Reducing BREAST CANCER MORTALITY Shifting Focus From Treatment To Early Diagnosis



BREAST CANCER

Breast Cancer is the most prevalent cancer, with 7.8 million prevalent cases over 5 years by the end of 2020. Approximately 2.3 million women were diagnosed with breast cancer and 685,000 deaths globally in 2020. (1) Despite all efforts to improve the situation & reduce breast cancer mortality, Asian countries and especially those in southeast Asia are much behind their western counterparts. (2)

Global Breast Cancer Incidence and Mortality by Geography in 2020

| Population | Incidence | Mortality | Comments | |
|---------------------------------|-------------|-----------|--|--|
| Northern America | 89.4 | 12.5 | The incidence of breast cancer is the | |
| Oceana | 87.8 | 14.7 | highest in Northern America, | |
| Europe | 74.3 | 14.8 | Europe, Australia, and New Zealand | |
| | 71 0 | 12 5 | | |
| Latin America and the Caribbean | 51.9 | 13.5 | The incidence is low in Asia, but | |
| Asia | 40.7 | 19.4 | increasing rapidly and can be | |
| Africa | 36.8 | 11.9 | attributed to rapid economic growth and urbanization | |

When digging deeper into the situation in specific countries, apart from Australia, New Zealand, and Korea, most Asia-Pacific (APAC)countries are having mortality ratios double or even triple compared to other countries.(2) Among the developed nations in APAC, Singapore lags behind other 'developed' countries in the region by far e.g., double the mortality ratio vs Korea, and 50% more than Australia. This is surprising as the country has a good healthcare system in place, a national screening program (similar to AU, KR, TW that are the only other Asian countries to have a national program) and is known for excellent healthcare outcomes when looking at different rankings comparing health systems globally.

Despite having mature healthcare systems in developed APAC economies, with adequate awareness, comprehensive efforts to improve patient care and several treatment options for breast cancer, the outcomes are bitter and grave. But it is an opportunity to save lives by detecting breast cancer earlier than what we see today.



Breast Cancer Incidence and Mortality in the Asia-Pacific Region in 2020



The prevalence will get worse as the breast cancer incidence trends are expected to go up, driven by the lifestyles and nursing habits of women in Asia and beyond.(3)





Breast Cancer Country Wise Forecasted Incidence in 2020 and Prediction in 2040

| Country | Incidence in 2020 | Prediction in 2040 | Percentage change (2020-2040) |
|-------------------|----------------------|-----------------------|-------------------------------|
| China | 416371 | 481293 | 15.60% |
| India | 178361 | 271601 | 52.30% |
| Indonesia | 65858 | 96805 | 47.00% |
| Japan | 92024 | 86543 | -6.00% |
| Philippines | 27163 | 46089 | 69.70% |
| Viet Nam | 21555 | 32522 | 50.90% |
| Thailand | 22158 | 27635 | 24.70% |
| Republic of Korea | 25814 | 25386 | -1.70% |
| Malaysia | 8418 | 13819 | 64.20% |
| Singapore | 3662 | 5012 | 36.90% |

When one looks at end to end management of breast cancer, the significant efforts, focus and investments from the healthcare ecosystem and community have been majorly on treatment rather than on patient awareness, early screening, and diagnosis across most countries in Asia (per the schematic below):





ANSEA

Following Ansea's extensive work around the status of breast cancer, augmented with multiple dialogues with diverse stakeholders, the conclusion on pre-treatment interval is grim. It is about time to shift gears and take control by making breast cancer screening and early diagnosis a top-most priority. The medium- to long-term result of this shift will save innumerable lives and families coupled with substantial lowering of healthcare costs and burdens.

Apparently, this appears an easy problem to solve as the way ahead is to address the issue - earlier diagnosis of breast cancer. However, this is not so simple because of several underlying barriers that must be addressed before we see a tangible difference in the mortality rates.

Barriers for Low Screening/Diagnosis and Later Stage Breast Cancer in Asia

There are 6 key barriers that hold back a tangible improvement in breast cancer mortality are (5-8)

- 1. Accessibility & availability barriers: inadequate access to timely screening
- 2. Affordability barriers: exclusion of screening and diagnosis from insurance coverage (public/private) or high out of pocket expense for new medical diagnostic devices e.g. digital breast tomosynthesis
- 3. **Detection barriers:** poor diagnostic mammography performance due to small volume breasts, dense breasts, not having the latest technology for breast imaging & sometimes radiologists' skills
- 4. Provider delay: long delay between first medical consultation and beginning of treatment
- 5. **Socio-cultural barriers:** culture, income, education, immigration status, language are factors cited in different Asian countries for women not going for screening. Also, some participants presume screening as painful and uncomfortable resulting in a reluctance to return
- 6. **Policy-related barriers:** include lack of government interventions for awareness campaigns, lack of evidence-based studies for breast cancer epidemiology, capacity building for cancer screening and funding



?

How can we address these barriers to breast cancer screening?

What are the screening modalities of breast cancer screening?

What is the latest screening modality available?

What are the pros and cons of each screening modality?

What do breast cancer screening guidelines recommend?

These are important questions that must be addressed collectively by all constituents of healthcare eco-system through close collaboration and joint efforts.

Ansea is and will be committed to support by creating awareness on early screening and diagnosis and bringing a sense of urgency about this in our healthcare system.

Feel free to post your comments and suggestions below or write to us at: insights@anseaconsulting.com

References

- Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J Clin. 2021 May 4;71(3):209–49.
- 2. International Agency for Research on Cancer. Global Cancer Registry [Internet]. 2020 [cited 2021 Jun 17]. Available from: https://gco.iarc.fr/
- Fan L, Goss PE, Strasser-Weippl K. Current Status and Future Projections of Breast Cancer in Asia. Breast Care. 2015;10(6):372– 8.
- 4. Singapore Cancer Society. Annual Reports [Internet]. [cited 2021 Jul 17]. Available from: https://www.singaporecancersociety.org.sg/about/publications/other-publications/48-annual-reports.html
- Wong XY, Chong KJ, van Til JA, Wee HL. A qualitative study on Singaporean women's views towards breast cancer screening and Single Nucleotide Polymorphisms (SNPs) gene testing to guide personalised screening strategies. BMC Cancer. 2017 Nov;17(1).
- 6. Rakkapao N, Promthet S, Moore MA, Solikhah S, Hurst C. Assessing Breast Cancer Awareness in Thai Women: Validation of the Breast Cancer Awareness Scale (B-CAS). Asian Pac J Cancer Prev. 2017;18(4):995–1005.
- 7. Teo CT, Yeo YWS, Lee S. Screening mammography behavior and barriers in Singaporean Asian women. Am J Health Behav. 2013;37(5):667–82.
- 8. Momenimovahed Z, Tiznobaik A, Taheri S, Hassanipour S, Salehiniya H. A review of barriers and facilitators to mammography in Asian women. Ecancermedicalscience. 2020 Nov 23;14.

