LETTER TO THE EDITOR



Consideration of Asian ethnic groups and immigration status in cancer disparities research

Eleanor Xu¹ · Michael A. Liu²

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Khosla et al. conducted an excellent study researching racial and regional disparities of mortality rates in patients with breast cancer [1]. The authors found that among patients with breast cancer from the 2016–2018 National Inpatient Sample, African Americans had the highest mortality rate, followed by Asian and Pacific Islanders, compared to Caucasians. In the geographic analyses, the West region had the highest general mortality rate, which was also the region of greatest mortality among Asians; for African Americans, the South was the region of highest mortality. The study suggested that identifying and addressing the factors contributing to racial and regional disparities in breast cancer mortality may be crucial for improving health outcomes and reducing inequalities.

We commend the authors on bringing attention to this critical and understudied topic. Notably, Asians in the current study had significantly higher mortality than Caucasians. However, many other studies demonstrate that Asians tend to have lower mortality from breast cancers even among the same region observed in the authors' study (West), and overall, there is considerable variation among studies when Asians are considered as one group [2]. Asians are the most diverse racial group in the United States and extremely heterogeneous in culture, lifestyle, and health behaviors. Because Asians are a minority population, sample sizes tend to be low. Therefore, research studies tend to aggregate Asians into one group. It is critical to compare among the specific ethnic subgroups of Asians, which may reveal crucial differences and inform prevention and intervention strategies

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Michael A. Liu ml4777@cumc.columbia.edu

- ¹ Columbia University, New York, NY, USA
- ² Columbia University Medical Center, Herbert Irving Comprehensive Cancer Center, 161 Fort Washington Avenue, New York, NY 10032, USA

in the goal towards eliminating breast cancer disparities. For example, a recent study showed that Asians (compared to Caucasians) had a lower mortality from breast cancer overall, but Native Hawaiians and other Pacific Islanders had a higher mortality than Caucasians [2]. Therefore, the distribution of Asians among ethnic subgroups in the authors' study may explain the discordant findings compared to other studies.

Secondly, there are remarkable variations in the mortality rate of breast cancer between Asian immigrants and Asian Americans. In a study using the California Cancer Registry linked to the Surveillance, Epidemiology, and End Results program (SEER), survival rates for breast cancer tended to be higher for US-born Asian Americans than in foreign-born Asian immigrants, and immigrant status had a larger effect on survival in several ethnicities, including Vietnamese, Chinese, and Filipinas [3]. Foreign-born Asians tend to have different lifestyles, dietary habits, and physical activity levels, but may also have lower socioeconomic status and linguistic barriers/reporting of health conditions.

To guide the management of breast cancer in Asians, conducting a comprehensive analysis of ethnic subgroups and immigrant status is essential as they are associated with distinct health behaviors, cultures, and practices. Combining Asians as a single group may mask important differences between ethnic groups and undermine study results. While sample limitations may be contributory to many studies, we recommend that future studies of breast cancer in Asians try to include these key distinctions, to better tailor interventions and risk management towards the appropriate Asian subgroups. We believe these considerations would strengthen the validity and applicability of these findings.

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Declarations

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References

1. Khosla A, Desai D, Singhal S, Sawhney A, Potdar R. Racial and regional disparities in deaths in breast cancer. Med Oncol. 2023;40:210.

- Medina HN, Callahan KE, Morris CR, Thompson CA, Siweya A, Pinheiro PS. Cancer mortality disparities among Asian American and Native Hawaiian/Pacific Islander populations in California. Cancer Epidemiol Biomarkers Prev. 2021;30:1387–96.
- Gomez SL, Clarke CA, Shema SJ, Chang ET, Keegan TH, Glaser SL. Disparities in breast cancer survival among Asian women by ethnicity and immigrant status: a population-based study. Am J Public Health. 2010;100:861–9.

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