Breast Cancer in Pakistan: A Looming Epidemic

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The age standardised incidence rate (ASIR) of breast cancer is highest in Pakistan among the Asian countries.[1,2] The results of the first population-based cancer registry in Pakistan, the Karachi Cancer Registry (KCR), with 99% morphologically verified cancers, showed ASIR of 51.7/100,000 in 1995-1997.[1,2] The GLOBOCAN 2012 estimates indicated an ASIR of 50.3/100,000.[3] The population-based Punjab Cancer Registry (PCR), of Lahore district with a population of 15 million, has shown an ASIR of 47.6/100,000 for 2010-2012.[4]

The five-year survival rate for breast cancer vary worldwide. The CONCORD2 study,[5] on Global Surveillance of Survival 1995-2009 analysed the data of 5,486,928 women with breast cancer from 279 population-based cancer registries from 67 countries around the Globe. In women diagnosed with breast cancer during 2005-09, age-standardised five-year net survival was 80% or higher in 34 countries. However, breast cancer survival was lower than 70% in countries like Malaysia (68%), India (60%), and very low in Mongolia (57%) and South Africa (53%). In North America and Oceania, survival from breast cancer was high (84-89%). In Europe, the survival was generally lower than in North America and Oceania. It was difficult to assess the survival in Africa. Likewise, there was no data available on Pakistan as there was/is no national population-based cancer registry system in place.

In Pakistan, like in most low- and middle-income countries (LMIC), there is a lack of follow-up on patients. Therefore, the country has no primary data on mortality due to breast cancer. However, the Age Standardised Mortality Rate (ASMR) for Pakistan (GLOBOCAN 2012 estimates) was 25.2/100,000, highest among South Asian countries.[3] The major reason for high ASMR is the advanced stage of disease at presentation, due to lack of awareness and access to care, delayed clinical evaluation, diagnosis and staging, and absence of timely access to optimum treatment.

A key determinant of breast cancer outcome in any population is the degree to which it is detected at an early stage. In the USA, five-year survival is 99% for localised, 85% for regional, and 27% for distant-stage disease.[6] Screening and early detection has played a major role in reducing the mortality rate in developed countries.

Data on stage-distribution for Pakistan is scarce. In a study carried out on stage-distribution of breast cancer in two tertiary care cancer hospitals in Pakistan (SKMH and INMOL Lahore),[7] including 179 biopsy and stage-proven patients from SKMH and 470 patients from INMOL, 71% and 63% presented in stage III and IV, respectively; 25% patients at INMOL and 36% at SKMH presented in stage IV (metastatic). In a recently published descriptive, retrospective study conducted at the Liaquat National Hospital, Karachi, Pakistan, records of 8,291 breast cancer patients (all biopsy-proven) registered from 1994-2014, were analysed.[8] The number of patients with stage 1 increased from 53 (0.64%) in 1994 to 847 (10.21%) in 2014. Year-wise data showed a slow upward trend for cases diagnosed in stage 1. High ASIR, high ASMR, and advance stages at presentation, all point to an alarming situation in Pakistan.

A comprehensive National Cancer Control Programme (NCCP) is mandatory for any country to confront the growing cancer crisis. Therefore, on the request of Ministry of Health, Pakistan, a multi-disciplined team consisting of experts from two leading international organisations – International Atomic Energy Agency and World Health Organization – conducted an integrated mission under programme of action for cancer treatment (imPACT), in Pakistan in 2013. The mission experts assessed the national capacity with regard to cancer control planning, cancer registries and surveillance, primary prevention, screening and early detection, diagnosis and treatment, and palliative care services. The mission gave its recommendations for actions to be taken by the relevant authorities, and facilitated the identification of priorities and projects. The recommendations included the creation of an active National Steering Committee, drawn from representatives in the Ministry of Health / relevant health centres / professionals, and other relevant national stakeholders. It is required by this experts mission to convene regular meetings with the intent to draw up a strategic national cancer control programme, and to monitor and evaluate the progress of this programme.

Currently, in Pakistan there are fragmented efforts for screening and early detection of breast cancer. There was an initiative on the part of Federal Government of

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Received: January 25, 2018; Accepted: January 27, 2018.

Pakistan and the first dedicated breast cancer care centre was established in Islamabad in 2014, followed by the second at Lady Aitchison Hospital, Lahore in 2017. These two centres aim at cost-free community-based mass breast screening programme.

There are some initiatives, in the form of dedicated breast care centres, one stop breast clinic (for triple assessment), and stand alone breast mammography clinics in private sector (both profit and non-profit), where cost is one of the impeding factors. The philanthropic initiatives and the services of a couple of mobile vans to take the mammography at the doorsteps, especially of the women living in the rural areas, also exist. Are these fragmented efforts enough to manage the crisis of cancer in general and breast cancer in particular?

The breast cancer control efforts should not be conducted in isolation, but integrated into an overall framework of a comprehensive strategic NCCP. A comprehensively structured and effective NCCP links and integrates cancer control planning, cancer registration and surveillance, prevention, early detection, diagnosis and treatment, and palliative care. A well-planned cancer control infrastructure should form the basis of a robust national investment, which will benefit cancer patients for decades to come. Government commitment, supported by expertise from PACT's strategic partners, is vital to develop and implement successful cancer control programmes.[9]

A NCCP with all the stakeholders on board has yet to be drafted, developed and implemented in Pakistan. This delay appears to be due to lack of political commitment, complicated system of bureaucracy, involvement of non-willing experts, and an inactive national steering committee for NCCP.

Most of all, a low priority is assigned to health sector as expenditure on health is a meagre 2.6% of GDP. Pakistan is a signatory to the Universal Declaration of Human Rights and the two subsequent international legal instruments namely, the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the International Covenant on Civil and Political Rights (ICCPR), that recognise a citizen's right to health, which the signatory has to respect, fulfill and protect.[10] In the above context and in view of the gravity of situation, there is a dire need to reestablish national health priorities on urgent basis in order to address the rising cancer incidence in general and breast cancer in particular.

Development and implementation of a NCCP with strong political commitment and a well-planned, realistic National Action Plan (NAP) with allocation of sustainable resources, including financial and human resources, is the need of the hour. For successful implementation of the NCCP, the NAP, in addition, should assign tasks to specific institutions / individuals and allocate dedicated funding towards the costs of each activity with a time-frame. The cancer control should be incorporated in all relevant national policies and programmes. There can be life after breast cancer; but the prerequisite is early detection.

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