Lehigh Valley Health Network

LVHN Scholarly Works

Research Scholars

Exploring Contributors to Cervical Cancer Disparities in Hispanic Women across Lehigh Valley Hot Spots: A Mixed Methods Analysis

Jocelyn Mertz

Roya Hamadani MPH

Nicole M. Burgess BS

Melanie B. Johnson MPA

Autumn Kieber-Emmons MD, MPH

Follow this and additional works at: https://scholarlyworks.lvhn.org/research-scholars

Part of the Medicine and Health Sciences Commons

Let us know how access to this document benefits you

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.

Exploring Contributors to Cervical Cancer Disparities in Hispanic Women across Lehigh Valley Hot Spots: A Mixed Methods Analysis

Jocelyn Mertz; Roya Hamadani, MPH; Nicole Burgess, BS; Melanie Johnson, MPA; and Autumn Kieber-Emmons, MD, MPH

BACKGROUND

- Although cervical cancer is both preventable and curable, an estimated 11,500 new diagnoses and 4,000 deaths are attributed to cervical cancer each year in the United
- Hispanic women have higher mortality rates due to invasive cervical cancer compared with non-Hispanic White women (2.5 vs 2.0 deaths per 100,000 women, respectively).²
- A concerning gap exists in the knowledge among female healthcare students regarding cervical cancer and HPV vaccination.³
- Pre-existing disparities in cancer screening for people living in lower-income neighborhoods and for immigrants significantly widened after the COVID-19 pandemic.
 - From March 31, 2019 (before the pandemic) to March 31, 2022, the proportion of people up-to-date for cervical cancer screening declined by 7.3%.
 - Access to primary care, as well as the type of primary care model to which one has access, plays a crucial role in cancer-screening recovery after the COVID-19 pandemic.

OBJECTIVE

To identify modifiable contextual elements that may contribute to cervical cancer disparities in priority hot spots of the Lehigh Valley, offering new directions for clinicians, policymakers, and the public to foster more equitable cervical cancer care.

METHODS

Focus Rapid Assessment Process (fRAP)⁵

Phase 1

- Region selection determined by public health issue.
- Geographic Information Systems (GIS) mapping by Zip Code Tabulation Area (ZCTA)

Ouantitative GIS Mapping and Analysis

Qualitative Data Collection and Analysis

- Community exploration and field visits.
- Key informant selection, recruitment, and interviews from three levels of the neighborhood.
- Cross-comparison analysis.

Phase 2

Phase 3

- Integration of data to identify modifiable contextual elements that appear to be influencing the public health issue.
- Advocacy for policy changes.

Multi-Level Data

Lehigh Valley Health Network, Allentown, Pennsylvania

RESULTS

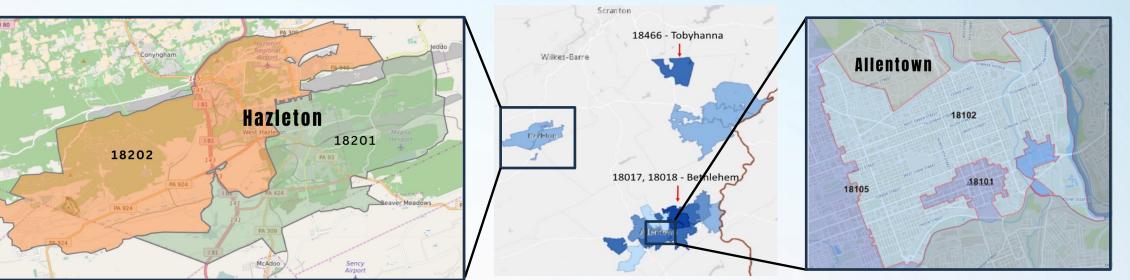


Figure 1. Lehigh Valley ZCTA Classes 2-3-4 with higher severity cervical cancer dysplasia or cervical cancer rates, zooming in on specific hot spot zip codes from which we have conducted depth interviews and field visits.

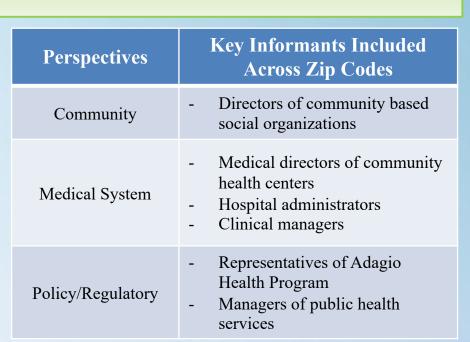
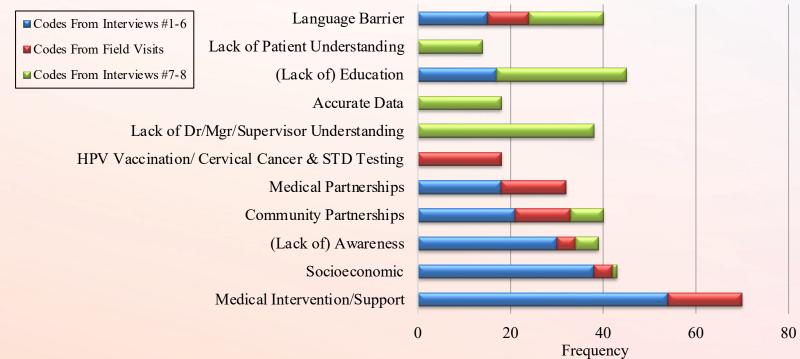


Table 1. Types of participants from various sectors, categorized by contextual level, that have been included for Phase 2.



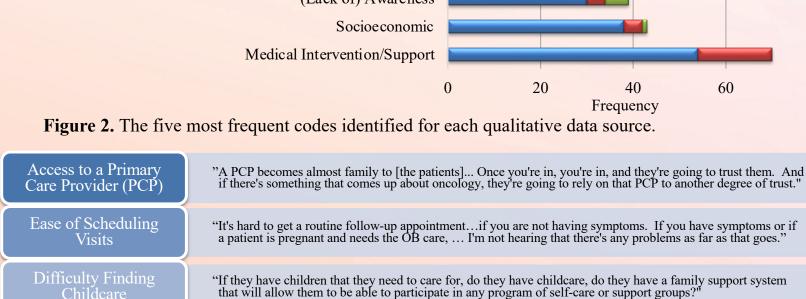


Figure 3. Emerging codes identified from depth interviews worth mentioning.

Rapid Assessment Process (fRAP) Applied to Cancer Survivorship. Journal of mixed methods research, 16(2), 183–206.

CONCLUSIONS

- There are significant differences in the identifiable contributors to cervical cancer disparities geographically.
 - Primary theme across the Hazleton region:

Health Communication and Access

- Primary theme across the downtown Allentown/Bethlehem region:

Socioeconomic and Community Health Factors

- Common contextual elements exist across all zip codes:
 - Language Barrier, Community Partnerships, (Lack of) Awareness, Neighborhood Support, & Cultural Differences

FUTURE DIRECTIONS

- Key informant selection and depth interviews until saturation is reached, meaning no new information or codes are being identified.
 - Obtain insight from more stakeholders across gynecologic oncology in the Lehigh Valley.
- Conduct cross-comparison analyses between interviewees from different levels.
- Identification of policy or environmental interventions that address the most prevalent contributors to cervical cancer disparities.
- Advocacy for change in the form of a one-page policy brief.

Scan the QR code to view resources available to women diagnosed with cervical cancer in the Lehigh Valley!



REFERENCES

- Centers for Disease Control and Prevention. Cervical Cancer Statistics. Division of Cancer Prevention and Control, Centers for Disease Control and Prevention; June 13, 2024. https://www.cdc.gov/cervical-cancer/statistics/index.html
- American Cancer Society. Cancer Facts & Figures for Hispanic/Laino People 2021-2023. Atlanta: American Cancer Society, Inc. 2021. https://www.cancer.org/research/cancer-facts-statistics/hispanics-latinos-facts-figures.html Verma, I., Bajpai, R., Arjaria, V., Garg, L., Mungad, A., Singh, D., Gavli, J., & Khare, A. (2024). A Study to Assess the Impact of Education on the Knowledge and Attitude Toward Cervical Cancer and HPV (Human Papillomavirus) Vaccination Among Female Healthcare Students. Cureus, 16(5), e59856. https://doi.org/10.7759/cureus.59856
- Lofters, A. K., Wu, F., Frymire, E., Kiran, T., Vahabi, M., Green, M. E., & Glazier, R. H. (2023). Cancer Screening Disparities Before and After the COVID-19 Pandemic. JAMA network open, 6(11), e2343796.
- https://doi.org/10.1001/jamanetworkopen.2023.43796 Kieber-Emmons, A. M., Miller, W. L., Rubinstein, E. B., Howard, J., Tsui, J., Rankin, J. L., & Crabtree, B. F. (2022). A Novel Mixed Methods Approach Combining Geospatial Mapping and Qualitative Inquiry to Identify Multilevel Policy Targets: The Focused



