

ETHNICITY AND HEALTH CARE IN CERVICAL CANCER SURVIVAL: COMPARISONS BETWEEN A FILIPINO RESIDENT POPULATION, FILIPINO-AMERICANS AND CAUCASIANS

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Background:

Cancer of the uterine cervix is the most common gynaecological malignancy worldwide [1, 2]. For developing countries, where 83% of the cases occur, average incidence was estimated to be 19.1 per 100,000 women-years, almost twice of that in developed countries, with 10.3 per 100,000 women-years [1, 3]. Few studies have assessed and compared cervical cancer survival between developed and developing countries, as well as population groups of different ethnic origins within one country [2, 4-7]. Fewer still have addressed how much of the international or interracial survival differences can be attributed to ethnicity or health care.

Purpose:

To determine the role of ethnicity and health care, five-year survival of patients with cervical cancer was compared between patients in the Philippines and Filipino-Americans, who have the same ethnicity, and between Filipino-Americans and Caucasians from the United States (US), who have the same health care system.

Methods:

Cervical cancer databases from the Philippine Cancer Society-Manila Cancer Registry (PCS-MCR), the Department of Health-Rizal Cancer Registry (DOH-RCR) and SEER 13 were used. Survival status of Philippine patients was determined in a special survival study with active follow-up. Using period analysis methodology [8], age adjusted five-year survival estimates were computed and compared between Philippine residents, and Filipino-Americans and Caucasians from the US. Aside from absolute survival, relative survival (ratio of the observed survival and expected survival) was also computed. Using the Ederer II method [9], expected survival was derived from life tables for the year 2000. Cox proportional hazards modeling was used to examine potential determinants of survival differences, such as age, stage, morphology, and receipt of surgery and radiotherapy.

Results:

Considerably lower overall 5-year relative survival was observed for Philippine residents (42.9%), in comparison to similar estimates seen in Filipino-Americans (68.8%) and Caucasians (66.6%). Although late stage at diagnosis and not receiving surgery explained a large proportion of the survival differences between Philippine residents and Filipino-Americans, excess mortality remained even after adjustment for these and other factors in the multivariate analysis (RR, 1.78; 95% CI, 1.41-2.23), which could be due to differences in access to and utilization

of chemotherapy. Furthermore, a moderate, marginally significant excess mortality was found among Caucasians as compared to Filipino-Americans (adjusted RR, 1.22, 95% CI 1.01-1.47), which requires further investigation.

Conclusions:

The differences in cervical cancer survival between patients in the Philippines and in the United States highlight the importance of health care and enhanced access to diagnostic and treatment facilities in the Philippines. Reasons for the moderate survival difference between ethnic groups in the US deserve further investigation.

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