



# Exploring racial and ethnic disparities in cervical cancer's histologic subtypes

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Cervical cancer, a preventable disease with human papillomavirus (HPV) vaccination, pre-invasive lesions screening and early diagnosis, continues to impact women globally, standing as the fourth most common cancer and the fourth leading cause of cancer-related fatalities among women. Alarmingly, approximately 90% of new cases and deaths in 2020 were concentrated in low- and middle-income countries (1). Considering this, a recent study titled “Racial and Ethnic Disparities in Cervical Cancer Incidence, Survival, and Mortality by Histologic Subtype” exposes the persisting disparities among diverse racial and ethnic groups (2).

The mentioned study explored data from the Surveillance, Epidemiology, and End Results (SEER) Program, an American population database that provides information on cancer statistics, over the years 2000 to 2018, shedding light on an unsettling reality: the disparities extend beyond incidence rates. The findings revealed that cervical squamous cell carcinoma (SCC) disproportionately affects Black women, with a corrected incidence rate of 13.8 per 100,000, followed by Hispanic women at 11.8 per 100,000, and White women at 6.8 per 100,000. This demonstrates a significant two-fold higher incidence in Black women as compared to White women.

Differently, adenocarcinoma (ADC) is more commonly

diagnosed in Hispanic women, with a corrected incidence rate of 3.0 per 100,000, followed by White women at 2.5 per 100,000 and Black women at 1.9 per 100,000. Although Black women have a lower incidence rate of ADC, notable racial inequalities in ADC survival lead to the highest ADC mortality rates observed in this group compared to others. Therefore, beyond the inherent nature of the disease, factors contributing to the adverse outcomes for Black women with ADC extend further (3).

Research conducted in both developed and developing nations suggests that the increased susceptibility of Black populations to worse outcomes may be linked to various factors (4,5). These factors encompass lower socioeconomic status, which is associated with limited access to vaccination and screening, advanced stage diagnosis, and difficulties in accessing appropriate treatments (6). Besides, Cohen *et al.* (2) raised a discussion about the potential influence of specific biological factors contributing to the inferior outcomes of ADC in Black individuals, highlighting the need for further exploration in this area.

Black women are diagnosed more frequently in an older age group (50–54 years) when compared to White women (45–49 years), both in the general population and in each racial group. Another remarkable finding was the observed

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differences in the age group of peak incidence among each racial and ethnic group. In Black women, this peak occurs later, typically between the ages of 65–74 years for both SCC and ADC (2).

Importantly, Black women had the highest overall mortality rates and lowest 5-year relative survival, irrespective of subtype and stage. Unfortunately, the racial disparities in cervical cancer leading to higher incidence and mortality rates are markedly observed in low- and middle-income countries where the highest disease burden is located (4). Indeed, these findings can be explained by inadequate HPV vaccination coverage, and inadequate access to effective screening programs, leading to the late diagnosis of invasive disease (6). In this context, economic constraints, geographical challenges, and lower levels of education, also play an important role (7). To bridge these disparities, a multifaceted approach is essential. Firstly, tailored healthcare initiatives and culturally sensitive interventions are fundamental. Secondly, the community should be engaged and aware of this important subject.

In 2020, the World Health Organization (WHO) ambitiously set out a strategy to eliminate cervical cancer by 2030, targeting a 90% vaccination rate for girls, 70% screening, and 90% treatment for women with cervical cancer (8). However, a 2023 analysis reveals a significant gap in progress, exposing notable geographical and socioeconomic disparities. Countries with lower levels of Human Development Index face higher incidence rates, indicating a considerable journey ahead to reach the WHO's commitment (9).

Major concerns have been voiced regarding obstacles to HPV vaccination, with a particular focus on the lack of consistent recommendations from healthcare providers. Early observations following the vaccine's introduction unveiled disparities in uptake, particularly among eligible young women for catch-up vaccination (unvaccinated 13 to 26 years old) (10). This discrepancy was pronounced among young Black women and those dependent on public health insurance in the USA. Hispanics exhibited higher increases in vaccine uptake, with black adolescents catching up as of 2014. In contrast, White female adolescents have demonstrated a steadier increase in HPV vaccination rates, revealing a crucial need to reinforce vaccination efforts within the Black population subgroup (11). Diverse health educators, personalized information dissemination, and addressing gender-specific recommendations are crucial. Overcoming vaccination barriers, such as low provider recommendations, insufficient knowledge, and safety

concerns, necessitates multi-level interventions with targeted information distribution and the introduction of a political mandate for school entry vaccination (12).

In conclusion, addressing racial and ethnic disparities in cervical cancer requires a broader effort. Healthcare systems, policymakers and communities must collaborate to decrease the barriers to care. This includes promoting education and awareness about cervical cancer prevention and the availability of vaccines against HPV. Finally, Cohen *et al.* (2) made a crucial contribution to the healthcare equity proposal by emphasizing the need for a multifaceted approach. The significance of improved availability of HPV vaccination, early identification, tailored therapy, and fair access to standard care in addressing discrepancies in cervical cancer was highlighted.

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