Mayo researchers find ‘unacceptable low’ cervical cancer screening rates

By Heather Carlson Kehren

ROCHESTER, Minn. — The percentage of women who are screened for cervical cancer may be far lower than national data suggests, according to a Mayo Clinic study recently published in the Journal of Women’s Health (https://www.liebertpub.com/loi/jwh). Less than two-thirds of women ages 30 to 65 were up-to-date with cervical cancer screenings in 2016. The percentage is even
lower for women ages 21 to 29, with just over half current on screenings. Those figures are well below the 81 percent screening compliance rate self-reported in the 2015 National Health Interview Survey (https://www.cdc.gov/nchs/nhis/index.htm).

“These cervical cancer screening rates are unacceptably low,” says Mayo Clinic family medicine specialist Kathy MacLaughlin, M.D. (https://www.mayo.edu/research/faculty/mclaughlin-kathy-l-md/bio-20199426), the study’s lead author. “Routine screening every three years with a Pap test or every five years with a Pap-HPV co-test ensures precancerous changes are caught early and may be followed more closely or treated.”

In addition to lower-than-expected screening rates, Mayo Clinic researchers also found racial inequities in terms of who is getting screened.

“African-American women were 50 percent less likely to be up-to-date on cervical cancer screening than white women in 2016,” says Dr. MacLaughlin. “Asian women were nearly 30 percent less likely than white women to be current on screening. These racial disparities are especially concerning.”

Mayo Clinic researchers reviewed medical records using the Rochester Epidemiology Project database to determine cervical cancer screening rates for more than 47,000 women living in Olmsted County, Minn., from 2005 to 2016. An estimated 13,240 new cases of invasive cervical cancer were diagnosed in the U.S. in 2018, according to the American Cancer Society (https://www.cancer.org/cancer/cervical-cancer/about/key-statistics.html). Another 4,170 women died from cervical cancer last year. January is Cervical Health Awareness Month.

Dr. MacLaughlin says these study results should prompt health care providers to start considering new ways of reaching out to patients to help ensure they get screened. Ideas could include setting up Pap clinics with evening and Saturday hours, or offering cervical cancer screenings at urgent care clinics. For women who qualify for the newest screening option of primary HPV screening, clinics could explore the option of giving patients at-home testing kits.

“We, as clinicians, must start thinking outside the box on how best to reach these women and ensure they are receiving these effective and potentially life-saving screening tests,” she says.

Cervical cancer death rates have dropped dramatically in recent decades thanks to the development of the Pap test in the 1950s. That test involves collecting cells from a woman's cervix and examining them under a microscope to look for precancerous and cancerous cells. A second type of cervical cancer screening — called the HPV test (https://www.mayoclinic.org/tests-procedures/hpv-test/about/pac-20394355) — detects the presence of high-risk HPV, which can lead to precancerous changes and cervical cancer.

In 2012, national cervical cancer screening guidelines were updated to recommend Pap testing every three years for women ages 21 to 65 or Pap-HPV co-testing every five years for women ages 30 to 65. The study results show high rates of adoption by Olmsted County health providers of the 2012 guidelines in regards to appropriate use of co-testing and in appropriately not screening women under 21 or over 65.

A limitation of this study is that Olmsted County is less ethnically and racially diverse than the U.S. population, but the county’s demographic makeup is reflective of the Upper Midwest. The study’s findings related to racial disparities in screening are consistent with several other studies from across the country. Another limitation is the potential for over counting young women as not screened who are insured by their parents and have an Olmsted County address but may have gone to healthcare providers outside of Olmsted County for screening.
The research was supported by the Rochester Epidemiology Project, Mayo Clinic, the Mayo Clinic Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery (https://www.mayo.edu/research/centers-programs/robert-d-patricia-e-kern-center-science-health-care-delivery), the National Institute on Aging (https://www.nia.nih.gov/) and the National Institutes of Health (https://www.nih.gov/).


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**About the Rochester Epidemiology Project**
The Rochester Epidemiology Project is a collaboration of clinics, hospitals and other medical facilities in Minnesota and Wisconsin, and involves community members who have agreed to share their medical records for research. Using medical record information, medical scientists can discover what causes the diseases, how patients respond to medical and surgical therapies, and what will happen to patients in the future. Research studies conducted in the local community may improve the health of people both locally and globally.

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