

Cancer in Rural India

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Introduction

The higher incidence of cancer cases are reported in rural India and are at the alarming rate because of changing lifestyles and urbanization of rural India. This is due lack of adequate cancer facilities available in rural India [1]. Nearly 70% of Indian population lives in rural India. However, nearly 95% of cancer care facilities are in urban India. Thus, though the incidence of cancer in rural India is nearly half of that of urban India, the mortality rates are double [2].

The number of Tertiary Cancer Centers with excellent infrastructure and trained oncologists is also increasing in urban India. The situation in Rural area is quite different [3]. In next 30 years, it is estimated that India is likely to double the cancer patients. Patients from outlying rural areas of many countries have been found to have more advance stage at diagnosis and poor survival [4]. As stated by Sharma et al, the cancer control in India has a sorry figure [5].

The causes of this high prevalence of cancer in rural India being the combination of lack of awareness among people, self neglect and late presentation, Lack of awareness of the doctors and lack of infrastructure at rural areas regarding early diagnosis, prevalence of alternative systems and quacks who do not have any knowledge of cancer and its management, prevalent tobacco and alcohol use, poverty and resource crunch. In the rural areas, many people consider cancer as communicable infectious disease and consider it as a taboo for the family which leads to isolation [6]. The distance of the residence from the cancer center is also responsible for the late presentation and poor survival in cancer patients [7].

Patients from outlying rural areas of many countries have been found to have more advanced stage at diagnosis and poor survival [4]. Early (curable) cancers are made incurable by inappropriate treatment given locally by nononcologists without using principles of oncology; at the same time, patients with advanced, metastatic (incurable cancers) patients who may only need palliative care are referred to TCCs. This leads to inappropriate use of the limited, precious resources [3]. There are few facilities disseminating cancer awareness, early detection and early diagnosis in rural regions [3].

Even the biopsies or the blood samples are sent to cities and the reports take weeks to come back. By the time, the patient can arrange the logistics to go to cities for treatment, it causes further delays in treatment and advancement of the disease. All this leads to the vicious cycle: Because these patients come with advanced disease, the outcomes are poor; and because of poor outcomes, other rural patients are not motivated to take proper treatment on time [3].

Because of financial constraints and cultural barriers, rural patients present late to the Tertiary Cancer Centers (TCCs) [3]. Most TCCs are overcrowded, and because of decreased manpower and limited infrastructure, there are further delays in treatment [3]. It is beyond the reach of most rural patients to take cancer treatment on their own. Ironically, most of the societal help given by trusts or nongovernmental organizations-be it financial or logistic, is

available to patients taking treatment in TCCs in cities. Even government help like Health Ministers Fund, Rajiv Gandhi Arogya Yojna, etc., is approved mainly for TCCs [3].

Government of India first developed its statement on cancer control as early as in 1971. The cancer control program was revised in the year 1984 with the Aim to have primary prevention of tobacco-related cancers, Early detection of cancers of easily accessible sites, Augmentation of treatment facilities and Providing pain and palliative care [8]. Twenty-one Regional Cancer Centers (RCC) have been established but the main contribution has been lacking in the direction of prevention and early detection. Studies have documented lack of awareness and screening in India. There is no organized screening and awareness program for any of the common cancers. Most cancer centers provide only opportunistic screening services [9]. The number of cancer patients in India is going to double in next 30 years. The cases of cancer detected in India are low, mortality rate is high.

Cancer control

All this will hopefully change if more rural comprehensive cancer centers (RCCCs) are developed [3]. If cancer care has to be improved, more centers have to be developed in the smaller cities and in rural India [3]. If all helps are made available at their doorstep vicious cycle of delay will be broken [3]. Cancer control Program is definitely complicated, as there are different cancers involved, which require different strategies for individual cancers.

As every different cancer differs in its etiology, presentation, screening strategies, diagnosis and treatment, it is essential to have a multidisciplinary approach. Most cancer control procedures need high technology, expertise, and experience in the developing countries like India. There is an acute need to develop affordable effective treatment for these rural patients with treatment delivered locally. Comprehensive cancer care centers (Regional Cancer Centers) which offers optimal cancer care that is cost-effective [3].

Cancer awareness program: Creating health awareness about all cancers in general and specifically about oral, breast and cervical

cancers. Screening for precursors/early stages of cervix, breast and oral cancer and other malignancies with immediate treatment of cases detected in these screening camps. Rural comprehensive cancer care centers will help urban Tertiary cancer centers to take better care of patients, since their patient load will decrease [3]. The urban Tertiary cancer centers public and private could each adopt one or more such rural center and help it develop into a rural comprehensive cancer care center. The team from TCC (Onco-surgeon, Radiation oncologist, Medical oncologist, and Onco-pathologist) can visit the rural center at regular intervals and also Some cancer treatment can be given and train local doctors at TCC [3].

With the availability of Skype, Webinar, telemedicine facilities, interval consultations can be carried out when needed [3]. With the availability of courier services, pathology slides/blood samples from rural comprehensive cancer care centers can also be sent to Tertiary cancer center to save time and reports E-mailed [3]. Students of all oncology specialties who train at tertiary cancer center should be rotated through rural comprehensive [3]. Link all these rural cancer units across India. through the National Cancer Grid so that it allows the exchange of expertise, between centers and to create a ready network of centers, for collaboration research in cancer [10].

As projected, the real success of National Cancer Grid will be apparent when overall cancer outcomes in India improve considerably, parallel with patients getting the highest quality cancer care at their door step [10]. There are deficiencies of Oncosurgeon this can be overcome by training General Surgeons these rural Comprehensive cancer centers and Tertiary cancer centers should also have a registry attached to it since, estimating the cancer burden not only helps us to formulate policies, but also to gear-up for further management strategies [3].

District Hospital should have well established oncology department, Preventive oncology, Oncosurgery, Medical oncology, Radiotherapy Onco pathology unit Palliative Care Primary

health care center is a vital strategy which remains the backbone of health service delivery. Primary health care center is the day-to-day care needed to protect, maintain, or restore our health. For most people, it is both their first point of contact with the health care system and their most frequently used health service.

PHC should have cancer awareness programme: Posters in the PHC. cancer day once in week or 15 days. Training to staff for cancer awareness training of the staff for some palliative care Group discussion by the trained staff in local area and early referral of patient. Grampanchayat should have Cancer awareness in village by Posters, Organization of lectures and camps Quit tobacco program. The main focus is on creating cancer awareness and prevention. Educating the public about the High risk factors, (aetiological) common symptoms and signs and the importance of early diagnosis and treatment.

This can be achieved through educating the individuals involved in health care i.e. doctors at primary health center, pharmacists, Health workers(male and female), Anganwadi workers. Nongovernment organizations (NGO), Structured training and field activities by medical colleges and regional cancer centers, participatory programs on radio and television, Descriptive articles in newspapers and magazines, Exhibitions and public lectures etc [8]. People are thinking that diagnosis of cancer is very difficult and costly. People are explained the easy methods of cancer diagnosis. e.g. Cervical cancer-Pap smear P. V. Examination Colposcope Breast cancer - Breast self examination ,physical examination of breast, FNAC, Mammography Oral cancer- Oral

cavity examination and biopsy. Cancer does not have a single & definite cause. Cancer is caused by the interplay of a number of risk factors. So we have to educate people that such risk factors can be avoided by adopting certain life style measures such as, avoid use of tobacco in any form. Eat more green leafy vegetables & fruits Eat less of red meat & food rich in fat. Maintain good personal hygiene. Obesity is an important and causative factor, thus maintaining a proper BMI would be a sensible approach to cancer prevention and early diagnosis [8].

If symptoms suggestive of cancer then consult a doctor. Prevention is better than cure. Cancer awareness lectures are very effective there is interaction with many villagers. Their queries about cancer can be discussed & explained. They are very enthusiastic. They are eager to know about cancer. Some people can avoid eating tobacco (quit tobacco) Cancer diagnostic camps in rural repeated organization of cancer diagnostic camps in rural with the help of Local medical association, Primary health center or rural hospital Rotary club, Lions club and grampanchayat Tarun mandals, Cancer awareness lectures, Cancer diagnostic camps and repeated visits of medical social workers. Creates good cancer awareness Immediate treatment for cases detected in cancer diagnostic camps.

The best way to fight cancer is to have a plan that helps you to detect the disease in its early stage and early treatment.

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