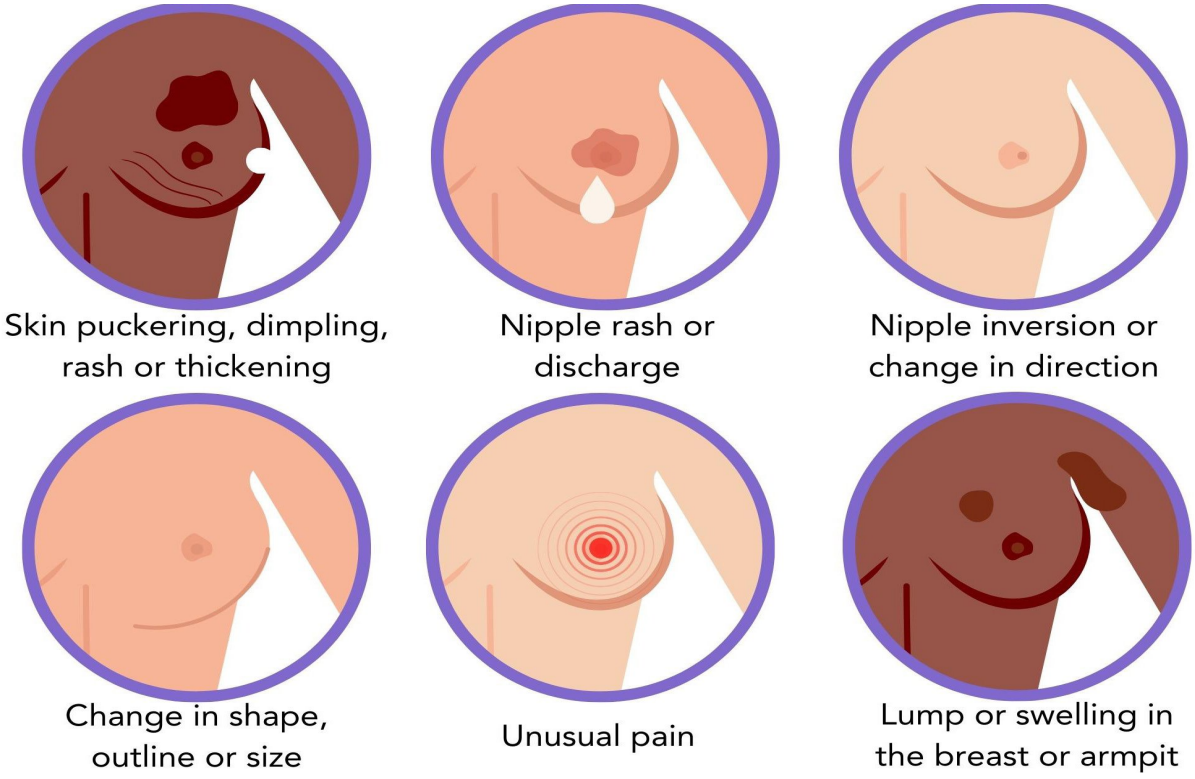
Breast Cancer in Africa: Current Challenges and Future Directions



Signs of breast cancer

Introduction

Breast cancer is the most common cancer among women globally, and in Africa, it represents a significant and growing health concern. Despite advancements in breast cancer awareness, diagnosis, and treatment worldwide, the disease's burden in Africa remains disproportionately high. Several factors contribute to this, including late diagnosis, limited access to quality healthcare, socio-economic barriers, and cultural stigmas. This article explores the current state of breast cancer in Africa, highlighting its prevalence, challenges, and potential solutions.

Prevalence and Epidemiology

Breast cancer is the most prevalent cancer among women in Africa, accounting for approximately 25.5% of all cancer cases diagnosed on the continent [1]. According to the Global Cancer Observatory (GLOBOCAN), in 2020, over 168,690 new cases of breast cancer were reported across Africa, with an estimated 74,072 deaths [2]. Unlike in high-income countries where breast cancer is more common in older women, in many African nations, the disease affects younger women, often between the ages of 35 and 49 [3].

The reasons for this demographic pattern are multifaceted, involving genetic, environmental, and lifestyle factors. Additionally, the incidence of breast cancer in Africa is projected to increase due to population growth, aging, urbanization, and adoption of a more Western lifestyle, which includes higher consumption of processed foods, reduced physical activity, and increased obesity rates[4].

Factors Contributing to the Burden of Breast Cancer in Africa

1. Late Diagnosis

One of the most critical challenges in managing breast cancer in Africa is the high rate of late-stage diagnosis. Approximately 70% to 90% of breast cancer cases in sub-Saharan Africa are diagnosed at an advanced stage (Stage III or IV)5. In comparison, less than 30% of cases are detected at late stages in high-income countries. This discrepancy is primarily due to the lack of regular screening programs, limited awareness, and cultural beliefs that discourage women from seeking medical care.

Authors: Jane Fualal Odubu Senior Consultant Surgeon[1], Victoria Walusansa, Deputy Director of the Uganda Cancer Institute (UCI)[1], Israel Luutu, Senior Consultant radiation oncologist at UCI[1], and Elsie Kiguli-Malwadde, Senior Radiologist, Kampala Imaging Center, Uganda.[1] Mulago Hospital



Signs of advanced beast cancer

2. Limited Access to Diagnostic and Treatment Services

Access to diagnostic facilities, including mammography and biopsy services, is limited in many parts of Africa, particularly in rural areas. Moreover, many healthcare systems lack the infrastructure to provide adequate treatment, including surgery, chemotherapy, and radiotherapy. For instance, while the World Health Organization (WHO) recommends one radiotherapy machine per 250,000 people, several African countries have fewer than one machine per 5 million people6.

3. Socio-economic Barriers

Poverty is a significant determinant of health outcomes, and this is evident in the context of breast cancer in Africa. Financial constraints often prevent women from accessing early diagnostic services or completing recommended treatments. Additionally, the cost of drugs, even when subsidized, remains prohibitive for many, leading to high drop-out rates from treatment regimens.

4. Cultural Beliefs and Stigma

Cultural factors also play a significant role in the late presentation of breast cancer. In some communities, there is a stigma attached to the disease, with myths linking breast cancer to curses or supernatural causes. These beliefs discourage women from seeking timely medical attention. Furthermore, the concept of screening for diseases in the absence of symptoms is not well understood or accepted in some cultures7.

Efforts to Address Breast Cancer in Africa

Despite these challenges, several efforts have been made to improve breast cancer care in Africa:

1. Awareness Campaigns

Increasing awareness about breast cancer, its risk factors, and the importance of early diagnosis has been a priority for various health organizations and non-governmental organizations (NGOs). Initiatives like 'Pink October,' which encourages breast cancer awareness during the month of October, have helped to educate women on self-breast examinations and the importance of routine check-ups.

2. Improving Screening and Early Detection

Efforts to implement more widespread screening programs are ongoing. For example, mobile mammography units have been introduced in some countries to reach women in rural areas. These units have been instrumental in early diagnosis and have increased breast cancer survival rates by facilitating diagnosis and timely treatment8.

3. Training Healthcare Professionals

Training more healthcare professionals in breast imaging, oncology and improving the quality of care provided at primary healthcare facilities are essential steps in combating breast cancer. Some countries have started integrating breast cancer education into their health professional training curricula to improve the capacity for early detection and treatment[9,10].

4. Strengthening Health Systems

Investments are being made to strengthen health systems, including building new cancer treatment centers and improving existing ones. Countries like Kenya, Nigeria, and South Africa have taken significant strides in this regard, with governments investing in radiotherapy machines and other cancer care facilities. Additionally, partnerships between local health ministries and international organizations have led to the establishment of oncology training programs for healthcare providers.

Future Directions and Recommendations

Addressing breast cancer in Africa requires a comprehensive, multi-pronged approach:

1. Policy Interventions

Governments should prioritize cancer care by allocating more resources to breast cancer screening and treatment programs. Implementing national cancer control plans, which include regular screening, will help ensure that women are diagnosed at earlier, more treatable stages.

2. Public-Private Partnerships

Public-private partnerships can help bridge the gap in resources and expertise. For example, collaborations between governments, NGOs, and pharmaceutical companies can help provide affordable diagnostic services and treatments, including chemotherapeutic agents and targeted therapies.

3. Community Engagement

Engaging communities in health education campaigns is vital to dispel myths and reduce stigma associated with breast cancer. Local leaders, religious figures, and community health workers can play crucial roles in spreading awareness and encouraging women to seek medical care early.

4. Research and Data Collection

More research is needed to understand the epidemiology of breast cancer in Africa, including genetic studies that could shed light on why the disease tends to affect younger women on the continent. Robust data collection will also help track the progress of interventions and identify gaps that need to be addressed.

Conclusion

Breast cancer remains a major health challenge in Africa, with many women facing late diagnosis, limited access to care, and socio-cultural barriers. However, there is hope. Increased awareness, better screening programs, healthcare worker training, and investments in cancer treatment infrastructure have started to make a difference. With sustained efforts, policy interventions, and international collaboration, the future can hold better outcomes for women facing breast cancer across the continent.

References

1. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin. 2018;68(6):394-424.
2. Sung H, Ferlay J, Siegel RL, et al. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J Clin. 2021;71(3):209-249.
3. Jedy-Agba E, McCormack V, Adebamowo C, dos-Santos-Silva I. Stage at diagnosis of breast cancer in sub-Saharan Africa: a systematic review and meta-analysis. Lancet Glob Health. 2016;4(12):e923-e935.
4. Abuidris DO, Elsheikh A, Ali M, et al. Breast-cancer screening with trained volunteers in a rural area of Sudan: a pilot study. Lancet Oncol. 2013;14(4):363-370.
5. Gakunga R, Parkin DM, African Cancer Registry Network. Cancer in Sub-Saharan Africa. Oxford University Press; 2017.
6. Ndlovu N. Radiotherapy treatment in cancer control and its important role in Africa. Ecancermedicalscience. 2019;13:942.
7. Akuoko CP, Armah E, Sarpong T, Quansah DY, Amankwaa I, Boateng D. Barriers to early presentation and diagnosis of breast cancer among African women living in sub-Saharan Africa. PLoS One. 2017;12(2):e0171024.
8. Akinyemiju TF, Ogunsina K, Sakhuja S, Ogbhodo V, Braithwaite D. Comparative analysis of breast cancer knowledge and awareness among women in Africa and the United States: Findings from the World Breast Cancer Survey. BMC Cancer. 2019;19(1):1-10.
9. Stewart BW, Wild CP. World Cancer Report 2020. International Agency for Research on Cancer; 2020.
10. Zeridah Muyinda, Katie M. Davis, Samuel Kalungi, et al Using Patient Navigation to ReduceTime to Diagnosis of Breast Cancer in Uganda. J Am Coll Radiol 2024;21:1180-1187

