

A NOVEL COMPREHENSIVE INTEGRATED MODEL FOR CANCER CONTROL

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The need for early detection of Cancer in order to decrease mortality is well known. No significant progress has been made until now, probably due to lack of a suitable model for India. Most of the cancers are both preventable & curable provided they are detected at an early stage. In developed countries 80% of the cancers are cured because of early detection. However in developing countries 80% of the cancers are incurable at the time of detection if they are detected at all. The developing countries possess only 5% of the global resources for cancer control. There are very few screening programmes for cancer control with a coverage sufficient to have an impact in developing countries.

Despite extensive work done in several parts of the country, conventional models have failed to produce the desired results. Hence there is a need for innovative methods to suit our socio-economic conditions.

THE CONVENTIONAL MODELS

- 1. OPPORTUNISTIC SCREENING:** This type of screening was successful in America, It is unlikely to succeed in the Indian scenario, as most of our rural populations are illiterate and have no access to such facilities.
- 2. ORGANIZED POPULATION BASED SCREENING:** This project was successful in Finland. WHO recommends this project for developing countries - atleast once in a lifetime screening for women between 35 & 60 years and covering atleast 80% of the population.

Cervical Cancer Screening Programme based on visual inspection of cervix was studied at Kidwai Memorial Institute of Oncology in a ICMR-WHO project using the existing health infrastructure. This project failed because of the non-compliance of

Women and inability of the health workers to perform the test adequately due to heavy schedule.

Our experience in cancer control has not proved to be cost effective. The existing programme through Mobile Cancer Detection Unit and Hospital Based Cancer Detection Unit is based on opportunistic screening.

LIMITATIONS OF EXISTING MODELS

1. Dependency on voluntary organization to conduct camps.
2. Camps are usually clubbed with the major political programmes and the importance of the camps was therefore diluted.
3. Camps fail to create the awareness for cancer and fail to motivate people to undergo check up. As a result the camps end-up with screening the low risk population.
4. Experiences in 20 years has revealed the rate of picking suspected case is 2.2% and frank case is 1.6%.
5. Camps are conducted in remote villages far from regional centres. As a result most of these frank cases fail to turn up at the centre for therapy. Our experiences has shown that it is < 2%.

Taking into consideration all these drawbacks, we have found that mobile camps are not cost effective as it costs Rs.2000/- to detect a frank case or suspected case. Rs. 100/- for screening a person and Rs. 30,000/- for conducting a camp.

ETHICAL PROBLEMS

With organized screening programme <3% are expected to have dysplasias, where immediate treatment may not be necessary, but they need to be followed very scrupulously. For population of 40,000 eligible female population 1200 cases are expected to have dysplasias. This burden increases every year. After 5 years this would become an unmanageable load. This would lead to an ethical problem because we have created a “fear” that something is not normal and cannot provide the adequate treatment facility at the same time. We would have created a population with ‘worry’, who otherwise would be living happily.

A NOVEL COMPREHENSIVE - EDUCATION, EARLY DETECTION AND TREATMENT - INTEGRATED MODEL

This model is **COMPREHENSIVE** because it encompasses the concepts of education for cancer awareness and prevention of disease; specified, regular, fixed time-place cancer detection clinics for early detection; and provision of cost-effective treatment as near to patient's home as possible. It is **INTEGRATED** because it revolves around participation of existing Govt. health infrastructure, Panchayath Raj system, NGO's and a Regional Cancer Centre. It is in a way incorporation of practical features of various models, that are described earlier, to suit our set up.

THE CONCEPT OF THE NOVEL MODEL

"The answer for all our national problems -the answer for all the problems of the world -comes from a single word. The word is education."-Lyndon B. Johnson.

Main theme is "Population based systematic health education with early detection clinics". This is significant paradigm shift from "**ACTIVE INTERVENTION**" TO "**ACTIVE MOTIVATION and SELF EMPOWERMENT**". With this model primary thrust is motivation in order to make people take measures to prevent cancers (and other diseases by "bystander effect") and come soon for examination resulting in early detection. The message that will be conveyed to the person in the remotest of the village is -"you are responsible for your health".

Power of Panchayath Raj System: 1) Kamataka Panchayath Raj Act of 1993 has a provision which says that gram panchayaths may also carry measures which are likely to promote health, safety, education or social and economic well- being of its inhabitants. 2) Subsequent notification of July 1994, listed schemes for Zilla and Taluk panchayaths with transfer of funds to specific areas. Forty-two schemes have been identified under the Zilla Panchayaths, one of which is cancer control. 3) July 1994 notification also brought PHC's under the control of Zilla Panchayaths.

COMPONENTS OF THE NOVEL MODEL

A. FIELD UNIT AT DISTRICT CENTRE

Education Team: Education Team will comprise of health worker/ Anganwadi worker/ School teacher/Agricultural extension worker/ NGO's/social worker/elected member as decided by the particular gram panchayath. Two members from the district hospital, will train the team from Gram Panchayat at the taluk head quarters. Those who attend the education camp would be given simple pictorial pamphlets to be given to the village person. The mode of education would be group type. The time of education can be coincided with existing taluk level programs for the gram panchayath members. In addition bus exhibition, one to one interviews, flip charts, pamphlets, encouragement of "word of mouth", media (newspaper, radio, TV etc.) would be employed.

One education team will have 1 person from Regional Cancer Centre to co-ordinate the whole operation and 3 persons from Zilla panchayath.

Clinical Team:

This team will be formed from the existing staff of district hospital, who would be given training at Regional Cancer Centre if necessary. The other facilities to be organised from the existing infrastructure of District Hospital.

Early Cancer Detection Clinic (ECDC)

The team made of district and taluk hospital personnel will attend cancer detection camps at taluk level in order to "Reach the Unreached". The concept is - provision of clinical facility for the persons who are motivated by the education, who otherwise don't know where to go or what to do.

The purpose of the ECDC team

- a) Provide early detection facility for the village individual at a reasonable distance;
- b) Act as reinforcements and catalysts to activities of PHC's and taluk hospitals.

The ECDC camp can be coincided with the visit of education team camp.

B. RANDOM SURVEY TEAM

This is done at selected places in random fashion, covering the Gram Panchayaths, villages and PHC's/Taluk hospitals, to monitor the effect of control programme. Already existing Management Information Evaluation System (MES) of Govt. of Kamataka can also collect the feedback information.

C. ADVISORY COMMITTEE AND WORKING COMMITTEE

These committees will help in providing planning, and technical advice to the field team in addition to organization of education and ECDC camps, and review the progress periodically.

D. GRAM PANCHAYATHS

The individuals from the Gram panchayaths who have been trained will educate the other personnel of gram panchayaths. They in turn will educate the village individuals. The personnel who can undergo the educational training are a) health workers, b) Anganwadi workers, c) School teachers, d) agricultural extension workers, e) elected members, f) NGO's as decided by the gram panchayaths.

E. PHC's AND TALUK HOSPITALS

Taluk hospital will be a nodal point for education and ECDC camps. Both PHC's and Taluk hospitals will provide the visual inspection and PAP smear facility to the individuals who seek clinical examination. The PAP smears will be then sent to the cytology lab at district hospital. ECDC's will act as reinforcements and catalysts to the activities of PHC's and taluk hospitals.

F. BASE UNIT AT REGIONAL CANCER CENTRE

To initiate, monitor, analyze and coordinate the programme and train the personnel.

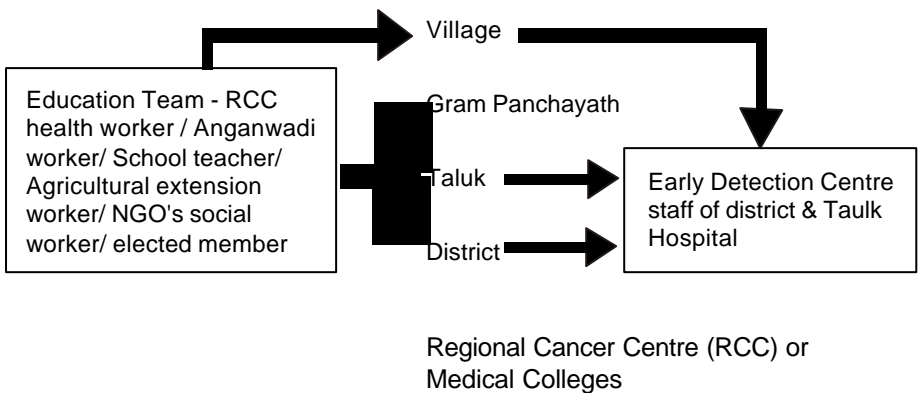
ADVANTAGES

- Cost would be phenomenally minimal versus other methods.
- Logistically easy to maintain a team in one permanent place.
- The field units of District centres can be established immediately with minimum personnel and cost.
- Cumulative salary burden and overheads would be low.
- Can be started simultaneously and strategically at different places with very large population coverage.

IMPLEMENTATION

It is desirable to take this model as a pilot project at 3 or 4 places, where treatment facilities for cancer are available. Later it can be extended to cover a larger area in a in a Phased manner. We have introduced this model in two places. One at Kanakapura and one at Mandya.

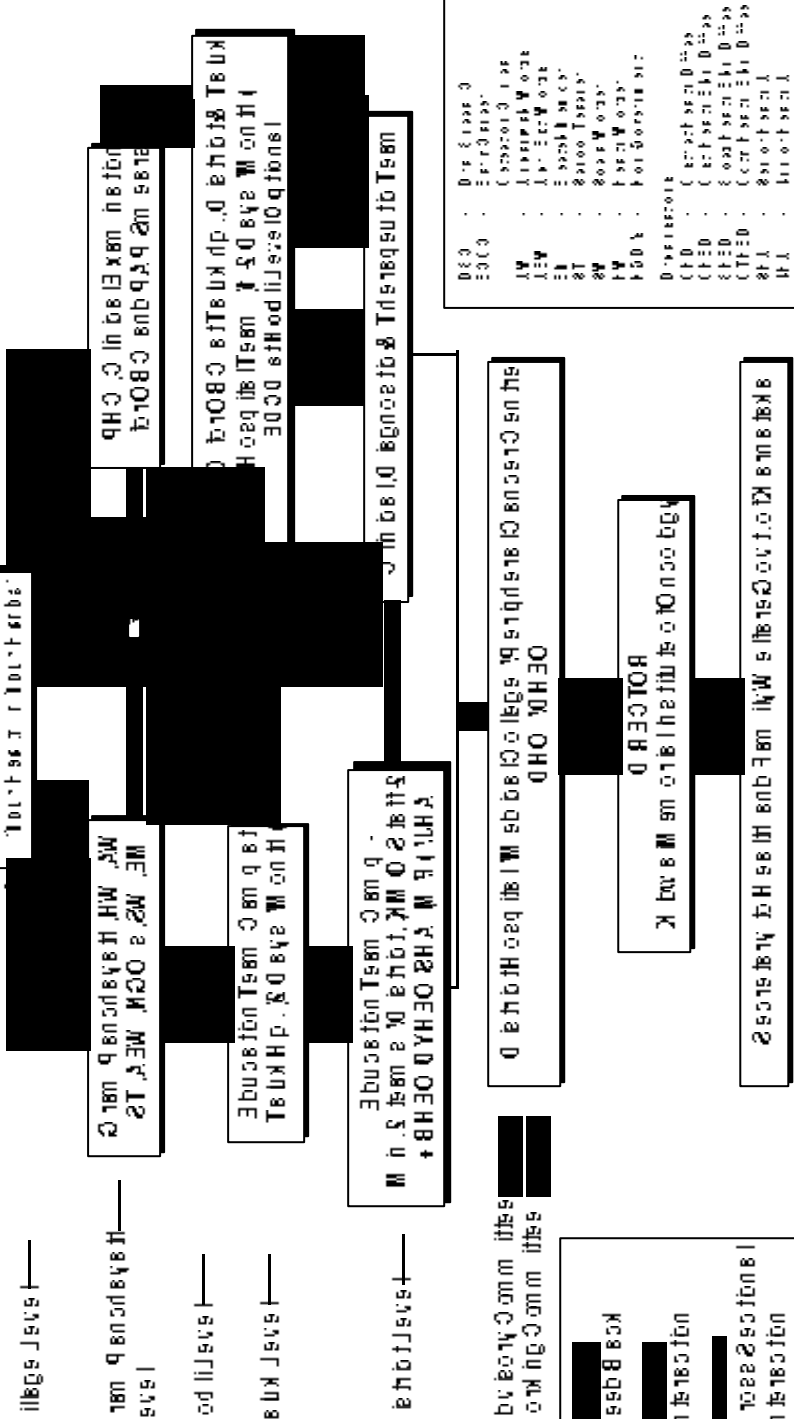
MODEL FOR CANCER CONTROL



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2011-12	437
2012-13	444
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2014-15	458
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2016-17	472
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2018-19	486
2019-20	493
2020-21	500