Colorectal Cancer Screening Barriers: Does the Ethnicity of the Community Healthcare Worker Matter? A 12-Month Retrospective Analysis of a Rural West Texas Population

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Introduction

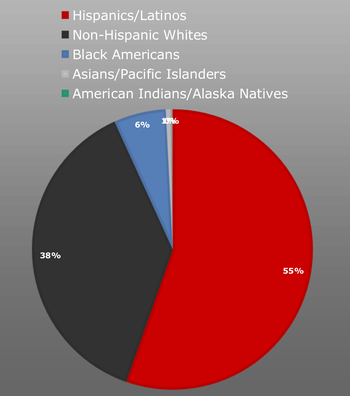
The aim of this study was to examine whether the ethnicity of community healthcare workers impacts colorectal carcinoma screening rates in a rural West Texas population with a focus on the African American population. Colorectal carcinoma is the second leading cause of cancer-related deaths in America with African Americans experiencing the highest incidence and mortality rates among all other racial groups. Previous studies have shown how racial discordance between patients and physicians have led to this disparity, but the specific impact of community healthcare workers remains underexplored. We hypothesize that having a minority community healthcare worker will increase the amount of colorectal carcinoma screenings in African Americans in our target population.

Materials and Methods

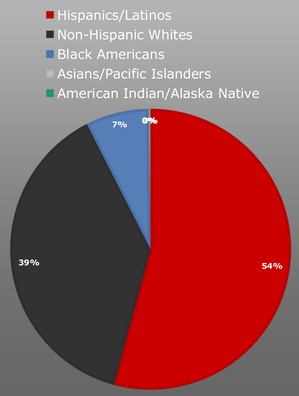
- Retrospective cross-sectional analysis over a 12-month period (May 1, 2023 – Nov, 1 2023)
  - Period A (May 1, 2023 – Oct. 31, 2023) = Non-Hispanic White, Asian, and Hispanic/Latino CHWs employed
  - Period B (Nov. 1, 2023 – April 30, 2024) = Black American CHW begins employment
- Inclusion criteria:
  - Age between 40 – 89 years old
  - No prior colorectal cancer diagnosis
  - Received care at the Texas Tech Health Sciences Center and/or the Colorectal surgery clinic in Amarillo, TX
- Exclusion criteria:
  - Age less than 40 years or older than 89 years
  - Prior history of colorectal cancer
- Data regarding the total number, gender, and ethnicity of patients screened by CHWS were recorded, as well as total FIT kits given and returned during both periods
- Odds ratios with 95% confidence intervals were used to assess for statistical significance

Results

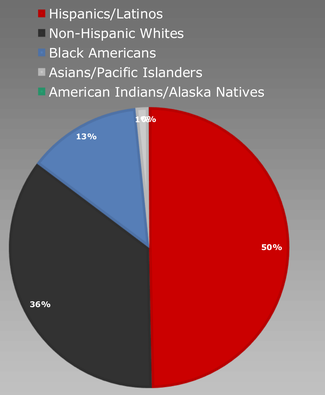
- Period A = 6% Black American participation
- Period B = 7% Black American participation
- 13% Black American participation during period B if they interacted with the Black American CHW
- 4% Black American participation during period B if they interacted with non-Black American CHW
- Men, Hispanics/Latinos, and Non-Hispanic Whites were more likely to be screened during period A (no statistical significance; clinically significant only)
- Black Americans significantly more likely to be screened if they interacted with Black American CHW (OR = 3.1857; P = 0.0001)



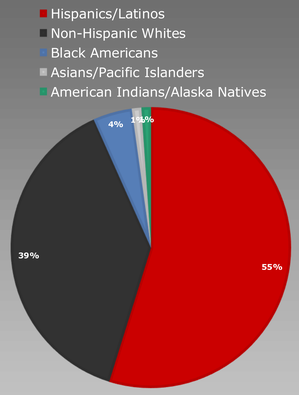
Ethnic demographics of period A



Ethnic demographics of Period B



Period B: Screened by Black American CHW



Period B: Screened by non-Black American CHW

Compared Date Range	Odds Ratio	Confidence Interval	P-Value
BA participation when screened by BA CHW compared to cumulative data	2.356	[1.3221 – 4.1992]	0.0036
BA participation when screened by BA CHW vs non-BA CHW during period B	3.1857	[1.7554 – 5.7814]	0.0001

Calculated odds ratios regarding interaction with the Black American CHW

Discussion

- The addition of a female Black American CHW improved CRC screening rates among Black Americans, demonstrating that targeted Black American CHW implementation is an effective tool for reducing disparities in this population
- This intervention addressed two key barriers: mistrust and systemic racial biases
- Higher mistrust in the healthcare system correlates with lower Black American CRC screening, with skepticism of motives, perceived inequity, and provider competence cited as common reasons
- Furthermore, provider-level bias also influences CRC screening rates in Black Americans, as lack of recommendation is the most cited reason for screening nonadherence
- Our study aligns with these findings, showing increased screening rates following the Black American CHW's employment
- Employing healthcare workers from diverse backgrounds that reflect the patient population can help reduce provider-level bias
- Further research should be conducted regarding long-term outcomes from minority CHW implementation and gender specific barriers to CRC screening

Conclusion

- The addition of the female Black American CHW statistically increased Black American participation in CRC screening and boosted productivity and community engagement
- Representation among healthcare staff is crucial to provide the best care to patients from all backgrounds

References:

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2. Luque J, Gebre-Egziabher K, Vargas M, Deloria J, Olayemi M, Tifini A, Rima T, Askal A, Harris C, Wallace K, Gwede C (2023) Association of Preventative Care Attitudes and Beliefs with Colorectal Cancer Screening History Among African American Patients of Community Health Centers. J Cancer Educ, DOI: 10.1007/s13187-023-02337-1, December 01, 2024.

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