

Improving Cancer Care in India

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Abstract- 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 life styles. 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. Earlier, it was in fifth place. Among women in ur ban 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 .

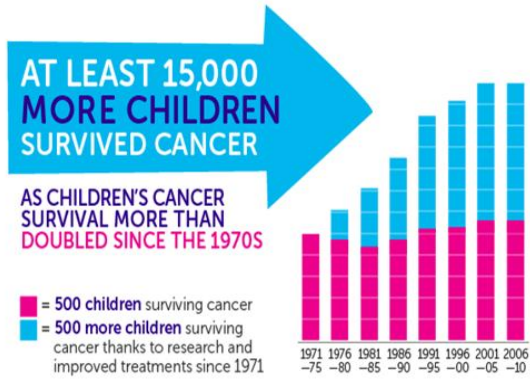
Index terms- Cancer control

CANCER

Is the uncontrolled growth of abnormal cells anywhere in a body. Anything that may cause a normal body cell to develop abnormally potentially can cause cancer; general categories of cancer-related or causative agents are as follows: chemical or toxic compound exposures, ionizing radiation, some pathogens, and human genetics. Silent crisis in cancer treatment exists in developing bountries 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 radio therapy, 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 (Chaturvediet al 2002). Though there is no doubt about the positive effects on the treatment outcome provided by specialized cancer centers but, establishing super specialized hospitalists 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.

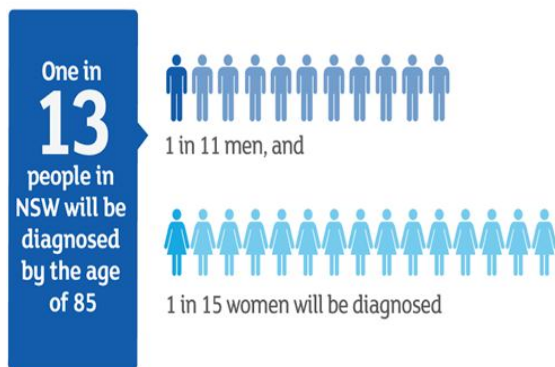




Based on children aged 14 or under surviving cancer for 10 years or more.

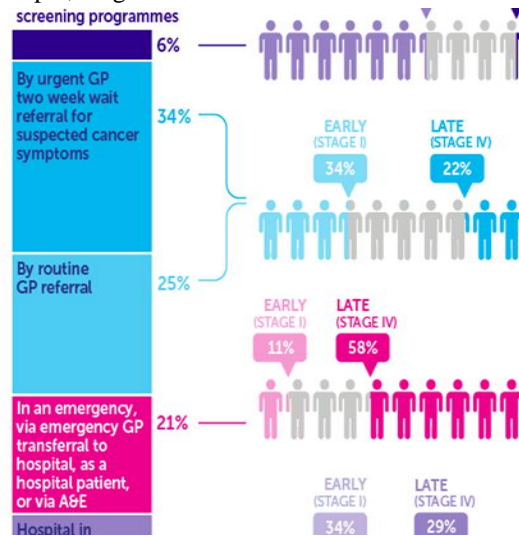
DELAY IN DIAGNOSIS

Almost 75-80 per cent of patients have advanced disease (Stage 3-4) at the time of diagnosis. This has been attributed to the late presentation which in turn is due to low level of awareness in the population and among community physicians, lack of screening programmes, lack of diagnostic facilities locally and vast distances to travel to reach a major tertiary cancer centre, financial constraints and stigma associated with the diagnosis. The situation is even worse in rural areas (69% of total population) where patients and families have to travel a long distance to reach a tertiary care oncology centre. Lack of place to stay, long time taken for investigations, limited finances, language and cultural differences are also some of the limitations⁴. As per data from rural-based PBCRs, the incidence of cancer is low in rural India compared to urban PBC Rs². Even the pattern of cancers in rural PBCRs is different compared to those in urban PBC Rs, suggesting a different policy/approach to adopt in rural areas.



INFRASTRUCTURE

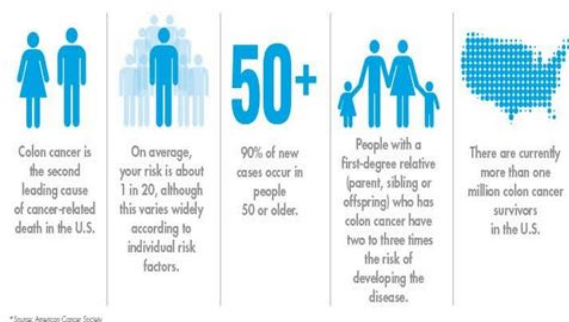
One of the major reasons for not being able to implement screening programme in India has been lack of workforce - physicians, health workers, technical staff and pathologist to review pathological material. The preference of healthcare personnel to work in urban settings has also resulted in unequal distribution of healthcare centres and practitioners. Many tertiary care centres (not all) have a comprehensive team of professionals comprising medical, radiation and surgical oncologists, pain and palliative care experts and auxiliary services, for example, diagnostics and



In India and many other less-developing countries the bottle neck in health care is not lack of evidence that interventions are good. The bottle neck is in implementation. Moreover, majority of Indian cancer patients have late stage in curable 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 very 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.

Colon Cancer At-A-Glance*



CLINICAL RESEARCH

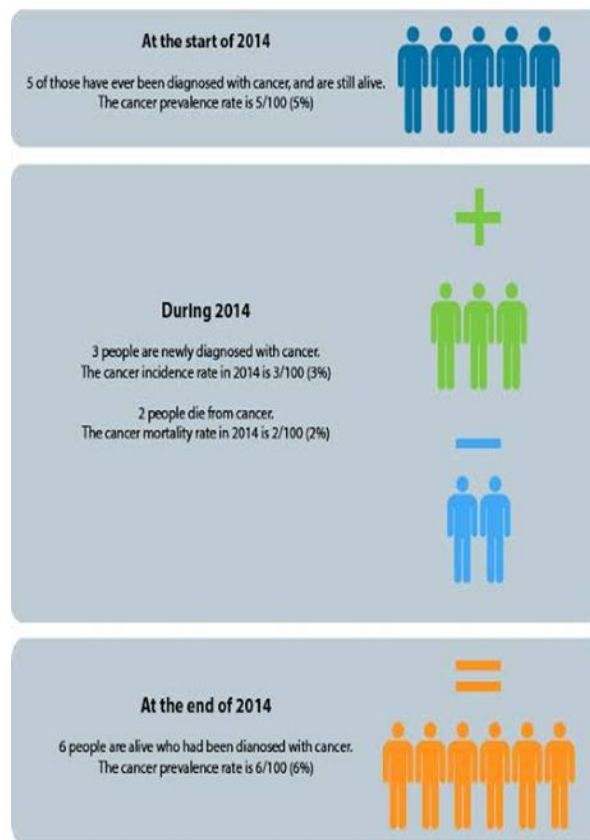
Although a notable progress in this field has been made in the recent years, there is a need to develop proper clinical research environment. This includes exposing graduate and postgraduate medical students, community physicians and medical college teachers about translation clinical research, and developing adequate infrastructure. Indian pharmaceutical industry has made phenomenal growth in the field of generic molecules; they need to invest in the development of new molecules and India centric cancer research.

India has a large pool of individuals with genetic diversity (4000 anthropologically distinct groups and 22 languages)¹⁴. This provides an opportunity to study environmental influences on drug metabolism (such as smoking, alcohol and use of herbal medicine), variation in drug targets (for example, higher incidence of activating mutations of epidermal growth factor receptor in lung cancer in patients from Asia), and genetic polymorphism in drug-related genes. Indian population is unique in terms of genetics, culture, languages and food habits. Well-planned genome-wide association studies may yield insights into disease aetiology and potential

responses to therapy¹⁴. In the era of precision medicine, it will be important to define risks or susceptibility of certain population or ethnic subgroups for high incidence of cancer seen in these areas¹⁶ and also from treatment point of view if these subgroups need dose modification or special precaution during the treatment. Translational studies involving imaging, pathology, gene expression profiling, sequencing, bioinformatics and detection of circulating tumour cells can be done in few centers, and then data generated can be evaluated for its translation at other centers.

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 on 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.

For every 100 people in the population...



Since 1980s, the National Cancer Control Program has identified that 'cancer patients with advanced stage require good palliative treatment.' Yet the establishment of PC clinics has not gone ahead (Mohanti2002). One solution put forward was that the existing 150 radiotherapy center include PC service with trained 'doctor-nurse 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 50percent 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.

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

CONCLUSION

A plane for the diagnosis and treatment of cancer is a key of component of any overall cancer control plane. Its main goal to cured cancer patient or prolong their life considerably, ensuring a good quality of life. In order of diagnosis and treatment program to be effective, it must never be developed in isolation. It need to be linked to an early detection program so that cases are detected at an early stage, when treatment is more effective and there is greater change of cure it also need to be integrated with a palliative care program, so that patient with advanced cancer who can no longer benefit from treatment, will get adequate relief from their physical and psychosocial and spiritual suffering furthermore, program should include awareness raising to educate patients, family and community member about and the need for preventive measure to avoid developing cancer.

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