pew Research Center. (2017). Cambodians in the U.S. fact sheet. Retrieved from http://www.pewsocialtrends.org/fact-sheet/asian-americans-cambodians-in-the-u-s/

Renfrew, M. R., Taing, E., Cohen, M. J., Betancourt, J. R., Pasinski, R., & Green, A. R. (2013). Barriers to care for Cambodian patients with diabetes: Results from a qualitative study. *Journal of Health Care for the Poor and Underserved, 24*, 633-655. doi: 10.1353/hpu.2013.0065

Rosenthal, E. L., Brownstein, J. N., Rush, C. H., Hirsch, G. R., Willaert, A. M., Scott, J. R., Holderby, L. R., & Fox, D. J. (2010). Community health workers: Part of the solution. *Health Affairs, 29*(7), 1338-1342. doi:10.1377/hlthaff.2010.0081

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Los Angeles, CA: Sage Publications.

Taylor, V. M., Bastani, R., Burke, N. J., Talbot, J., Sos, C., Liu, Q., Do, H. H., Jackson, J. C., & Yasui, Y. (2013a). Evaluation of a Hepatitis B lay health worker intervention for Cambodian Americans. *Journal of Community Health, 38*, 546-553. doi:10.1007/s10900-012-9649-6

Taylor, V. M., Burke, N. J., Sos, C., Do, H. H., Liu, Q., & Yasui, Y. (2013b). Community health worker Hepatitis B education for Cambodian American men and women. *Asian Pacific Journal of Cancer Prevention, 14*, 4705-4709. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3801266/

Wallerstein, N., & Duran, B. (2003). The conceptual, historical, and practice roots of community based participatory research and related participatory traditions. In M. Minkler & N. Wallerstein (Eds.), *Community-based participatory research for health* (pp. 27-52). San Francisco, CA: Jossey-Bass.

Whitehead, M. (1992). *The concepts and principle of equity and health.* Retrieved from http://publicaciones.ops.org.ar/publicaciones/piezas%20comunicacionales/cursoDDS/cursoeng/Textos%20Completos/the%20concepts%20and%20principles%20of%20equity%20and%20health.pdf

Wong, E. C., Marshall, G. N., Schell, T. L., Elliott, M. N., Babey, S. H., & Hambarsoomians, K. (2011). The unusually poor physical health status of Cambodian refugees two decades after resettlement. *Journal of Immigrant and Minority Health, 13*, 876-882. doi:10.1007/s10903-010-9392-y

World Health Organization. (2018). About social determinants of health. Retrieved from the World Health Organization website: http://www.who.int/social\_determinants/sdh\_definition/en/