

EDITORIAL

Is Cutting Edge Technology Cutting Cancer Treatment Cost?

Raghuram K Nair, PhD

Formerly Professor & Head, Radiation Physics Division, Regional Cancer Centre, Trivandrum, Kerala, India

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Cancer is the second most common disease responsible for mortality in India. Annually, 1.16 million persons are diagnosed with cancer and about 780,000 patients succumb to the disease. Every fifth individual in the 36-45 year age bracket is affected, resulting in huge personal expenditures and healthcare costs.¹ Technological advancements in the last three decades have revolutionized the field of medical science. This development is more obvious in the field of oncology than any other discipline. But it is accompanied by rising healthcare costs. The heavy burden of cancer in our population and its rising costs warrants a close look at the cost-efficiency of our preventive, diagnostic and treatment interventions.

The newer diagnostic modalities, including ultrasound and mammography with guided biopsy capability, super fast dual energy CT scanners and 3T MRI scanners, have significantly increased the level of diagnostic accuracy, enabling early detection of the disease. Their cost runs in millions and only selective high-end hospitals can afford to buy and maintain these machines. As these imaging technologies increasingly form an essential part of cancer diagnosis, these costs are invariably transferred to the patients, thus denying healthcare to the poorest of the poor.² One way to address this issue would be to install basic machines like CT scanners in all district and taluk(sub-district)level public hospitals.

Surgery, Radiation and Chemotherapy either alone or in combination, are the established treatment modalities for cancer treatment. Of these, chemotherapy and radiotherapy have undergone a sea change with the recent researches in biotechnology and life sciences. Sophisticated treatment with better prognosis and least adverse outcomes, in the

form of monoclonal antibodies targeting specific cancer cells, have flooded the market. These are patented drugs of foreign companies which again the common man can ill afford. The cost per dose of newer anti-cancer drugs like Trastuzumab, Crizotinib, Bevacizumab etc. is at times so high, that even an insured individual cannot escape crippling out-of-pocket healthcare expense. In this context the National Pharmaceutical Pricing Authority's (NPPA) step towards controlling the price of these drugs to a certain extent, is just the beginning of an arduous path. A proactive effort on the part of the union health ministry is the need of the hour. Revision of the National List of Emergency Medicines to include cost-effective, safer and quality-controlled drugs would go a long way in ensuring the health and economic security of India.

Another aspect that requires attention is the shortage of skilled human resources. Properly trained doctors, nurses and technologists required for running the high-tech services should be available. The current doctor to patient ratio is around 1:2000, which in turn results in high cost of human resources.

In Radiotherapy, even though Cobalt-60 based machines remain the work horse, high tech machines like Linear accelerators, Tomotherapy, Cyberknife and Proton machines, with prices in the range of 100 Million to 6.5 Billion India Rupees, are now available. The cost of treatment may be anywhere between 200,000 Indian Rupees for a linear accelerator based treatment to around two million Indian Rupees for proton therapy in the private sector. The prohibitive capital and maintenance costs, exclude smaller private and public healthcare facilities from entering this arena, thus pushing high-tech radiation treatment further beyond common man's reach. As more than 60% of the cancers can be treated using basic equipment, it is a big relief that high tech radiotherapy may not affect the management of the disease negatively. It would be appropriate if emphasis is given to establish basic radiotherapy equipment in all district level public hospitals.

Regulations should be in place to include the new targeted drugs with proven efficacy and quality, in the essential list. The government must ensure active participation of pharmaceutical companies to control the unreasonable pricing.

Corresponding author:

Raghuram K Nair, PhD, Formerly Professor & Head
Radiation Physics Division, Regional Cancer Centre,
Trivandrum, Kerala, India 695011
E-mail: raghurkn@gmail.com



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This may help patients in the low and middle income groups to face the “Emperor of maladies” with equanimity.

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