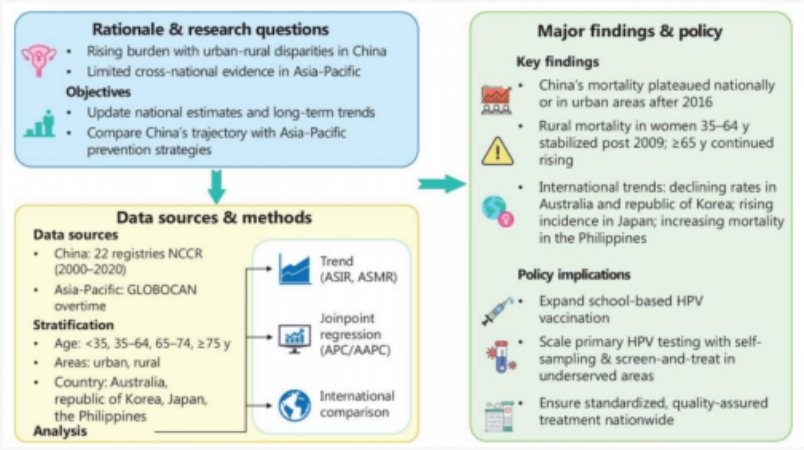
China’s cervical cancer trends reveal plateau amid rising risk for older and rural women

FAYETTEVILLE, GA, UNITED STATES, October 22, 2025 /EINPresswire.com/ -- Cervical cancer remains a major public health concern in China despite recent stabilization in national incidence and mortality rates. Analyzing data from two decades, researchers observed a tripling of age-standardized incidence between 2000 and 2020, followed by a plateau after 2016. However, pronounced disparities persist—older and rural women continue to face growing risks, while younger urban women benefit from improved screening. When compared internationally, China’s progress lags behind countries such as Australia and the Republic of Korea, where integrated HPV vaccination and screening programs have sharply reduced cervical cancer rates. The findings underscore the urgent need for equitable prevention strategies.



Study flowchart.

Cervical cancer is one of the most preventable malignancies, yet it remains the fourth leading cause of cancer death among women globally. China accounts for nearly one-fifth of the world’s female population, making the country's progress crucial to the global elimination effort. Despite large-scale screening programs and the introduction of HPV vaccination in 2016, coverage remains low—only about half of women aged 35–64 have been screened and less than 10% of girls have completed HPV vaccination. Persistent gaps in access, especially in rural and aging populations, limit progress toward the WHO’s “90-70-90” targets. Based on these challenges, it is essential to conduct in-depth studies on cervical cancer trends and control strategies.

A research team from the National Cancer Center, Chinese Academy of Medical Sciences and Peking Union Medical College, analyzed cervical cancer data from 22 long-term cancer registries across China, together with international datasets from the International Agency for Research on Cancer. Their study (DOI: /10.20892/j.issn.2095-3941.2025.0386), published in Cancer Biology & Medicine on September 15, 2025, examined incidence and mortality trends from 2000 to 2020 and compared China’s progress with other Asia–Pacific countries. The findings reveal

encouraging signs of stabilization nationally but highlight widening disparities by age and geography that threaten elimination targets.

Using Joinpointregression analysis, the study found that China's age-standardized incidence rate (ASIR) rose from about 3 per 100,000 in 2000 to over 10 per 100,000 by 2016, with an average annual increase of 6.5%. Since 2016, both incidence and mortality have plateaued nationally. Urban women under 35 years showed declining incidence after 2009, likely due to improved awareness and early detection. However, rural women aged 35–64 years continued to experience increases, while those aged ≥65 years showed steadily rising incidence and mortality in both urban and rural areas.

When benchmarked against regional peers, China's trends contrasted sharply with Australia and the Republic of Korea, which achieved consistent declines through nationwide HPV vaccination and high-quality screening. Japan exhibited rising incidence, and the Philippines showed increasing mortality despite stable incidence. The authors emphasize that China's plateau marks a critical inflection point—but the continuing age and regional disparities call for urgent policy recalibration.

"China's stabilization in cervical cancer rates is an encouraging signal, but we cannot overlook the inequities beneath it," said Professor Wenqiang Wei, corresponding author of the study. "Older women and those in rural regions remain at disproportionate risk, largely due to limited access to vaccination, screening, and timely treatment. Achieving the WHO elimination goal will require not just technological advances but system-level equity—ensuring every woman, regardless of where she lives, receives the same standard of preventive care."

The findings provide critical evidence for refining China's national cervical cancer elimination roadmap. To accelerate progress, researchers recommend expanding school-based HPV vaccination, scaling up primary HPV testing with self-sampling options, and ensuring standardized treatment across healthcare levels. Integrating AI-assisted cytology and digital registries could further improve early detection. Strengthening coordination between public health programs and local governments will be vital to narrow the urban–rural gap. As China approaches the peak of its national burden around 2040, decisive and equitable interventions will determine whether the elimination of cervical cancer becomes a regional reality.

References

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