



Community Breast Health Education for Immigrants and Refugees: Lessons Learned in Outreach Efforts to Reduce Cancer Disparities

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Abstract

Community-academic partnerships are vital to address cancer disparities in geographic areas with diverse socioeconomic, language, and cultural barriers. Regarding breast health, immigrant and refugee women are a particularly vulnerable population, with considerably lower mammography rates than most communities, including racial and ethnic minorities. To promote health care equity in this high-risk population, we developed a community-academic partnership (CAP) model to promote breast health education at community faith-based centers in the city of Milwaukee, WI. In this paper, we describe the success of our partnerships, our lessons learned, and future directions.

Keywords Community-academic partnership · Community education · Breast cancer · Cancer disparities

Introduction

Community-based education programs are excellent platforms for collaboration between local organizations and academic partners [4, 9]. The concept of community-based education has been documented in scholarly publications since the late nineteenth century, when health professionals struggled to improve sanitation and hygiene to reduce disease. In 1880, Dr. John Eaton commented, “education should train the child, the adult, and the community, in the precepts of sanitation, so that every individual may have secured to him that first requisite of power, labor, and happiness, a sound mind in a healthy body [6].” In the decades that followed, community-

based education approaches produced positive health outcomes across a wide scope of health issues and populations.

The importance of culturally tailoring these educational interventions to meet community needs is also well documented [12, 18]. This approach can take the form of employing community health workers who are well versed in cultural norms, or recognizing and addressing community-specific barriers, such as difficulty with transportation to access health care services [14]. In a recent evaluation of a community-based breast health education program, educators were selected based on their involvement in their community, as well as their existing breast cancer knowledge. New cohorts of educators were trained by experienced educators who shared effective strategies for implementing breast health education, described the current state of breast cancer knowledge, and addressed prevalent myths within their catchment area. Because of this thoughtful approach, 71% of women recommended to receive a mammogram completed their screening [16]. In a predominantly African-American community in St. Louis, patient navigation attempts incorporated assistance arranging public transportation and childcare, as well as face-to-face, telephoned, and mail-based support. Because of these comprehensive services, screening rates in the study clinic increased from 12% of eligible women over age 40 to 94% over a 2-year period [5].

Mammography screenings rates are nearly equitable among racial and ethnic populations, likely due to the resources devoted to these culturally tailored interventions. In

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the USA, 64% of women over the age of 40 have completed a mammogram in the last 2 years (69% of Black, 65% of White, 61% of Hispanic, 60% of Native, and 60% of Asian) [10]. Many interventions have been conducted within racial and ethnic minority populations, but inadequate resources have been devoted to recently immigrated and refugee populations. In stark comparison to the rest of the US population, only 46% of women who immigrated to the USA less than 10 years ago received a mammogram in the last 2 years [2].

This staggering disparity highlights the need to create community-based health interventions that address the communication, transportation, and cultural barriers that preclude timely access to care in recently immigrated and refugee populations [4, 8, 9, 11]. Faith-based community centers, local nonprofit organizations, community health centers, local media, and adult literacy and educational organizations have all been highlighted as strong community partners for academic researchers seeking to attenuate disparities in multiethnic and medically underserved populations [8].

Community-academic partnerships (CAPs)—partnerships that partner academic researchers with community members/organizations to address needs of a community—are essential to address health needs, strengthen resources, and increase community outreach efforts against disparities [15, 17]. To be successful, these efforts require commitment from all stakeholders, a sense of ownership from communities, and dedication to long-term sustainability [1, 3, 13]. In alignment with these principles, researchers from an urban academic medical center collaborated with representatives from several community organizations to promote breast health education workshops and mammography in the city of Milwaukee, WI. Critical to the success of this project was (1) partnership with community faith-based centers, (2) small group workshops to promote breast health education and access to mammography, (3) identification/engagement of community leaders, (4) training of community health workers and volunteers, and (5) iterative program evaluation with a long-term focus on sustainability of the program. In this paper, we will describe the lessons learned in our CAP project that reached out to medically underserved immigrant and refugee populations.

Summary of Program Results

Detailed results of our breast health education workshops can be found in previously published works [7]. To summarize, a total of 24 monthly breast health workshops were held between 2014 and 2017. Three hundred seventy-four women received breast health education and clinical breast examinations. After program participation, 80% of women eligible for a mammogram completed screening. Additional outcome measures included improved breast health knowledge and satisfaction with program delivery. Participants expressed

appreciation for the broad topics covered within the program, ranging from healthy diet, exercise, primary care, to screening. Additionally, many program participants expressed satisfaction upon completing their first clinical breast examination.

Formation of Community-Academic Partnerships

Our research team is comprised of a diverse group of academic and community partners (Table 1). The effective assembly of a multilingual staff with deeply rooted commitment and pre-existing trusting relationships with the communities that they serve was integral to program success. Multilingual patient health navigators, community health workers, translators, and volunteers functioned as critical conduits who also built trust among participants and academic partners, given their language barriers.

Success of our community-academic partnership was demonstrated by the participation of 14 faith-based and community-based organizations in our breast health education workshops. These programs demonstrated broad inclusivity and dedication to overcoming communication barriers, with workshops conducted in 8 languages and regional dialects (Table 2). Demographic information from program participants indicates significant representation from individuals representing diverse racial/ethnic origin, languages spoken, and regions of origin (Table 3).

Lessons Learned

Presence of Multiple Unique Barriers in Individual Communities

In our partnership with 14 organizations that support immigrant and refugee women, we discovered complex, multifactorial barriers that impede adherence to mammography. Language barriers and discomfort in communicating within English-speaking healthcare settings are persistent barriers across populations, and we encountered 8 to 10 unique languages and dialects represented in the immigrant/refugee session attendees. Comprehensive translational services as well as navigation towards these services are critical to ensure that women can successfully connect with healthcare providers.

In addition to language barriers, complex cultural and socioeconomic factors exist within distinct communities. In our study, there a total of 188 women who were eligible for a screening mammogram. To our surprise, both insured (113 of 188) and uninsured (75 of 188) women expressed similar concerns. Regardless of the insurance status, several women felt empowered to act regarding their personal health needs but were non-adherent to screening recommendations because

Table 1 Partnering sites for breast health education workshops

Academic partner	Community partners
Froedtert and the Medical College of Wisconsin	
<ul style="list-style-type: none"> • Department of Internal Medicine (Hematology-Oncology) • Center for Patient Care and Outcomes Research • Department of Family Medicine 	<ul style="list-style-type: none"> • Wisconsin Well Woman Program • Columbia St. Mary's Mobile Mammographic Unit • Community Faith Based Centers (Listed individually in Table 2)
<ul style="list-style-type: none"> • Community Engagement Advisory Committee 	

of transportation barriers or difficulty coordinating primary care appointments with work schedules. Lower socioeconomic status was also cited as a frequent barrier to pursuing primary health care and screening. To address this, complete, personalized needs assessments are needed at both the individual and community-level to create targeted approaches that reduce loss-to-follow up in primary care settings. Identifying the needs of communities in a sustainable approach that respects the existing challenges of primary care settings will require novel innovative methods to be feasible.

Community Leadership

Acceptance and uptake of breast health education workshop materials was strongly bolstered by support from respected leaders within communities. Early identification of organizational representatives who can advocate for program

participation, establish trust with health educators, and encourage adherence to recommendation is vital to program success. Stakeholder involvement and commitment of leadership teams from all sectors will be of utmost importance in helping communities with multiple barriers to health care. Support for community-academic partnerships with faith-based centers is evidenced by the deep commitment to health education as well as many cancer awareness programs in the city of Milwaukee. Local funding sources such as the Advancing a Healthier Wisconsin Endowment and the Greater Milwaukee Foundation have a history of supporting programs that address breast, liver, and prostate cancer disparities by improving education and awareness. However, there is still a need to expand the number of dedicated staff integrated within other local organizations (e.g., community centers, school campuses, and homeless shelters) that are trained to address these health disparities. Additionally, given the racial

Table 2 Demographics and participation in community settings

Community Partners	Number of workshops	Number of participants	Languages spoken
Albanian Center	1	14	Albanian
Burmese (Refugees)			Burmese, Rohingya
African American Da'wa Center	2	39	English
El'qran	1	12	Urdu
Turkish American Cultural Center	1	31	Turkish
Hindu Temple of Wisconsin	2	15	Telugu, Hindi
Wisconsin Shirdi Sai Center			
Sikh Temples of Wisconsin			Punjabi
<ul style="list-style-type: none"> • Brookfield, WI • Oak Creek, WI 	2	59	Hindi
Women's Shelter	1	12	English
Muslim Community Health Center and Affiliates	13	172	Arabic, Hindi, Palestine, Urdu
Brookfield Islamic Center			
Somali Refugees			Somali, Arabic
Nepali Refugees			Nepali
Total	24	374	
*14 Participating Organizations			

Table 3 Demographics of program participants

Variables	Total (%) *374 participants
Age	
Mean ± SD	44.99 ± 13.49
Native language	
Arabic	54 (14.4)
Urdu	63 (16.8)
English	110 (29.4)
Punjabi	44 (11.8)
Missing	103 (27.5)
Residency status	
Legal resident	136 (36.4)
Citizen	196 (52.4)
Missing	39 (10.4)
Visitor	3 (0.8)
Region of origin	
African American	39 (10.4)
Middle East (Iran, Iraq, Palestine)	38 (10.2)
Asia (Afghanistan, Burma, India, Nepal, Pakistan)	126 (33.7)
Refugees from Eastern Europe (Albania, Turkey)	26 (6.95)
Refugees from Africa (Somalia, Nigeria)	13 (3.5)
Missing	132 (35.3)

and ethnic diversity, as well as the segregation that exists within the city of Milwaukee, multilingual, translator-assisted, and culturally adaptable programming are needed. Additional efforts to develop strategies implementing and encouraging community-academic partnerships would promote sustainability.

Sustainability and Continued Engagement

Continued engagement is critical to maintain the trust and relationships established during breast health education workshops. This program focused not only on breast health education, but also covered other disparities within immigrant and refugee communities such as: obesity, physical inactivity, low rates of cancer screening of all types, and lack of routine health care. Program participants expressed interest in expanding their knowledge to other health conditions in future interventions. Rates of colonoscopy and pap smears are exceptionally low in these communities, and we have created a promising opportunity to expand our breast health model into these topic areas. Planning for cost-effective, sustainable interventions remains a ubiquitous challenge across research efforts; however, continued conversations and workshops are necessary to leverage the existing trust built around breast health education to other cancer disparities and health issues.

Future Directions

While this project was successful at improving mammography and providing insight into the essential needs of cancer education in immigrant and refugee populations, our future efforts will focus on (1) improving community awareness of the strength of academic partnerships, and emphasizing the impact of community input on our scholarly efforts, (2) expanding the existing project model to other health disparities, (3) developing ongoing training programs for community health workers and patient navigators to ensure long-term sustainability and independence, and (4) exploring the use of multilingual, user-friendly mobile health applications to remove additional barriers to healthcare.

References

- Agurto I, Arrossi S, White S, Coffey P, Dzuba I, Bingham A, Bradley J, Lewis R (2005) Involving the community in cervical cancer prevention programs. *Int J Gynaecol Obstet* 89(Suppl 2): S38–S45. <https://doi.org/10.1016/j.ijgo.2005.01.015>
- American Cancer Society Inc. (2018) Breast Cancer Facts & Figures 2017–2018. Accessed
- Brooks SE, Hembree TM, Shelton BJ, Beache SC, Aschbacher G, Schervish PH, Dignan MB (2013) Mobile mammography in underserved populations: analysis of outcomes of 3,923 women. *J Community Health* 38(5):900–906. <https://doi.org/10.1007/s10900-013-9696-7>
- Brownstein JN, Cheal N, Ackermann SP, Bassford TL, Campos-Outcalt D (1992) Breast and cervical cancer screening in minority populations: a model for using lay health educators. *J Cancer Educ* 7(4):321–326. <https://doi.org/10.1080/08858199209528189>
- Drake BF, Tannan S, Anwuri VV, Jackson S, Sanford M, Tappenden J, Goodman MS, Colditz GA (2015) A community-based partnership to successfully implement and maintain a breast health navigation program. *J Community Health* 40(6):1216–1223. <https://doi.org/10.1007/s10900-015-0051-z>
- Eaton J (1880) Sanitation and education. *Public Health Pap Rep* 6: 248–265
- Kamaraju S, DeNomie M, Visotcky A, Banerjee A, Krause K, Tavares E, Rao A, Drew E, Stolley M (2018) Increasing mammography uptake through academic-community partnerships targeting immigrant and refugee communities in the city of Milwaukee. *Wis Med J* 117(2):55–61
- Meade CD, Menard JM, Luque JS, Martinez-Tyson D, Gwede CK (2011) Creating community-academic partnerships for cancer disparities research and health promotion. *Health Promot Pract* 12(3): 456–462. <https://doi.org/10.1177/1524839909341035>
- Michielutte R, Dignan MB, Wells HB, Young LD, Jackson DS, Sharp PC (1989) Development of a community cancer education program: the Forsyth County, NC cervical cancer prevention project. *Public Health Rep* 104(6):542–551
- Okoro CA, Zhao G, Fox JB, Eke PI, Greenlund KJ, Town M (2017) Surveillance for health care access and health services use, adults aged 18–64 years - behavioral risk factor surveillance system, United States, 2014. *MMWR Surveill Summ* 2016 66(SS-7):1–42. <https://doi.org/10.15585/mmwr.ss6607a1>
- Osuch JR, Silk K, Price C, Barlow J, Miller K, Hernick A, Fonfa A (2012) A historical perspective on breast cancer activism in the

- United States: from education and support to partnership in scientific research. *J Women's Health (Larchmt)* 21(3):355–362. <https://doi.org/10.1089/jwh.2011.2862>
12. Padela AI, Killawi A, Heisler M, Demonner S, Fetters MD (2011) The role of imams in American Muslim health: perspectives of Muslim community leaders in Southeast Michigan. *J Relig Health* 50(2):359–373. <https://doi.org/10.1007/s10943-010-9428-6>
 13. Rapkin BD, Massie MJ, Jansky EJ, Lounsbury DW, Murphy PD, Powell S (2006) Developing a partnership model for cancer screening with community-based organizations: the ACCESS breast cancer education and outreach project. *Am J Community Psychol* 38(3–4):153–164. <https://doi.org/10.1007/s10464-006-9071-2>
 14. Samaras AT, Murphy K, Nonzee NJ, Endress R, Taylor S, Hajjar N, Bularzik R, Frankovich C, Dong X, Simon MA (2014) Community-campus partnership in action: lessons learned from the DuPage County Patient Navigation Collaborative. *Prog Community Health Partnersh* 8(1):75–81. <https://doi.org/10.1353/cpr.2014.0005>
 15. Teal R, Moore AA, Long DG, Vines AI, Leeman J (2012) A community-academic partnership to plan and implement an evidence-based lay health advisor program for promoting breast cancer screening. *J Health Care Poor Underserved* 23(2 Suppl): 109–120. <https://doi.org/10.1353/hpu.2012.0076>
 16. Torres E, Richman AR, Schreier AM, Vohra N, Verbanac K (2017) An evaluation of a rural community-based breast education and navigation Program: Highlights and Lessons Learned. *J Cancer Educ*. <https://doi.org/10.1007/s13187-017-1298-0>
 17. Twiss J, Dickinson J, Duma S, Kleinman T, Paulsen H, Rilveria L (2003) Community gardens: lessons learned from California Healthy Cities and Communities. *Am J Public Health* 93(9): 1435–1438
 18. Wolff M, Bates T, Beck B, Young S, Ahmed SM, Maurana C (2003) Cancer prevention in underserved African American communities: barriers and effective strategies—a review of the literature. *Wmj* 102(5):36–40