

## Pathology-Based Cancer Registry in Bangladesh: The Need of Our Time

Kamal M\*

Cancer is a public health concern both in the developed and developing countries and is among the leading causes of death worldwide. In 2012, there were 14 million new cases and 8.2 million cancer-related deaths worldwide. The number of new cancer cases estimated to rise to 22 million within the next two decades. More than 60% of the world's new cancer cases occur in developing and resource constrained countries of Asia, Africa, and Central and South America. 70% of the world's cancer deaths also occur in these regions.<sup>1</sup> Bangladesh is not spared from this problem. Cancer is the sixth leading cause of death in Bangladesh. The magnitude of cancer in Bangladesh is getting alarming because of abundance of environmental carcinogens, malnutrition, lack of awareness and screening facilities. Poverty, ignorance and illiteracy have compounded the problem. The magnitude of the problem from cancer is often unrecognized by health and general policy makers alike due to other overwhelming and more visible competing health problems and natural calamities. Therefore, appropriate prevention and surveillance of cancer deserves urgent attention.<sup>2</sup>

Tumour registries are systems for collection, storage, analysis and interpretation of data from cancer patients. It involves recording of personal particulars of cancer patients and the clinical and pathological characteristics of the cancers, collected continuously and systematically from various data sources. Ideally the key source of information on cancers in any country is through a

population-based cancer registry. About 200 population-based cancer registries exist in various parts of the world.<sup>3</sup> However, because of the costs for maintaining a population-based cancer registry and lack of necessary infrastructure, Bangladesh, like many other developing countries, has not been able to establish any such registry to date. In spite of having high morbidity and mortality from many cancers (e.g., lung, head and neck, cervix, liver, colon, stomach etc.), there are no reliable data for the incidence, prognosis, morbidity and mortality from cancers in Bangladesh. Data sources and methods used for Bangladesh statistics are estimated from national incidence estimates using modeled survival and mortality based on reports from a few tertiary care hospitals and from neighboring countries.<sup>4</sup>

To overcome this, an effective alternative is 'Pathology Based Cancer Registry' which is efficiently going on in many parts of the world. The basis of this approach is documentation of cancers through hospital and/or pathology laboratories where the cancer patients attend for their diagnosis and follow-up. Although not perfect, this method is proving to be an effective in some developing countries.<sup>5,6,7</sup> Though an accurate picture of cancer situation depends on the establishment of a population based cancer registry, data derived from pathology based cancer registry would be able to measure levels of cancer burden in the community by recording all cases of cancers (and non-cancer) in given laboratories with emphasis on pathological diagnosis and clinical

\*Professor Mohammed Kamal, Professor, Department of Pathology, Bangabandhu Sheikh Mujib Medical University, Shahbag, Dhaka, Bangladesh. kamalzsr@yahoo.com

Information of the patients. In the absence of population based cancer registry, pathology based cancer data can be utilized as a reflection of the patterns of cancer in the population.

To establish a pathology based cancer registry in Bangladesh, the practical approach will be to start a collaborative network of all pathologists based at academic institutions, hospitals, and private clinics and laboratories. It can be done phase wise, starting from the Dhaka city and gradually expanding throughout the country. The collected data can provide estimation of cancer incidence and prevalence, patterns, epidemiology and other valuable information. Collaborative between government and non-government institutions, pathologists, epidemiologists, practitioners and relevant national and international policy makers is needed for smooth functioning.

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