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Up-to-date estimates and predictors of cancer survival in a Philippine urban population, and comparisons with Asian-Americans and Caucasians from the United States

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Cancer survival varies widely between regions of the world, with the magnitude of difference depending on the cancer site. Despite the availability of population-based cancer survival data, a majority of estimates came from the developed world and only a handful were reported from developing countries, most of which are extremely outdated. Survival comparisons between developed and developing nations remain very few, but may yield important information on the magnitude of survival discrepancies, and help identify current causes of health care disparities. Comparisons of cancer patients with similar ethnicities across geographical borders can likewise provide perspectives on the roles of environmental and health care related exposures and ethnicity.

Using the SEER database and databases from the Manila and Rizal Cancer Registries in the Philippines, five-year absolute and relative survival for selected adulthood cancers were estimated. For cancers of the stomach, colorectum, liver, lung, breast, cervix, ovary, thyroid and leukemia, survival of Filipino-American patients was compared with survival of cancer patients from the Philippines, having the same ethnicity, and survival of Caucasians in the US, being exposed to a similar societal environment and the same health care system. In depth analysis to determine factors affecting survival were done for breast, cervical, ovarian and colorectal cancers using Cox proportional hazards modelling.

Similarly, leukemia and lymphoma pediatric cancer patients of Asian-American origin were compared with Philippine resident patients, and Caucasians from the US. Analyses were done by major types of leukemia and lymphomas, by sex and by age.

For adult cancers, survival estimates were much higher for Filipino-Americans than the Philippine resident population, with particularly large differences (more than 20–30% units) for cancers with good prognosis if diagnosed and treated early (colorectal, breast and cervix), or those with expensive treatment regimens (leukaemias). Detailed analyses for breast, cervical, ovarian and colorectal cancers showed that a large proportion of survival variability for these cancers can be attributed to health care factors such as stage at diagnosis and treatment.

Filipino-Americans and Caucasians showed very similar survival for all cancer sites except stomach cancer (29.5 vs 22.2%) and leukaemias (34.3 vs 45.5%), the differences being possibly be more due to biological than health care related variables.

Much lower childhood leukemia and lymphoma survival was seen in Filipinos living in the Philippines (32.5 and 40.9%) than in Asian-Americans (76.0 and 89.7%) and Caucasians (78.2 and 85.3%). Very large survival discrepancies between Philippine resident and both Asian-American and US Caucasian children, and very similar survival rates among the latter two groups were consistently seen across leukemia and lymphoma subtypes and age groups.

The very large differences in the survival estimates of Filipino-Americans and the Philippine resident population highlight the importance of improving health care in developing countries. Efforts should be made to enhance access to and utilization of early detection facilities and make effective treatment regimens more accessible and affordable. Awareness likewise needs to be reinforced, not only on the part of patients, but for health practitioners as well.

Between Filipino-Americans or Asian-Americans and Caucasian patients, survival is comparable for most cancers, essentially down playing the role of ethnicity in survival differences. Survival differences in stomach cancer and leukaemia between Filipino-Americans and Caucasians in the United States most likely reflect biological factors rather than the differences in access to health care, but should nevertheless be studied in more detail.