

## Cancer Care in Developing Countries: Does Early Detection Truly Save Lives?

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### Abstract

**Background:** “Early detection save lives” is a common and almost universal slogan for promoting cancer screening world-wide. Doubtlessly, early detection of cancer can save lives when the detection is followed with appropriate interventions. Conversely, when early detection is not followed with appropriate intervention(s), then it becomes effort in futility. Therefore, we are advocating that the slogan should change from early detection save lives to early intervention save lives, particularly, for resource-constrained settings where we have evidence that early detection might not be followed with appropriate interventions as exemplified by this case report. The paper sets out to x-ray challenges of oncology care in resource-constrained environment and to emphasise the fact that cancer prevention goes beyond detection.

**Materials and Methods:** Using the case report of a breast cancer patient that was detected relatively early without appropriate intervention, we did a critical analysis of state of oncology care from prevention services to palliative care in a resource-constrained environment, drawing heavily from local experiences in cancer management.

**Results:** The paper revealed the challenges of oncology care from preventive services to palliative care in a resource-constrained environment. Locally applicable recommendations aimed at optimizing the available resources and simultaneously, reducing cancer related morbidity and mortality should be strongly considered.

**Conclusion:** A cancer prevention and control service is a comprehensive package in which early detection is a major component. For early detection of cancer to save lives, it has to be followed by appropriate interventions. In recognition of this fact, we are advocating a change in the slogan from “early detection save lives” to “early intervention save lives” based on our local experience which is seen in most developing countries that are hugely challenged by resource-constraints.

**Keywords:** Cancer care; Prevention; Awareness; Breast examination

### Introduction

Cancer has been identified as a major cause of morbidity and mortality all over the world and recent literature on cancer suggests that incidence of cancer cases has been rapidly increasing, especially, in developing countries [1-4]. Disappointingly, available cancer data are not quite robust and unreliable in most developing countries, underscoring the need for well-financed cancer registries and improve surveillance [2,4]. Nigeria, like many developing countries, appears to be experiencing increasing burden of cancer cases with high morbidity and mortality cases [2]. The impact of globalization- westernization and changing lifestyle, and increasing life expectancy in developing world appear to have contributed to the increasing prevalence of cancers. This has resulted in double epidemiological burden, which could be potentially overwhelming to the weak health system in most developing countries [5].

Awareness of cancer and its risk factors among the general population seem low in many developing countries [6-9]. The low level of awareness, high level of poverty, poor access to screening and

diagnostic facilities may have contributed to late detection and presentation at health facilities [10]. Contrary to findings in developing countries, the developed countries' experiences suggest that early detection often translate in the good prognosis for cancers [4,8]. This may explain the common slogan that says “early detection saves lives”.

In the light of the peculiarities of cancer prevention and control in developing countries, especially, in sub Saharan Africa, the paper sets out to emphasise the perspective that cancer prevention goes beyond detection. Based on peculiarities of resource-constrained environment, early detection may not save lives if appropriate interventions were not instituted.

### Materials and Method

#### Case Report

Patient X, a 38 year old woman was 8 month pregnant when we had first contact with her during a cancer screening outreach organized to commemorate the 2015 world cancer awareness month in one of the states in the north-west geopolitical zones of Nigeria. The pregnancy was her 4th- she has had 3 previous deliveries. She did not attend ANC

in her previous pregnancies and deliveries were at home. In the index pregnancy, she noticed her right breast was unusually bigger when the pregnancy was about 4 month old and she presented to a secondary health facility in the state with her complain. She was examined and reassured. Not satisfied with the treatment she received for her complain, she presented to the tertiary health facility in the state. Unfortunately, the treatment she received was not significantly different.

Four months after first presenting to health facility with her complain, she presented to us during our outreach cancer screening program for breast and cervical cancer with same complain but more severe. Clinical breast examination was used to screen for breast cancer and Visual Inspection with Acetic acid was used to screen for cervical cancer. Though she was healthy looking, but clinical breast examination revealed enlarged right breast, about twice the size of the left breast with skin changes however no obvious ulcer and there was no fixation to anterior chest wall. We suspected breast cancer and referred her to the secondary health facility in the state for confirmation and further management.

With support from state government, she was able to pay her health bills. She had a biopsy in November [about a month after she was referred from cancer screening program]. At the time she was having the biopsy, the skin over the breast was already ulcerating and the mass was fixed to anterior chest wall precluding any chance for meaningful surgical intervention. On 7th December, she had induction of labour and was delivered of a live small for gestational age female baby weighing 1.7 kg. The baby died on 3rd day of life at the special care baby unit of the tertiary health institution in the state. She was referred to oncology unit of a teaching hospital in a neighbouring state. At the teaching hospital, patient was commenced on chemotherapy and later discharged home for a repeat course of chemotherapy and a month appointment given.

Upon her return, she had constant pain, stench from the ulcer and other attendant challenges with advanced breast cancer. Sadly, the patient lacks access to basic palliative care services to adequately manage the pain and other medical and psycho-social challenges. This clearly calls for a review of cancer management practices in this environment and the right of patient living with cancer.

## Discussion

Arguably, breast cancer screening programs may have reduced morbidity and mortality associated with the disease, particularly, in developed countries. This was probably the genesis of the popular cancer screening advocacy slogan, "early detection save lives". The story is not the same for developing countries, where evidence has shown that the incidence and case fatality of breast cancer is on the rise [4].

Cancer control is a coordinated system involving all aspects of cancer care, starting with prevention, through early detection, treatment and finally, palliative care. In most developing countries, there is no system in place to coordinate various aspects of cancer control. Consequently, cancer can be detected early without meaningful impact on morbidity or mortality as exemplified by the experience of Mrs. 'X'.

Primary breast cancer prevention involves lifestyle modification which the patient was not aware of and she has never had breast cancer screening. This may be attributable to her low socio-economic status which is a strong factor against uptake of screening services. However,

pregnancy presented her with the opportunity for early detection; she presented to a secondary health facility for ante-natal care in the 4th month of her pregnancy and complained of the swelling in her breast, yet the opportunity was missed.

Four months after her initial presentation at secondary health facility, we had contact with her during our free breast cancer screening program. The fact that a patient with obvious lump in her breast which she was not only aware of but had also complained of it to her healthcare providers I and was presenting with same lump to a breast cancer screening program speaks volume of the state of health facility for treatment of cancer in our environment.

Cancer treatment is very expensive and patients have to pay for the treatment out of pocket in this environment [11]. It appears lack of funds deterred her from accessing treatment 4 months after her initial presentation. However, the fact that she still could not access timely intervention even after the government had undertaken the responsibility for the bills of her treatment calls for worry. The challenges cancer patients have to surmount in order to access treatment in developing countries has been well documented [11]. Mrs X by stroke of luck presented early with her breast lump, government undertook responsibility for the bills for her treatment yet she ended up with an inoperable fumigating breast cancer!

## Conclusion

A cancer prevention and control service is a comprehensive package in which early detection is a major component. For early detection of cancer to save lives, it has to be followed by appropriate intervention. In recognition of this fact, we are advocating a change in the slogan from early detection save lives to early intervention save lives, based on our local experience, which is seen in most developing countries that are hugely challenged by resource-constraints.

## Authors Contributions

SAO conceived the idea, conducted literature search, wrote the introduction and conclusion while IL drew the outline and wrote the case report and discussion. Both authors wrote the abstract. All authors critically revised and approved the final version of the manuscript.

## Disclosure of Interest

The authors declare no competing interest and no financial assistance was received from any funding agency or organization. The opinions expressed in this work are those of the authors and not that of affiliated organizations.

## References

1. Sylla BS, Wild CP (2012) A million Africans a year dying from cancer by 2030: what can cancer research and control offer to the continent? *Int J Cancer* 15: 245-250.
2. Agba EJ, Curado MP, Ogunbiyi O, Oga E, Fabowale T, et al. (2012) Cancer Incidence in Nigeria: A Report from Population based Cancer Registries. *Cancer Epidemiol* 36: 271-278.
3. WHO Global Status Report on Non-communicable Diseases (2011). World Health Organization, Geneva.
4. Kanavos P (2006) The rising burden of cancer in the developing world. *Ann Oncol* 17: viii5- vii23.

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5. Valsecchi MG, Foucher ES (2008) Cancer registration in developing countries: a necessity or luxury? *The Lancet Oncology* 9: 159-167.
  6. Omoleke SA (2013) Chronic Non-communicable Diseases as a New Epidemic in Africa: Focus on The Gambia. *Pan Afr Med J* 14: 87.
  7. Moore AR (2013) Beliefs and Correlates of Knowledge of Cancer Risk Factors among People in Lome, Togo (West Africa). *Int J Health Promot Educ* 5: 85-94.
  8. Bhurgri H, Gowani S, Itrat A, Samani S, Zuberi A, et al. (2008) Awareness of cancer risk factors among patients and attendants presenting to a tertiary care hospital in Karachi, Pakistan. *Journal of the Pakistan Medical Association* 58: 584-588.
  9. Samat N, Ghazali S, Atang C (2014) Awareness and knowledge of cancer: a community survey in Kedah and Perlis. *Asian Social Sciences* 10: 10-18.
  10. Feyi-Waboso PA, Kamanu C, Aluka C (2005) Awareness and risk factors for cancer among women in Aba, south-eastern Nigeria. *Trop J Obstet Gynaecol* 22: 25-26.
  11. Price AD, Ndom P, Atenguena E, Nouemssi JPM, Ryder RW (2012) Cancer challenges in developing countries. *Cancer* 118: 3627-3635.