

Review of: "Effect of Ethnic Differences on Breast Cancer Presentation and Prognosis in Singapore"

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Potential competing interests: No potential competing interests to declare.

Title:

1. The title should show that this is a review article.
2. Lack of specificity: The title could be more specific about the nature of the ethnic differences being studied. For example, are the differences related to incidence rates, age at diagnosis, tumor characteristics, treatment outcomes, or survival rates? Adding specificity could make the title more informative and help readers understand the focus of the research.

Introduction

1. The introduction briefly mentions the leading role of breast cancer among Singaporean women and the differences in incidence rates among ethnic groups, but it does not provide sufficient context or background information about the broader significance of these findings. Including a brief overview of the global burden of breast cancer, trends in incidence and mortality rates, and the importance of understanding ethnic disparities in cancer outcomes would help readers better understand the relevance of the study.
2. While the introduction mentions disparities in breast cancer outcomes among Malay, Chinese, and Indian women in Singapore, it does not provide a detailed explanation of the potential factors contributing to these differences. Adding a brief overview of known risk factors for breast cancer, such as genetic predispositions, lifestyle factors, socioeconomic status, and healthcare access, would provide greater context for understanding the study's objectives and hypotheses.
3. The introduction cites a few studies to support its claims about ethnic differences in breast cancer outcomes, but it could benefit from citing a broader range of literature to provide a more comprehensive overview of the existing research in this area. Including additional references to studies exploring ethnic disparities in breast cancer incidence, prognosis, and molecular subtypes, especially in the context of Southeast Asia, would strengthen the introduction's background information.
4. While the introduction briefly mentions that the study aims to explore ethnic differences in breast cancer presentation and prognosis, it does not clearly articulate specific research questions or hypotheses. Providing a more explicit statement of the study's objectives and research aims would help readers understand the focus and scope of the research.

Method:

1. The method section lacks detail on the specific methods used to analyze the data from the Singapore Cancer Registry and the Joint Breast Cancer Registry. Readers would benefit from a more detailed explanation of how the data were collected, processed, and analyzed, including any data cleaning procedures, statistical techniques, and potential limitations of the data sources.
2. The method mentions that TNBC data from Singapore General Hospital (SGH) and other local studies were analyzed, but it does not provide sufficient detail on how these data were collected or their relevance to the overall analysis. Providing more information on the characteristics of the TNBC patients, such as demographics, tumor characteristics, and treatment outcomes, would help readers understand the importance of these data in the study.
3. While the method mentions that statistical analysis was performed using SPSS software, it does not specify which statistical tests or techniques were used to analyze the data. Including details on the specific statistical methods employed, such as descriptive statistics, regression analysis, or survival analysis, would provide readers with a clearer understanding of the analytical approach used in the study.
4. The method does not mention whether ethical approval was obtained for the study or whether patient consent was obtained for the use of their data. Ethical considerations are essential in research involving human subjects, and the absence of information on ethical approval or patient consent raises questions about the study's adherence to ethical standards.

Results

1. The text refers to several references (e.g., "ref"), indicating that citations are needed to support the information provided. Without these references, readers cannot verify the accuracy of the data presented or explore the original sources for more detailed information.
2. While the results present various statistics, such as age-standardized incidence rates (ASIR), median age at diagnosis, survival rates, and tumor characteristics, there is a lack of detail on the statistical methods used to analyze these data. Providing information on the specific statistical tests or techniques employed would enhance the transparency and reproducibility of the findings.
3. The results discuss differences in breast cancer outcomes among ethnic groups but do not thoroughly explore potential confounding factors that may influence these disparities. Factors such as socioeconomic status, access to healthcare, lifestyle factors, and genetic predispositions could impact breast cancer presentation and prognosis but are not adequately addressed in the results.
4. While the results mention variations in TNBC prevalence among ethnic groups and differences in survival rates, there is limited detail on TNBC tumor characteristics and their implications for prognosis. Providing more information on TNBC stage, grade, and nodal involvement across ethnic groups would enrich the understanding of TNBC disparities.

5. The results present conflicting evidence regarding the association between ethnicity and breast cancer outcomes, particularly in TNBC patients. For example, while one study suggests that Indians have a worse prognosis in TNBC, another study indicates that ethnic variations do not impact overall and disease-free survival. Addressing these discrepancies and discussing potential explanations for conflicting findings would improve the coherence of the results.

Discussion

1. While the discussion explores various lifestyle factors such as dietary patterns, obesity, breastfeeding, socio-economic status, cultural beliefs, and genetic factors, it lacks integration and exploration of potential interactions among these factors. Breast cancer disparities are likely influenced by complex interactions between multiple factors, and discussing these interactions could provide a more nuanced understanding of the observed differences among ethnic groups.

2. The discussion frequently draws conclusions based on data from studies conducted in Malaysia or other regions, which may not fully reflect the situation in Singapore. While insights from studies in similar populations are valuable, it's essential to acknowledge the context-specific factors that may influence breast cancer outcomes in Singaporean ethnic groups. Providing more context-specific evidence and discussing how findings align or differ from those in other populations would enhance the relevance and applicability of the discussion.

3. The discussion tends to attribute breast cancer disparities solely to lifestyle factors, socio-economic status, and cultural beliefs, without considering other potential explanations. While these factors likely play a significant role, it's essential to acknowledge and discuss alternative explanations, such as access to healthcare, quality of healthcare services, environmental factors, and genetic predispositions. Addressing these alternative explanations would provide a more comprehensive analysis of breast cancer disparities.

4. While the discussion acknowledges the need for targeted interventions to address breast cancer disparities, it lacks specific recommendations or suggestions for intervention strategies. Providing concrete recommendations based on the identified risk factors and barriers to care would help guide efforts to improve breast cancer outcomes among ethnic minorities in Singapore. Additionally, discussing the potential challenges and opportunities associated with implementing these interventions would enrich the discussion and provide practical insights for healthcare practitioners and policymakers.