



The Role of CHWs in Combatting Cervical Cancer

Health Disparities in Cervical Cancer

Since the introduction of the Papanicolaou (Pap) test, incidence and mortality rates for cervical cancer have declined. However, disparities across racial and ethnic groups persist in the United States and in Michigan. The following table highlights major cervical cancer disparities.

United States	Michigan
African-American and Hispanic women are more likely than White women to be diagnosed with cervical cancer (2 and 1.5 times, respectively) ¹	Older black women (age 50+) have higher cervical cancer incidence rates than White women ²
Black women are twice as likely to die of cervical cancer than White women (4.4 deaths per 100,000 vs. 2.2 deaths per 100,000, respectively) ²	Black women are more likely to die of cervical cancer than White women (3.4 deaths per 100,000 vs. 1.8 deaths per 100,000, respectively) ²
Vietnamese women have the highest cervical cancer incidence rate (14 cases per 100,000) ¹	Cervical cancer screening rates are lower among Asian Americans than among white women ³
Asian American, Hispanic, or uninsured women and women with no more than a high school diploma or GED are less likely to have had a Pap test in the last three years ⁴	Asian American, Arab American, Hispanic, lower income and less educated women report significantly lower rates of cervical cancer screening. ⁵

Community Health Worker (CHW) Interventions

Health Literacy

Promotora-led workshops with Hispanic community members have been shown to significantly increase cervical cancer understanding and Pap smear screening. Following one such intervention, screening rates increased 29% (from 36% to 65%), cervical cancer knowledge increased from 3.5 to 5.4 (out of 6) and self-efficacy increased from 4.0 to 4.7 (out of 5).⁶

Screening and Vaccination

An economic evaluation found that although CHW-led education programs targeting Korean-American women are more expensive than traditional methods (\$444 vs. \$269 per enrollee), the cost per screening in the CHW-led program was significantly cheaper (\$1,002 vs. \$1,766), and the incremental cost-effectiveness ratio (ICER) was calculated to be \$236.⁷ For Hispanic communities, interventions that demonstrate the most significant increases in screening consist of one-on-one or small group educational sessions led by lay health advisors (LHAs). In effective interventions, LHAs carry out multiple sessions or implement ongoing activities in the community.⁸ In South Texas, a *promotora*-led program called *Entre Madre e Hija* (EMH) provides mothers and their daughters with culturally relevant cancer prevention education and support. This group was compared to another group given just an HPV vaccine education brochure. Eighty-four percent of participants in both groups started the HPV vaccine series, but the EMH group was over 30% more likely to complete the vaccine series (72.2% vs. 42.5%).⁹

Health System Navigation

Individuals from disadvantaged neighborhoods with lower socioeconomic statuses are less likely to receive timely cancer care.¹⁰ Patient navigators can decrease the time it takes to resolve abnormal cervical cancer screening tests. One study found that women with a patient navigator were more than twice as likely to have reached diagnostic resolution in 60 days (52.4% vs. 24.9%) and at 365 days were nearly 20% more likely to have their diagnosis resolved (88.5% vs. 70.3%).¹¹



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Article Title	Year	Target Population	Intervention Type
Economic Evaluation of a Community Health Worker-Led Health Literacy Intervention to Promote Cancer Screening Among Korean American Women	2015	Korean American women	Cervical cancer education, screening promotion and navigation
Breast Cancer and Cervical Cancer Control Program Enrollees Inform the Kin Keeper Curriculum	2009	Underserved women	Cervical cancer education
Increasing Cervical Cancer Screening Among US Hispanics/Latinas: A Qualitative Systematic Review	2015	Latina women	Using lay health advisors to increase screening rates
Promotora Outreach, Education and Navigation Support for HPV Vaccination to Hispanic Women with Unvaccinated Daughters	2015	Latina women	<i>Promotoras</i> provide health education, referral and navigation support for the HPV vaccine
A Cancer Screening Intervention for Underserved Latina Women by Lay Educators	2012	Latina women	Group based education led by a lay health educator
Evaluating a Bilingual Patient Navigation Program for Uninsured Women With Abnormal Screening Tests for Breast and Cervical Cancer: Implications for Future Navigator Research	2014	Bilingual and non-English speakers	Patient navigation to decrease follow-up time
Follow-Up and Timeliness After an Abnormal Cancer Screening Among Underserved, Urban Women in a Patient Navigation Program	2012	Underserved women	Patient navigation to decrease diagnostic resolution time
Community Health Worker Intervention to Decrease Cervical Cancer Disparities in Hispanic Women	2010	Latina Women	Cervical cancer education and screening promotion
A RCT of a Community Health Worker Intervention Using HPV Self-Sampling to Increase Cervical Cancer Screening Among Minority Populations	2014	Latina, Haitian and African American women	Tailored health outreach and individualized CHW navigation
Effective Lay Health Worker Outreach and Media-Based Education for Promoting Cervical Cancer Screening Among Vietnamese American Women	2007	Vietnamese American women	Cervical cancer education and screening promotion

Article abstracts available by clicking the hyperlinked article titles above; full citations are below

- Downs LS, Smith JS, Scarinci I, Flowers L, Parham G. The disparity of cervical cancer in diverse populations. *Gynecol Oncol* 2008;109(2 Suppl):S22-S30. doi:10.1016/j.ygyno.2008.01.003.
- Michigan Public Health Institute and Michigan Department of Community Health. The Cancer Burden In Michigan: Selected Statistics 1993-2011. *Report*. https://www.michigan.gov/documents/mdch/Ca_burden_MI_select_stats_1993-2011_371092_7.pdf. Accessed July 13, 2015.
- Wu T-Y. Reducing Health Disparities in Asian American: Michigan Experience. *Heal Asian Am Proj*. <http://www.michiganmhc.com/Documents/Tsu Yin Wu Presentation.pdf>. Accessed August 17, 2015.
- Cancer Prevention & Early Detection Facts & Figures 2015-2016. <http://www.cancer.org/acs/groups/content/@research/documents/webcontent/acpsc-045101.pdf>. Accessed August 17, 2015.
- Michigan Public Health Institute and the Michigan Department of Community. *Special Cancer Behavioral Risk Factor Survey, 2008.*; 2010. http://www.michiganmhc.org/PDFs/Publications_Products/MCCSpecialRpt/SCBRFS_2008-042910.pdf. Accessed July 13, 2015.
- O'Brien MJ, Halbert CH, Bixby R, Pimentel S, Shea JA. Community health worker intervention to decrease cervical cancer disparities in Hispanic women. *J Gen Intern Med*. 2010;25(11):1186-1192. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2947642&tool=pmcentrez&rendertype=abstract>. Accessed May 18, 2015.
- Schuster AL, Frick KD, Huh B-Y, Kim KB, Kim M, Han H-R. Economic evaluation of a community health worker-led health literacy intervention to promote cancer screening among Korean American women. *J Health Care Poor Underserved*. 2015;26(2):431-440. doi:10.1353/hpu.2015.0050.
- Mann L, Foley KL, Tanner AE, Sun CJ, Rhodes SD. Increasing Cervical Cancer Screening Among US Hispanics/Latinas: A Qualitative Systematic Review. *J Cancer Educ*. 2015;30(2):374-387. doi:10.1007/s13187-014-0716-9.
- Parra-Medina D, Morales-Campos DY, Mojica C, Ramirez AG. Promotora Outreach, Education and Navigation Support for HPV Vaccination to Hispanic Women with Unvaccinated Daughters. *J Cancer Educ*. 2015;30(2):353-359. doi:10.1007/s13187-014-0680-4.
- Barrett RE, Cho YI, Weaver KE, et al. Neighborhood change and distant metastasis at diagnosis of breast cancer. *Ann Epidemiol*. 2008;18(1):43-47. doi:10.1016/j.annepidem.2007.07.001.
- Markossian TW, Darnell JS, Calhoun EA. Follow-up and timeliness after an abnormal cancer screening among underserved, urban women in a patient navigation program. *Cancer Epidemiol Biomarkers Prev*. 2012;21(10):1691-1700. <http://cebp.aacrjournals.org/content/21/10/1691.short>. Accessed May 18, 2015.