COMMENTARY

Improving Cancer Care in India: Prospects and Challenges

Sanjoy Kumar Pal¹, Balraj Mittal²

Abstract

The World Cancer Report, a 351 - page global report issued by International Agency for Research on Cancer (IARC) tells us that cancer rates are set to increase at an alarming rate globally (Stewart and Kleiues 2003). Cancer rates could increase by 50 % to 15 million new cases in the year 2020. This will be mainly due to steadily aging populations in both developed and developing countries and also to current trends in smoking prevalence and the growing adoption of unhealthy lifestyles. The report also reveals that cancer has emerged as a major public health problem in developing countries, matching its effect in industrialized nations. Healthy lifestyles and public health action by governments and health practitioners could stem this trend, and prevent as many as one third of cancers worldwide.

In a developing country such as India there has been a steady increase in the Crude Incidence Rate (CIR) of all cancers affecting both men and women over the last 15 years. The increase reported by the cancer registries is nearly 12 per cent from 1985 to 2001, representing a 57 per cent rise in India's cancer burden. The total number of new cases, which stood at 5.3 lakhs Care lakh is 100,000 in 1985 has risen to over 8.3 lakhs today. The pattern of cancers has changed over the years, with a disturbing increase in cases that are linked to the use of tobacco. In 2003, there were 3.85 lakhs of cases coming under this category in comparison with 1.94 lakhs cases two decades ago. Lung cancer is now the second most common cancer among men. Earlier, it was in fifth place. Among women in urban areas, cancer of the uterine cervix had the highest incidence 15 years ago, but it has now been overtaken by breast cancer. In rural areas, cervical cancer remains the most common form of the disease (The Hindu 2004).

Key Words: Cancer control - India

Asian Pacific J Cancer Prev, 5, 226-228

A silent crisis in cancer treatment exists in developing countries and is intensifying every year. About 85% of the world's people live in developing countries - but these countries house only about one third of the world's radiotherapy facilities. At least 50% to 60% of cancer victims in the developing world can benefit from radiotherapy, but most developing countries do not have enough radiotherapy machines or sufficient numbers of specialized doctors and other health professionals. Recently, it was emphasized that establishing of hospital networks and streamlining of referral services can improve cancer care in our country (Chaturvedi et al 2002). Though there is no doubt about the positive effects on the treatment outcome provided by specialized cancer centers but, establishing super specialized hospitals is often not feasible in less-developing countries such as India, due to financial constraints, lack of enough resources, faulty planning and inadequate management. There is still no public funded tertiary care cancer hospital in all the Indian states.

In India and many other less-developing countries the bottleneck in health care is not lack of evidence that interventions are good. The bottleneck is in implementation. Moreover, majority of Indian cancer patients have late stage incurable disease when first diagnosed and many are not seen in a hospital (Pal 2002). Poor medical facilities and shortage of doctors as well as medicines is a feature of government hospitals. The worst affected are cancer patients from rural areas where they have to depend on rural private practitioners (RPP) and doctors practicing some form of alternative medicine. Several studies have shown that there is a marked reluctance to use free governmental health facilities even among the poorest section of the Indian society (Mather and Ramaiah 2002).

At present in India, over half of the health budget is spent on secondary and tertiary curative services. However, better health outcome measures could be achieved by investing in preventive measures (Mather and Ramaiah 2002). Tobacco which kills an estimated 5 million people around the world

¹ Department of Gastroenterology. ² Medical Genetics, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Raebareli Road Lucknow – 226 014 (UP), India Fax No.91-522-2668017,2668074 E-mail: sanjoypal@yahoo.com, balraj@sgpgi.ac.in

every year faces the prospect of stringent regulation on its use with the government deciding to ban its advertisement and curb sales. The Cigarettes and other Tobacco Products Act, which came into effect from May 1 has acquired a special meaning in the context of the World Health Organization finding that tobacco poses a greater threat to the developing countries where 60 percent of 5700 billion cigarettes are smoked every year (Roy 2004). Overall, tobacco-related disease is estimated to kill 2.8 million Indians annually. The ban on the manufacture, sale and use of gutka and pan masala in many states of India is a big stride in prevention process of tobacco-related oral and oropharyngeal cancer (Pai 2002). Public welfare organizations in India and the media have to come together to pursue the campaign against tobacco use in every form. Governments cannot be relied upon because they impose ban on tobacco on the one hand and encourage tobacco cultivation on the other. A vigorous campaign against tobacco, combined with programmes of education and awareness, early detection and screening, has to be taken up. A few dedicated institutions like the Cancer Institute, Chennai have been pursuing such an agenda and serving as a model for others (Sharma 2004).

There have been major advances in the cancer scenario over the past 50 years with revolutionary changes in the concepts of prevention, early detection and treatment. Access to care, however, is becoming increasingly difficult for the underprivileged. Most of the Indian cancer patients do not have health insurance. One admission to hospital can consume a sizeable share of a poor household's resources, commonly leading to financial crisis. Private for-profit insurers recently allowed in India targets the better-off section of the society with expensive packages but have little to offer to Indian's poor (Ranson 2001). More attention should be paid to the innovative indigenous health insurance schemes that are helping to address the weakness in health care financing and provision. Governments in India are unable to cope with the magnitude of the problem. Prevention should therefore be given high priority. China has achieved a sharp reduction in the incidence of cervical cancer through a screening programme (Li et al 2000).

If left untreated cancer continues to grow. The rate of growth can be variable but it is known to be high in many epithelial malignancies (Ash 2000). Investigations of O' Rourke and Edwards (2000) have shown that 21 percent of potential curable lung cancer patients became incurable while waiting for treatment. In India patients have to wait for a longer time before active treatment of cancer is started. This may be due to various factors like confirmation of diagnosis, arrangement of finance, seeking expert's opinion, getting date for surgery etc. In this circumstances 'Telemedicine' services can be of great help. Regional Cancer Centre (RCC) at Thiruvananthapuram the only referral cancer hospital in Kerala has developed a web-based telemedicine system, linking various cancer centers of the state. Patients can take the help of the doctors at the local teleclinic and access specialist service at RCC for consultation and follow-up. It is much cheaper to set up telemedicine centers in smaller town than to open super specialty hospital in large cities (Pal et al 2002).

At present, out of one million newly diagnosed Indian cancer patients each year, more than 50 % will die within 12 months of diagnosis and another one million cancer survivors (within 5 years of diagnosis) will show progressive disease. Out of these 1.5 million in need of palliative care (PC) less than 0.1 million patients can be covered by the existing facilities. Since 1980s, the National Cancer Control Programme has identified that 'cancer patients with advanced stage require good palliative treatment.' Yet the establishment of PC clinics has not gone ahead (Mohanti 2002). One solution put forward was that the existing 150 radiotherapy centre include PC service with trained 'doctornurse team'. For India, outpatient palliative care clinics will render meaningful and cost-effective practice. Thereafter, the medical institutions and NGOs can expand the service to integrate 'homecare' within a locality or region. Cancer pain relief still remains the cornerstone of optimal palliative care. Though morphine availability is made much easier now, yet we have not achieved a helpful atmosphere. Unless we can make oral morphine available country-wide, because of its geographic and economic disparities, palliative care of Indian cancer patients will continue to be suboptimal.

There cannot be any substitute for evidence based medicine, however, in India the challenge is to provide treatment to majority underprivileged cancer patients who cannot afford evidence based conventional care. Also, in many situations elderly cancer patients cannot be provided conventional cancer treatment because of poor performance status (Turner et al 1999). Complementary and alternative medicines (CAM) in such situations can play an important role in providing some help to these patients. In India a large number of cancer patients are dependent on CAM for treatment and palliation (Shukla and Pal 2004; Pal and Mittal 2003).

In developed countries, the probability of being diagnosed with cancer is more than twice as high as in developing countries. However, in rich countries, some 50 per cent of cancer patients die of the disease, while in developing countries, 80 per cent of cancer victims already have late-stage incurable tumors when they are diagnosed, pointing to the need for much better detection programs. Around the world there are approximately 470,000 cases of cervical cancer diagnosed annually, 80 percent of which occur among women in developing countries. The vast majority of women in developing countries currently have no options for avoiding this disease, despite the fact that it is highly preventable. Early treatment of precancerous lesions is available. The Bill & Melinda Gates Foundation recent announcement of \$13 million award to PATH to develop rapid biochemical tests to improve the accuracy, acceptability, and affordability of cervical cancer prevention technologies and these approaches can make a huge difference. The START (Screening Technologies to Advance Rapid Testing) project is primarily aimed at improving cervical cancer screening and prevention efforts in developing countries (www.path.org/resources/press/ 20030121-start.htm). The project will consist of two implementation phases: Phase 1 for product research and development, and Phase 2 for test validation through incountry studies. Working with PATH on the START project will be two private sector partners that are contributing \$4.8 million in matching funds, as well as field-based partners in India through the IARC, and China (through the Cancer Institute/Chinese Academy of Medical Science).

To improve the cancer care scenario in India extensive persuasive health education is needed to be directed towards control/reduce the tobacco habit. People at all levels should be educated to change their behaviour to avoid preventable cancers. Public awareness is needed in nutrition education, safe sexual practice, attention to personal and genital hygiene needs. Prophylactic vaccinations against Human Papilloma Virus infection and hepatitis B virus are useful strategies for the prevention of cancerous lesions of cervix and in the control of liver cancer (Murthy and Mathew 2004). To combat cancer a multi-disciplinary team approach is needed in which the oncologists and specialists should play the key role. At the same time other essential element in the team should include health care educators, private health care institutions, the press, health insurers, general physicians, bench scientists, alternative medical practitioners, RPP, nurses, NGOs, social workers and the patients and their family. At the core of cancer control strategy, the essential package should include cost-effective interventions for the following components: tobacco control, infection control, healthy eating, a curable cancer program and palliative care.

References

- Anon (2004). Battle against cancer. The Hindu, February, 06.
- Ash DV (2000). Waiting times of cancer treatment. Clin Oncol (R Coll Radiol), 12, 140.
- Chaturvedi P, Chaturvedi U (2002). Changes needed for improved cancer care in the developed world. Lancet Oncol, 3, 526-27.
- Li H, Jin S, Xu H, Thomas D B (2000). The decline in the mortality rates of cervical cancer and a plausible explanation in Shandong China. Int J Epidemiol, 29, 398-404.
- Mather I, Ramaiah S (2002). Private health care in developing countries. BMJ, 324, 46-7.
- Mohanti BK (2002). Palliative care for cancer patients in India: are we doing enough? JAMA-India, 1, 62-3.
- Murthy N S, Mathew A (2004). Cancer epidemiology, prevention and control. *Curr Sci*, **86**, 518-26.
- O'Rourke N, Edwards R (2000). Lung cancer treatment waiting times and tumor growth. Clin Oncol (R Coll Radiol), 12, 141-
- Pai SA (2002). Gutkha banned in Indian states. Lancet Oncol, 3,
- Pal SK, Mittal B (2003). Importance of complementary and alternative cancer therapies in palliative oncology in India. J*Alter Compl Med*, **9**, 811-2.
- Pal SK, Pandey GS, Kesari A et al (2002). Telemedicine: E-health and hospital of the future. J Scientific Industrial Res, 61, 414-
- Pal SK (2002). Use of alternative cancer medicines in India. Lancet Oncol, 3, 394-5.

- Ranson MK (2001). Health insurance in India. Lancet, 358, 1555-
- Roy B (2004). Tobacco which kills 5 million people a year must be banned. The Times of India, 15, 5.
- Sharma DC (2004). Cancer institute at Chennai: a model for resource poor countries. Lancet Oncol, 5, 204.
- Shukla Y and Pal SK (2004). Complementary and alternative cancer therapies: past, present and the future. Asian Pacific J Cancer *Prev*, **5**, 3-14.
- Stewart BM, Kleinues P (Eds.) (2003). World Cancer Report, IARC Press, Lyon.
- Turner NJ, Howard RA, Mulley GP, Selby PJ (1999). Cancer in old age-is it inadequately investigated and treated? BMJ, 319,