Factors that contribute to differences in cervical cancer screening in rural and urban community health centers

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In the United States, community health centers (CHCs) mainly serve historically marginalized populations. New research reveals that both
before and during the COVID-19 pandemic, females receiving care at rural CHCs were less likely to be up to date with cervical cancer screening than those in urban CHCs.

Factors associated with these differences included the proportion of patients with limited English proficiency and low income, as well as area-level unemployment and primary care physician density. The findings are published in Cancer.

In the analysis of data from CHCs in operation across all 50 states and the District of Columbia, investigators found that 38.2% of females receiving care at rural CHCs were up to date on cervical cancer screening during 2014–2019, compared with 43.0% of females receiving care at urban CHCs. This difference widened during the pandemic to 43.5% versus 49.0%.

The rural-urban difference in screening was mostly explained by differences in CHC-level proportions of patients with limited English proficiency. This accounted for 55.9% of the difference. Differences in the proportions of patients with income below the poverty level accounted for 12.3% of the rural-urban difference in screening, and the proportion of females aged 21–64 years accounted for 9.8% of the difference.

Differences in area-level unemployment accounted for 3.4% of the difference, and differences in primary care physician density accounted for 3.2% of the difference. Differences between rural-urban CHCs were counterbalanced (meaning that differences were reduced) by the proportion of uninsured patients and patients with Medicaid coverage. (There were lower proportions of uninsured or Medicaid patients in rural CHCs. If rural CHCs had equal or larger proportions of uninsured or Medicaid patients as urban CHCs, the rural-urban gap would have been larger.)
The contributing factors' effects on rural-urban differences in cervical cancer screening generally increased during the pandemic in 2020–2021.

"In our study, a higher proportion of patients best served in a language other than English in urban CHCs was the top contributor to rural-urban differences in up-to-date cervical cancer screening. A possible explanation for this finding might be greater access to language translation services in urban CHCs, as clinics serving a greater proportion of racial and ethnic minority groups are more likely to provide better translation services," said lead author Hyunjung Lee, Ph.D., MS, MPP, MBA, of the American Cancer Society.

"Increasing access to language translation services or adaptation of patient navigator interventions might improve completion and timeliness of cancer screening in CHCs and among patients with limited English proficiency, especially in rural CHCs. Insufficient funding remains a challenge to initiate and manage these activities, particularly in rural CHCs."

Dr. Lee stressed that the prevalence of cervical cancer screening in CHCs is generally lower than in the general population, underscoring the need to improve cancer screening rates in both rural and urban CHCs to detect the disease at earlier stages, when treatment is most successful.

More information: Hyunjung Lee et al, Factors contributing to differences in cervical cancer screening in rural and urban community health centers, Cancer (2024). DOI: 10.1002/cncr.35265