



Government of Punjab

Department of Health & Family Welfare and Medical  
Education and Research

# Cancer Awareness and Symptom Based Early Detection Campaign

**SUPERVISORS' PROGRAMME BOOK**

WHY ? WHAT ? HOW ? WHEN ? BY WHOM ?



State Health Systems Resource Centre  
National Rural Health Mission, Punjab

## **Cancer Awareness and Symptom based Early Detection**

### **AN INTRODUCTION**

Cancer has been perceived to be a dreadful disease, the name itself creates ripples in the individual. The idea itself creates an awful picture of a monster that is omnipotent to engulf the whole body like the famous Arabian camel, once allowed to put the neck inside. Pain, disability poverty and squalor are the scenes that haunt our minds once we hear about cancer.

However we are in general not told the success stories due to early diagnosis and/or of the proper treatment, that leads to decades of healthy and happy life and the occurrence of cancer goes into oblivion like an unpleasant dream. Do not laugh, do not be skeptical, it is true and real life stories are multiple of which three are narrated here in brief.

An old lady of 85 years of age palpates her breast, finds a lump, keeps mum till after a few days her doctor son comes. She gets herself examined, lo! The son finds it to be cancer. Gets it operated at a District Hospital within a week. The Test report confirms it to be frank cancer. Lady is further operated at Premier institute for removal of any left out cancerous tissue but none was found at that juncture. Lady lives for 14 years without any signs of cancer and dies at 99 due to some other illness.

Another young lady of 35 feels a lump. Goes to the nearby medical college hospital. Gets operated. Is well after 17 years.

A doctor visits a premier institute for problem in abdomen. Diagnosed as inoperable tumor but gets treatment at Tata Cancer Institute Mumbai, is well after 22 years. Retires from Government Job at 60 and still working in a private institute.

Likewise there are umpteen numbers of stories that encourage the medical world to lay stress upon early diagnosis and proper treatment.

### **BACKGROUND**

It has been projected through the print and electronic media that Punjab has become cancer bowl of the country. Malwa region is most affected. The train from Bathinda to Bikaner has been designated as cancer train by media and others. With mouth to mouth propaganda, it has been made the talk of the town that each alternate house has a patient of cancer in Malwa belt of Punjab. There are conflicting reports as to whether the cause of increased incidence of cancer is the pollution of subsoil water by Insecticides, Pesticides, Weedicides, Fungicides or Chemical Fertilizers. Others are alleging that Uranium in the sub soil water is the culprit.

It is in this background that Principal Secretary, Government of Punjab, Department of Health and Family Welfare, held a state level meeting of experts from the State Medical Colleges, Oswal Cancer Hospital and the PGIMER Chandigarh in order to ascertain as to whether

- the incidence of cancer is more in Punjab as compared to rest of India?
- the incidence of cancer is more in Malwa belt as compared to Majha and Doaba regions?
- the causative factor is any of the above or not?
- Experts are of the considered opinion that there is no scientific evidence to show that the incidence of cancer is more in Punjab than that in other parts of the country.
- There is no scientific evidence to show that incidence is more in Malwa belt
- The specific cause of cancer is not known as yet, however the chemicals lead to overall change in the immunological status of human body which are known to contribute to the development of cancer and other diseases as well.

The studies conducted by PGIMER, Chandigarh show that the incidence of cancer is 103 per lakh population in Talwandi Sabo block of District Bathinda while it is 65/lakh population in Chamkaur Sahib Block of District Ropar.

The studies conducted by some NGOs without any funding sources show that in 36 villages of Malwa belt spread in Mansa, Sangrur and Patiala Districts, there were 136 cases of cancer in a population of 66,000 (about 13000 families) in last 5 years. Out of these 90 patients have expired while 46 are still living with cancer. Similarly studies for two villages of Gidderbaha Block District Muktsar show that in a population of 7,800 with (about 1550 families) there are 19 living patients of cancer while due to cancer 35 deaths have already occurred in last 5 years.

According to Prof. J.D. Wig former Professor and Head of Surgery PGIMER, Chandigarh most common cancers in India are that of Breast, Cervix and Stomach which together account for 41% of the total cancers. Similarly Dr. Wig has observed that 30% of the total cancers in India are the cancers of Oral cavity which can be suspected even by self-inspection of mouth.

Further according to him, in India in 2010 there were 9, 79,786 cancer cases (85/lakh population). It is projected that the same is likely to rise to 11, 48,757 by 2020. On Other hand as per figures quoted by Prof. Wig, cancer cases in United States of America (USA) are projected to be 16,38,910 in 2012(about 500/ per lakh population) It is also significant to note that population of USA is almost one fourth that of India. Obviously the common impression that in Punjab every next door has a patient of cancer in Malwa seems to be extremely off the mark and nowhere near reality.

However there is no denying the fact that the incidence of cancer is increasing in Punjab as well as in India.

### BRIEF OF THE PROPOSAL

It is proposed that 45,000 field workers after being duly trained in about 1200 workshops of one day duration each held simultaneously all over Punjab, shall carry out a state wide door to door cancer awareness campaign and also identify those who are to be medically examined for

symptom based early detection. During the campaign even the knowledge about risk factors shall be imparted. Already diagnosed cases of cancer shall also be identified. Cancer deaths in last five years shall also be another indicator in order to gauge the impact of the disease on the economy of the State and on the society as well. Age Group wise load shall depict as to which group age group is more affected.

1. To carry out a mass awareness campaign about cancer & its warning signs by home visits with a focus on the importance of early diagnosis in treatment of cancer.
2. To identify individuals showing the warning signs/symptoms raising suspicion of cancer.
3. To locate and find the Number of already diagnosed existing cases of cancer, so as to identify the needs for strengthening the preventive, treatment and palliative care facilities for cancer in Punjab.
4. Capacity building amongst the Accredited Social Health Activists (ASHAs), ASHA Facilitators, Auxiliary Nurse & Midwives (ANMs), Multipurpose Health Workers Male (MPHWs), the Nursing Students, Medical and Para Medical manpower.

### WHAT IS CANCER ?

Cancer is nothing but an uncontrolled undisciplined growth of cells that do not accept the regulatory mechanisms of the body and can spread their tentacles by local invasion of tissues and also by movement through the natural channels for flow of blood and Lymph. The cells of any of the tissues of the body or that of the organ can turn cancerous and can affect any other organ also, by way of spread. Thus the cancerous cells are adept in surviving and flourishing at unnatural abodes.

### WHY CANCER ?

Though exact cause of cancer is not known but it has been observed that chronic irritation by mechanical means like a sharp tooth, Knot of Dhoti, Heat of Kangri, or Chemicals of tobacco, dyes, radiation, heavy metals, hormones, viruses or even genes are responsible for cancer. Insecticides, Pesticides, Chemicals are also being blamed and are being accepted more and more as a causative agent of cancer. Even Uranium in sub soil water is being said to be one of the factors. Systematic studies have yet not finally confirmed these factors scientifically. However it is being accepted more and more that lowering of the immunological defense of the body against normal population of abnormal cells or the excessive production of the abnormal cells beyond the normal capacity of the body to destroy them, by natural mechanism, lead to cancerous growths.

### WHY AWARENESS & SYMPTOM BASED EARLY DETECTION CAMPAIGN ?

Since there is lot of confusion about the number of patients of cancer in the state at a given time, so in order to ascertain the enormity of the cancer burden on the population of Punjab,

the experts are of the opinion that a mass awareness and symptom based early detection campaign can be undertaken in the State. They further opined that with short training on the symptoms and sign of cancer as defined by WHO coupled with some more sign and symptoms for certain other cancers, the ASHAs, ANMs, MPW (M&F) Nursing students can conduct the awareness campaign and enlist the high risk cases on the basis of standard symptoms to an extent which is likely to be fairly correct. It is also well established that early detection based on the suspicion created by certain symptoms and parameters, can lead to early and effective management of cancer at the initial stage of the disease. So the state has decided to tread this path and conduct the campaign.

Cancer Awareness & Symptom Based Early Detection Campaign has been conceptualized and planned to be carried out in the form of a door to door exercise, to be undertaken, both in rural as well as in the urban areas.

- during this campaign field workers shall visit each house and generate awareness on the warning symptoms, the presence of which makes it necessary for the concerned individual/ family member to get herself/himself examined by a Doctor.
- The worker shall also collect information on those who are suffering from cancer that has already been diagnosed.
- The cases of cancer who have expired in last five years after confirmed diagnosis shall also be enlisted.

During this campaign family data shall be collected on Proforma No.1 while that of the individual suspected to be cancer patient/ cancer patient/ diagnosed cancer patient/ expired ones shall be collected on Proforma No.2. Consolidation of Proforma No.1 is to be carried out by the field worker itself and then by the supervisors and so on. However the particulars of the individuals of Proforma No.2 shall be transmitted by the ANM in the Rural Area and by the Faculty members of the Faculty Institutes in Urban Areas. The same shall be done with the help of software installed in to the Mobile Phones of ANMs in the Rural Areas and Telephone/Computer of the Nursing Institutes in Urban Area. The same shall stand automatically analyzed with the help of a programme designed already.

### MEDICAL EXAMINATION OF SUSPECTS/ CANCER PATIENTS

The medical examination shall be facilitated by ASHA and is to be carried out by the medical officers/ specialists at the

**PHC/RH → CHC → DH → Medical Colleges** for Rural Population.

While for the Urban Population the flow of patients shall be from

**CD/CH → SDH → DH → Medical College.**

PHC/RH and the CHCs in the Rural Areas while CD/CH and SDHs in the Urban Areas shall act as First and Second Level of Filtration of the Individual identified during the campaign.

CHCs and SDHs shall also act as first referral units for these patients while the second referral units shall be the District Hospitals (DHs).

### FIRST LEVEL OF FILTRATION

- ✓ The persons who depict the warning symptoms shall be taken to the Primary Health Centre (PHC)/ Civil Dispensary (CD)/ Civil Hospital (CH) of the area concerned for preliminary examination and simple tests like Blood examination (PBF) or plain X-RAY etc. shall be conducted as per needs. Thus the PHC shall be first level of Filtration for which the Medical Officers shall be provided with a check list for examination and tests, drawn out by the experts for each of the symptoms listed as warning signs/ symptoms.
- ✓ For giving proper attention to the patient concerned, the days for each field worker in the concerned area shall be marked, for each of the Primary Health Centre's (PHCs)/ Civil Dispensaries (CDs)/ Community Health Centre's (CHCs)/ Sub Divisional Hospitals (SDHs). As such around 10 cases of the campaign reach that particular establishment on each working day. This shall also prevent flooding of the concerned establishment.

### FIRST LEVEL OF REFERRAL

The suspected cases from the PHC/RH/CD/CH shall be referred to the concerned CHC in the Rural Areas and to the concerned SDH in the Urban Areas. The CHCs, SDHs shall also act as the second level of filtration while simultaneously acting as first referral units.

### SECOND LEVEL OF REFERRAL

Those who are suspected at first referral level, shall be taken to the secondary level that is DHs where further examination by the specialist of concerned specialty and the investigations like Pap smear, Ultrasound, Fine Needle Aspiration Cytology (FNAC) shall be done. DHs shall also act as third level of filtration. Here also the same method of ear marking a particular area is to be done, so that not more than 20 patients of this campaign referred by FRUs in the District, reach any of the DHs on any given working day.

### TERTIARY LEVEL MEDICAL CARE AT MEDICAL COLLEGES

The final Diagnosis shall be confirmed at the tertiary level, where a **special cancer clinic shall be operative at each institute with all the specialist under one roof**. This clinic shall function for at least three days a week. In this clinic the cancer registry proforma shall also be filled.

## HOW CANCER AWARENESS & SYMPTOM BASED EARLY DETECTION CAMPAIGN ?

Cancer awareness & symptom based early detection campaign shall be conducted as a major activity in the state by the Department of Health and family Welfare in collaboration with the Department of Medical Education and Research. Cooperation of all other Departments like the social security, Panchayati Raj, local Self Government, Education and the Revenue department

and the department of Public Relations, with the help of the State and District Health Societies shall also be solicited. Following phases of activity have been conceptualized and planned. Following activities as planned have been carried out and the tasks have been accomplished successfully.

1. Expert consultations for advisability and feasibility.
2. Designing of Proformas.
3. Finalizing the modalities and syllabus for training of experts.
4. Finalizing modalities, Syllabus and schedule for Training of field workers and supervisors.
5. Making provisions for funds required and necessary approvals.
6. Preparation of list of common symptoms for suspecting cancer as per standard List by World Health Organization (WHO) supplemented as per advice of experts.
7. Preparation of Check List for each Symptom by experts.
8. Working out technical feasibilities of data collection and consolidation by interaction with Census Directorate, Centre for Development of Advanced Computing (CDAC), Baba Farid University of Health Sciences (BFUHS), National Health Systems Resource Centre (NHSRC), National Rural Health Mission (NRHM), State Health Systems Resource Centre (SHSRC), Punjab.
9. Requesting the Nursing Institutes for involvement.
10. Issuance of necessary letters for administrative instructions including free investigations and treatment to the cases referred through campaign.
11. Finalizing the guide booklet.
12. Instructions for filling the proforma and data consolidation.
13. Field testing of the proforma

### ACTIVITIES THAT ARE TO BE COMPLETED BEFORE ROLL OUT

- ❖ Orientation workshops ( Going on , Being conducted by SHSRC)
- ❖ Ear marking the area and working out logistics.
- ❖ Printing of the materials.
- ❖ Distribution of the materials.

### INFORMATION DISSEMINATION THROUGH FOLLOWING

- i. All the Deputy Commissioners as they are the chairpersons of District Health Societies.
- ii. Secretary Panchayati Raj and Rural Development for seeking cooperation of PRIS and the RMOS

- iii. Secretary Local Government for seeking Cooperation of the Municipalities
- iv. Secretary Education for seeking cooperation of schools and colleges for information dissemination
- v. Secretary Social Security for the cooperation of Anganwadies.
- vi. Secretary Revenue for cooperation of the Village Patwaries and the Lambardars.
- vii. Secretary Public Relations.
- viii. All the Directors of these departments.

This shall be done in a way so that the people co-operate and there is no element of scare.

### PREPARATORY ACTIVITIES TO BE DONE BY THE CIVIL SURGEONS

#### FACILITY MAPPING

##### Institutions

Location Wise institutions i.e.

##### URBAN AREAS

DH, SDHs, CHs, CHCs, Dispensaries, Sub Centre's

##### RURAL AREAS

CHCs, PHCs, Rural Hospitals, Dispensaries, Sub Centre's

#### MEDICAL MANPOWER

Institution wise

Sanctioned Posts of Doctors

Postings Specialty wise, Qualification wise

Postings in Civil Surgeons office with designations

Programme Officers

#### HEALTH WORKERS IN THE FIELD

Area and Village wise , Sub Centre wise , PHC wise and CHC wise manpower details as to

- the names of the BEEs/ LHVs/ Supervisors under each CHC/ Block PHC,
- Sub Centre wise ANMs and MPHWS (M) under each LHV /Supervisor
- Names of villages under each Sub Centre
- Names of ASHA with each ANM /Sub Centre
- Names of ASHA Facilitator and the names of concerned ASHA, ANM and LHV.



**NURSING INSTITUTES BOTH GOVERNMENT AND PRIVATE**

**Names**

**Addresses**

**E mails**

**Telephone Numbers**

**Name of Principal, contact Number**

**Faculty**

**Computers**

**Admission capacity, Course wise**

**Year wise and course wise strength of students.**

Civil Surgeons should immediately put some senior dynamic, resourceful and hard-working Doctor as project coordinator of the district to draw out the project proposal as has been drawn out by Faridkot a Copy of which has been sent to them.

**TRAINING PYRAMIND**

Simultaneously the trainings shall start in which at the Key Resource Persons (KRPs) shall self-train themselves. They shall be experts from Medical colleges, PGIMER Chandigarh, the core committee and the SHSRC.

KRPs in turn shall train the State Resource Persons (SRPs) who shall be the Civil Surgeons (CSs), Assistant Civil Surgeons (ACs), District Health Officers (DHOs) etc. in three batches of 30-35 each at SIHFW Mohali.

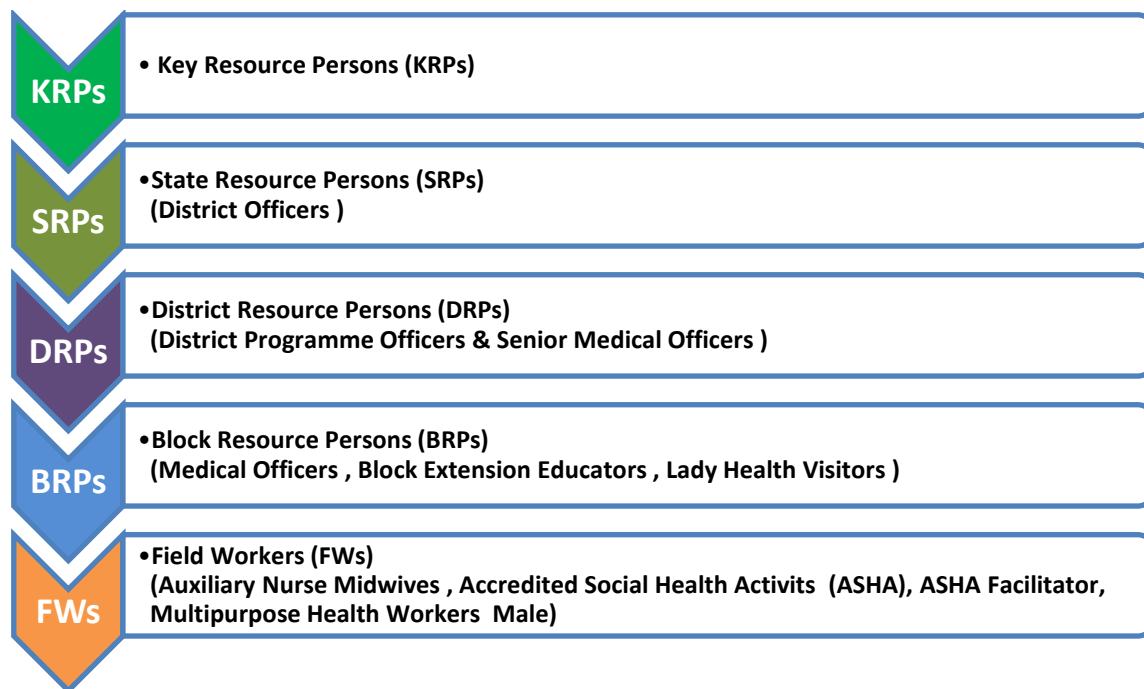
The third level of training for the training of District resource Persons (DPRs) shall be at district headquarters. Wherein all the Senior Medical Officer (SMO) rank officers including district officers and selected faculty of Nursing Institutes shall be trained simultaneously at each district for one day in 20 workshops of 20 -25 each. This training shall be conducted by the SRPs and supervised by the KRPs.

**FOR RURAL AREAS**

Next level shall be training of supervisors i.e. Block Resource Persons (BRPs) including Medical Officers (MOs) of Primary Health Centre's (PHCs), Block Extension Educator (BEEs), Lady Health Visitors (LHVs) and supervisors male and female. They shall be trained in 160 workshops of 25 each, simultaneously at Community Health Centre's (CHCs) and Sub Divisional Hospitals (SDHs)/ Rural Hospitals (RHs).

These supervisors i.e. BRPs shall train then the Field Workers/ Investigators Auxiliary Nurse Midwives (ANMs)/ Multipurpose Health Workers (MPHW Male), Accredited Social Health Activists (ASHAs) and ASHA Facilitators in 700-800 one day workshops of 30-35

investigators each held simultaneously in whole of the state at each mini PHC/RH/CHC/CH and other suitable places.

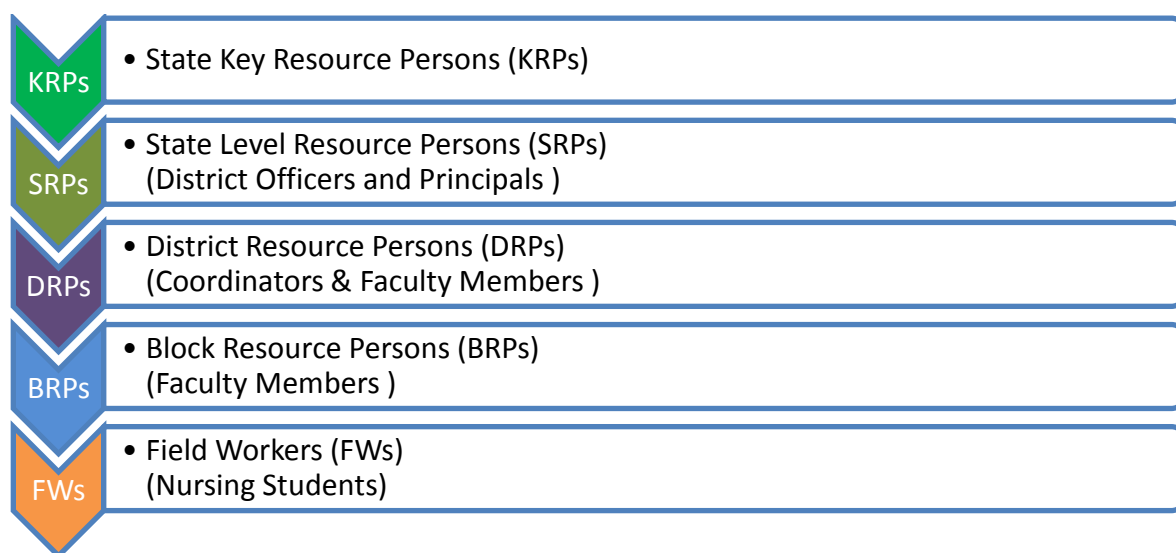


### FOR URBAN AREAS

Three senior members of faculty of each of the Nursing Colleges shall be trained as DRPs in the District Level Workshops as already mentioned at third level of training of the DRPs.

They (DRPs) shall then hold institution level training workshops for rest of the faculty i.e. Institutional Resource Persons designated as BRPs. Each Institution shall hold one such workshop for the training of BRPs at each of the Nursing schools and colleges in the District. All these 200 workshops shall be held simultaneously.

Then 400-500 one day workshops shall be held at the institutional level simultaneously to train the investigators who shall be the nursing students of 2<sup>nd</sup>, 3<sup>rd</sup> /4<sup>th</sup> year. Training to the field workers in these workshops shall be imparted by the BRPs i.e. Institutional Resource Persons.



### THE CAMPAIGN PROPER, ACTUAL VISITS, FILLING OF PROFORMAS AND CONSOLIDATION

There shall be mass awareness proforma called proforma No. 1, the data of which shall be consolidated at various levels in Consolidation Proforma Nos.(CP Nos.) 1, 2, 3, 4 & 5 at the respective levels. The Field Worker shall have 15-20 pages for consolidation while the rest of the levels shall not be having more than 10-15 proformas for consolidation.

The Sample Proforma I & II and the detailed guidelines for filling each of the columns are given from Page No.10 to 15 in the Guide Book published for ASHA/ Field Worker.

### IN RURAL AREAS

The scheme shall operate as under

There are 23,000 ASHAs, ASHA Facilitators, ANMS and MPHW (M) who shall take care of Rural Population of about 180 lakh. Accordingly each worker shall have a population of 800-900 in her/his area of operation having 160-180 families.

A proforma designed by experts (Proforma -1) shall be filled by the field worker for each member of a family and multiple families i.e. 10 families/50 persons can be listed on one proforma.

- These proformas are to be consolidated by the concerned field worker on Consolidation Proforma No.1 (CP-1).
- Consolidated Proforma No.1 (CP-1) shall be consolidated by the concerned Supervisor in Consolidated Proforma No.2 (CP-2).
- Consolidated Proforma No.2 (CP-2) shall be further consolidated by the CHC in Consolidated Proforma No.3 (CP-3).
- Consolidated Proforma No.3 (CP-3) shall be consolidated by the concerned District Civil Surgeon Officer in Consolidated Proforma No.4 (CP-4).
- Consolidated Proforma No.4 (CP-4) shall be consolidated by the State Headquarter for the State in Consolidated Proforma No.5 (CP-5).

### IN URBAN AREAS

The task shall be entrusted to the 20,000 nursing students of more than 200 Nursing schools and colleges. Preferably students of 3<sup>rd</sup> and 4<sup>th</sup> year shall be entrusted the task of the campaign. One student shall have a population of about 500-600 with 100-120 families.

The Faculty of Nursing Institutes shall be their supervisor and the trainer. They shall do the consolidation at the institution level

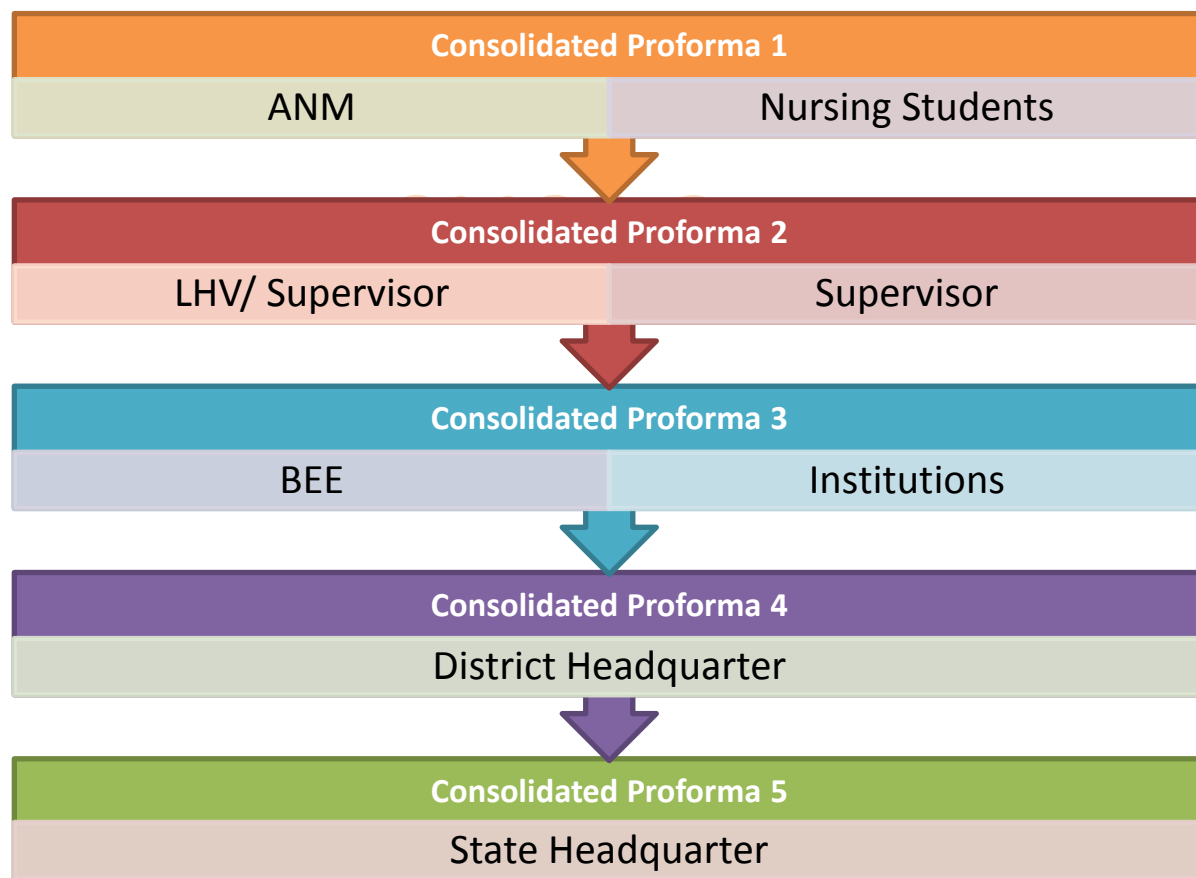
- These proformas are to be consolidated by the concerned field worker (Nursing Student) on consolidation Proforma No. 1 (CP-1).
- Consolidated Proforma No. 1 (CP-1) shall be consolidated by the concerned Faculty member in Consolidated Proforma No. 2 (CP-2) for at least 20 students.
- Consolidated Proforma No. 2 (CP-2) shall be consolidated by the concerned Institute in Consolidated proforma No. 3 (CP-3).
- Consolidated Proforma No. 3 (CP-3) shall be consolidated by the concerned Civil Surgeon Office as the case may be in Consolidated Proforma No. 4 (CP-4).

- Consolidated Proforma No. 4 (CP-4) shall be consolidated by the State Headquarter in Consolidated Proforma No. 5 (CP-5).


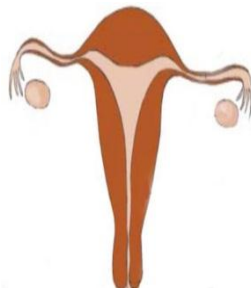

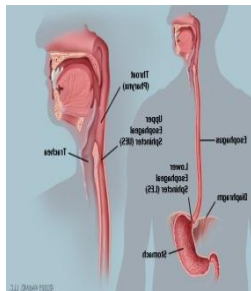
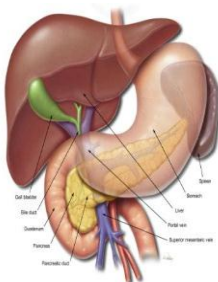
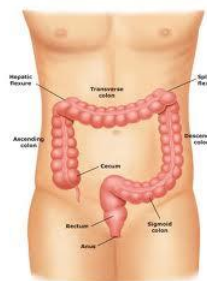

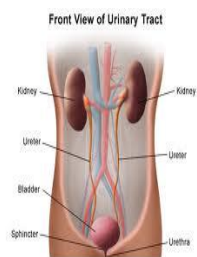
### **BOTH FOR RURAL AS WELL AS URBAN AREAS**

There shall be a detailed proforma to be filled for each individual who has cancer/ died of cancer or has already been treated of cancer or depicts some warning Symptom /Signs out of the list of symptoms/signs given on the following pages


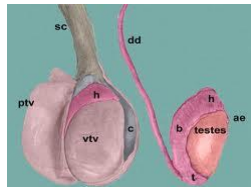
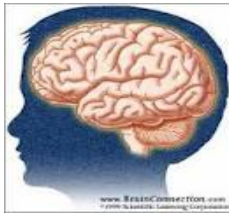
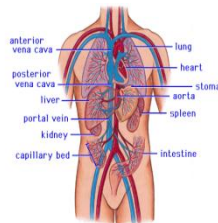
- An individual proforma designated as Proforma No. 2 which is more detailed, shall be filled for each individual who is already diagnosed positive for cancer within one year, within one to three or within three to five years or more than five years whether living or dead.
- Similarly the individual proforma shall also be filled for those who show one or more of the following symptoms or risk factors.



**WARNING SYMPTOMS/ SIGNS**

S.N o.	Warning Symptoms/Signs	Type of Cancer	S.N o.	Warning Symptoms/Signs	Type of Cancer
1	Lump in the breast /recent nipple retraction/ blood stained discharge	<b>Breast</b> 	2	Post-coital bleeding/ purulent vaginal discharge/ excessive menstrual bleeding/ inter-menstrual bleeding, dyspareunia	<b>Uterus/ Cervix</b> 
3	Non-healing Ulcer/ bleeding in ulcer in mouth, gum, palate/ tongue, nodule on tongue	<b>Mouth/ Gum/ Palate / Tongue</b> 	4	Difficulty in Swallowing of short duration/ Persistent hoarseness of voice or persistent cough/ Hemoptysis	<b>Esophagus / Larynx/ Lung</b> 
5	Persistent Jaundice with lump in abdomen, loss of weight & appetite, itching.	<b>Liver/ Gall Bladder</b> 	6	Painless blood in the stool/ unexplained weight loss/ Severe Anemia/ Sudden change in bowel habit	<b>Colon Rectum</b> 
7	Un explained bleeding from any natural orifice/ Un explained Fever more than three months	<b>Blood/ Lymph Nod</b> 	8	Painless Excessive blood in urine/ Difficulty in Urination/Frequent nocturnal urination in male of more than 50 years age.	<b>Kidney/ Urinary Bladder / Prostate</b> 

## Cancer Awareness and Symptom Based Early Detection Campaign

9	Sudden change in size/ color of wart/mole or bleeding from wart/mole	<b>Skin</b> 	10	Hard Swelling (lump) of testicle	<b>Testis</b> 
11	Un explained persistent Headache and Convulsions	<b>Brain</b> 	12	Lump anywhere in the body/ Non-healing ulcer	<b>Any Organ</b> 

### RISK FACTORS

**Do you have any of the following?**

Factors
1. Did you not Breastfeed your child for at least six months? (if applicable)
2. Do you use Smoke producing tobacco? (Cigarette, Biri, Huka/Chilmetc)
3. Do you use Smokeless tobacco? (Zarda/ Gutka/ Pan Masala etc)?
4. Do you consume Alcohol ?
5. Has any member of your Family ever suffered from Cancer ?
6. Do you use Oral Contraceptive Pills (OCP) ? (if applicable)

The persons whose individual proforma is filled shall be got examined at various levels and confirmed as to whether they suffer from cancer or not as under.

1. The Medical officers at the PHC /RH in the rural areas and the Civil Dispensaries / Hospitals in the urban areas shall be examining the patients brought by the respective field workers to them. They shall filter out the cases for next level on the basis of a check list for each of the warning symptoms/ sign.

**CHECK LIST FOR EACH WARNING SYMPTOMS/ SIGNS**

(Prepared by experts and finalized in state level meeting of experts from various Government Medical Colleges in the state)

S.No	Common Symptoms	Examination	Basic investigations
1	Lump in the breast /recent nipple retraction/ blood stained discharge	Examination of breast Colour of areola, retraction of nipple, discharge from nipple, colour, duration, Lump, Site, consistency mobility, & fixation to skin, appearance of skin. Other Breast, axillary and neck examination for lymph nodes. Examination of liver for nodules etc., persistent Backache	X ray chest
2	Post- coital bleeding/ purulent vaginal discharge/ excessive menstrual bleeding/ inter- menstrual bleeding, dyspareunia	Early marriage, Multiple sexual partners, Sexual intercourse at <17 years, Multipara, 1 <sup>st</sup> relative has Cancer CX, H/O OCP, persistent Backache, Fractures/Bonepain, Leakage of urine /faeces per vaginum, swollen leg, unhealthy Cervix irregular, bleeds on touch, leukoplakia, Punctate hemorrhage	PAP Smear , X-RAY Spine, chest
3	Non-healing Ulcer/ bleeding in ulcer in mouth, gum, palate/ tongue, nodule on tongue	H/O irritation to mucosa, Examination of the lesion , Any sharp tooth, examination of regional L/N in neck, submandibular L/Ns, & submental L/Ns	FNAC
4	Difficulty in Swallowing of short duration/Persistent hoarseness of voice or persistent cough/Hemoptysis	History of dysphasia to solids or liquids and its duration, Lymph nodes in neck, Examination of liver	X-Ray Chest, Sputum Examination, Endoscopic biopsy
5	Persistent Jaundice with lump in abdomen with loss of weight & appetite along with	History and examination of the abdomen especially liver , High Colour urine, clay coloured stool	U/S abdomen, LFT



## Cancer Awareness and Symptom Based Early Detection Campaign

	itching		
6	Painless blood in the stool/ unexplained weight loss/ Severe Anemia/ Sudden change in bowel habit	Examination of abdomen for any lump & palpable liver, Supra clavicular nodes on left side , P/R	Hb, Stool examination for occult blood, X ray chest, u/s whole abdomen
7	Un explained bleeding from any natural orifice/ Un explained Fever for more than three months	H/o Backache , Excessive Fatigue Anaemia , LNs, Spleen enlargement , Hepatomegaly	Hb, TLC, DLC , PBF, X-ray Chest & Skull, Ultrasound abdomen
8	Painless Excessive blood in urine/ Difficulty in Urination/ Frequent nocturnal urination in male of more than 50 years age.	History , examination of abdomen for KUB , LUMP , Fullness in Renal Angle , P/R for nodule in prostate , Consistency hard or not , Median sulcus obliterated or not , over lying Rectal mucosa free or fixed , Liver nodule, Bony Tenderness	Urine C/E , U/S for KUB and whole abdomen, X-RAY DorsoLumber spine , X-ray Chest
9	Sudden change in size/ color of wart/mole or bleeding from wart/ mole	Examination of Draining LNs , Enlargement of liver/nodule in liver	FNAC, U/S Abdomen
10	Hard Swelling (lump) of testicle	History, examination of testis, size , consistency ,Status of spermatic cord, <b>Check whether testicular sensation is present or not.</b> Examination of abdomen for any lump & supraclavicular LN on left side,	ultrasound abdomen
11	Un explained persistent Headache and Convulsions	History of loss of consciousness, vision defect diplopia, Any neurological deficiency.	CT Head, Fundus Examination
12	Lump anywhere in the body/ Non-healing ulcer	History, examination of lump / ulcer , examination of draining LNs	FNAC, U/S Abdomen

2. Those who are still suspects of cancer shall be sent to the specialists at the CHC in rural areas and SDH/DH in the urban areas for further examination and investigations.
3. The suspects as identified by the CHCs and the SDHs shall be sent to the DH as required.
4. The DHs may further refer those patients who are still suspects, to the Tertiary Care Centre's i.e. Government Medical Colleges. The diagnosed cancer cases that need treatment of the tertiary level hospital shall also be referred to the State Medical College Hospitals in their respective areas as per the distribution of the districts for each medical college annexed as annexure 'A'.

### MEDICAL CARE OF THE SUSPECTS WHO ARE NOT DIAGNOSED AS CANCER

- The rest of the patients who are not diagnosed as cancer shall be taken care at various levels for the symptom detected during awareness.
- As such the Confirmed patients of cancer shall be given treatment for cancer and those who are not suffering from cancer shall be taken care for their other symptoms due to which they had been placed in the suspect list.

### TIME FRAME

Once the information dissemination is complete and trainings are done successfully then.

- the door to door awareness and symptom based early detection campaign shall be started and each investigator shall be having a population of 700-900 in about 140-180 families .
- The individual proformas to be filled by each of the investigator are likely to be around 10 in his /her segment of population.
- The door to door Awareness shall be completed in three –four weeks.
- Subsequently data shall be tabulated and analyzed on one hand and the follow up action for confirmation shall start on the other.
- The investigator shall motivate the individual as well as the family for follow up and shall keep in touch with them.
- ASHA shall be given monetary incentive while Nursing Students shall be given academic credits for carrying out door to door campaign.

### HEALTH INSTITUTIONS SHALL BE FLOODED

It was an observation in the Core Committee by some of the members, the response to which after discussion was as under.

No, the health institutions shall not be flooded and there shall not be any break down of the health care delivery system because the whole exercise is so well planned that not more than 10-15 persons requiring medical aid as identified during the awareness campaign, shall be visiting any of the health institutions on any given working day. The logistics shall be as under

There are 446 institutions in the Rural Areas including PHCs/RHs and about 2, 20, 000 suspects are likely to be identified during the awareness campaign. If 10 cases are sent to each institution for filtrations on first level then on any given day  $446 \times 10 = 4460$  persons shall be examined at this level in the rural areas. As such it shall need 50 working days for the whole lot to be examined and taking into consideration the holidays etc. a period of Ninety days i.e. Three months shall be sufficient. For working out the logistics of the above proposition, Dr. R.S.Buttar, DFWO Amritsar suggested that the days for each of the field workers should be earmarked so that they accompany the patient on that particular day for providing hassle free medical care on one hand and also to prevent the flooding of the health institutions.

For second level of filtrations the number of patients going to the CHC from the PHC, daily shall be 10. As such 60,000 patients can be taken care at the rate of  $129 \times 10 = 1290$  /day in a period of 50 days again. So simultaneously same period of three months is sufficient to filter out cases in rural areas at the 2<sup>nd</sup> level.

Similarly in urban areas there are 220 institutions i.e. Dispensaries/Hospitals. 1, 00, 000 persons as suspects are likely to be identified, who shall need medical examination. Again by a denominator of 10 patients a day 2,200 shall be examined on any given day and the same shall require again 50 days and by same formula first level shall be over with in a period of three months in urban area too.

Similarly at the 2<sup>nd</sup> level there are 43 SDHs and if on an average 4 patients are sent to a specialist daily, 15-16 patients shall be taken care on any working day. Thus  $43 \times 15 = 645$  patients shall be examined by the SDHs daily. Even if 30 % are sent by the first level whole exercise can be done in a period of 50 days and by same formula in a period of three month.

District Hospitals shall get 20 patients daily and as such 500 patients per day are likely to be covered and even for a patient load of 60,000, the DHs shall take a total of 120days. After making an allowance for holidays and other exigencies the total time required shall not be more than six months. As such additional three months in addition to the three month period of primary care at first and second level shall be required for these referred cases from the first referral units i.e. CHCs and SDHs.

### **TERTIARY LEVEL**

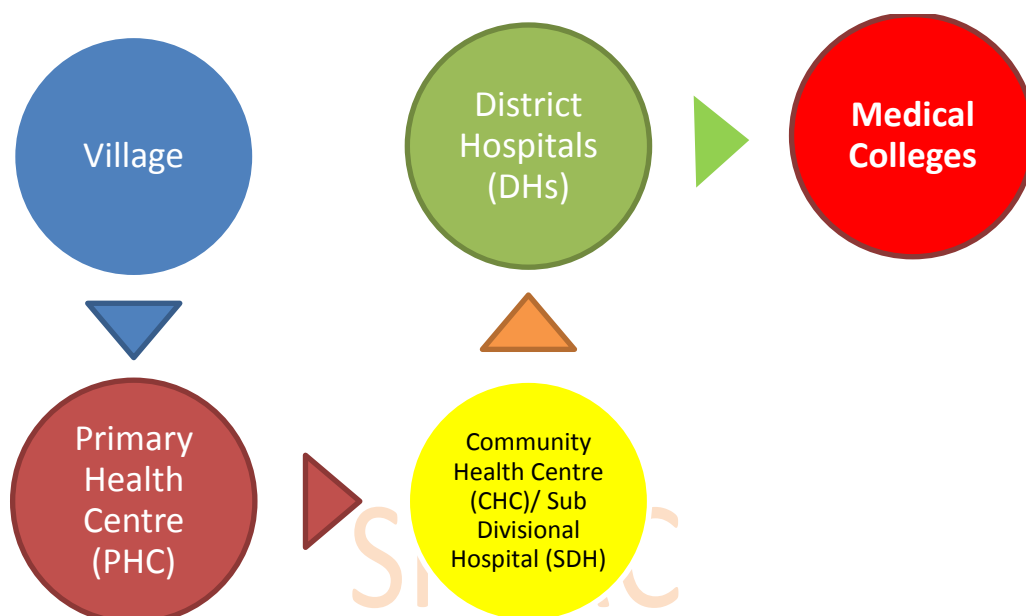
There is likelihood that there shall be 30, 000 to 35,000 total patients of cancer out of whom about 20,000-25,000 already stand diagnosed and are getting treatment. The remaining are likely to be new ones.

As proposed and agreed to by the Department of Medical Education and Research, there shall be a cancer clinic in each of the tertiary care Government Medical College Hospitals where all the specialists shall be sitting and the patients of this campaign shall be brought to them. Even if 10 patients per consultant are sent and a total of 30 patients are sent daily to each college

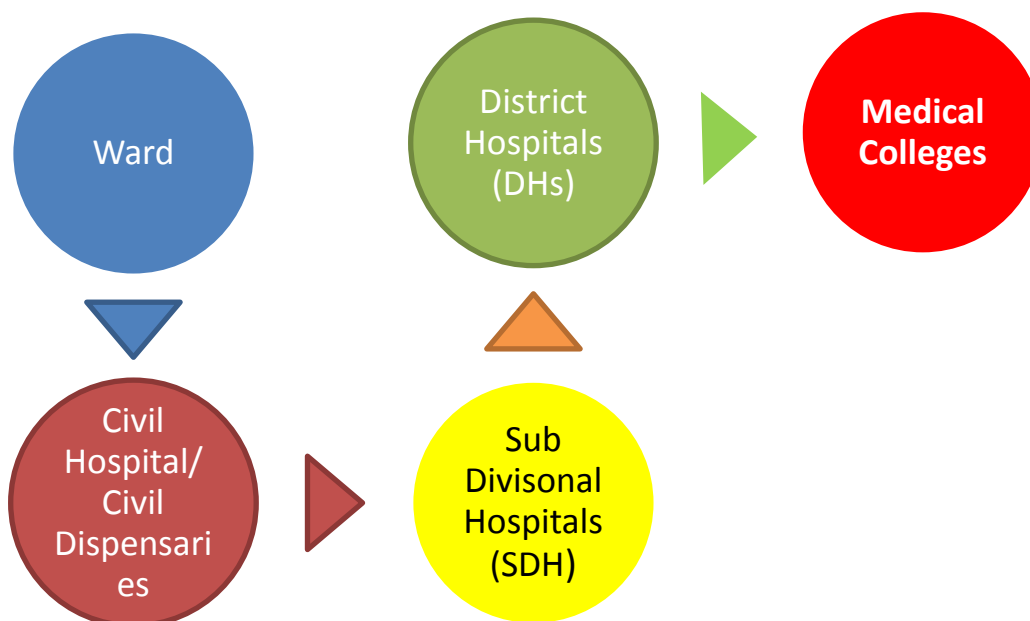
than 90 patients per day shall be covered and as such 2000 per month and within a period of 8 months all shall be diagnosed finally. The Medical Colleges shall take two months more than the districts.

The vast exercise of examining of about 3 lakh suspects is likely to be over with a total period of eight months

### RURAL AREA



### URBAN AREA



## **SYLLABUS FOR TRAINING OF DOCTORS (SPECIALISTS)**

The manual for training of medical Officers and the one for the Pathologist as formulated by WHO/ Government of India concerning Cancer under the National Programme for Prevention of Non-Communicable Diseases shall be used as broad guidelines for this training.

After introduction to course & participants there should be discussion on following topics/by following specialists coupled with hand on training in the OPD and IPD for the specialist of the concerned specialties.

### **1. EPIDEMIOLOGY**

- Cancer Epidemiology (Global/Indian/Punjab scenario)
- Age/Sex distribution,
- Risk factors,
- **Impact of disease on individual/family**( physical, psychological, financial and social)
- Importance of cancer Awareness/early detection on the basis of early warning signals.

### **2. (BY GYNAECOLOGIST) – CANCER- CERVIX**

- Presenting symptoms.
- Risk factors, etiology and various prevention methods or lifestyle modification or modification in habits e.g. genital hygiene/infections, role of OCPs, Pap smear, Breast self-examination or clinical examination by physician, mammography)
- Early warning signals, various stages of the disease and its impact on prognosis or consequences of delayed diagnosis.
- Various diagnostic modalities, their role in diagnosis or early detection on symptomatic basis.
- Treatment modalities at various stages of the disease.
- Awareness about exact locations where diagnostic and treatment facilities are available and where to refer if needed.
- HOW TO DO PAP SMEAR & BREAST EXAMINATION

### **3. (SURGEON)- CANCER BREAST, ORAL CAVITY, LARYNX, LUNGS, PROSTATE, URINARY BLADDER etc.**

- Presenting symptoms.
- Risk factors, etiology and various prevention methods or lifestyle modification or modification in habits e.g. Role of tobacco, alcohol etc)

- Early warning signals, various stages of the disease and its impact on prognosis or consequences of delayed diagnosis.
- Various diagnostic modalities, their role in diagnosis or early detection on symptomatic basis.
- Treatment modalities at various stages of the disease.
- Awareness about exact locations where diagnostic and treatment facilities are available and where to refer if needed.
- EXAMINATION OF ORAL CAVITY

#### 4. PATHOLOGIST

Various diagnostic tests available and their technique, Interpretation of the results/ test reports.

Training/enhancing the skill of doing various tests feasible at different levels.

#### 5. RADIOLOGIST/RADIOTHERAPIST

Various diagnostic facilities available for various cancers and how to interpret them and best suited treatment modality in that stage.

Eg. -Histopathology of biopsy of breast tissue or Pap smear or FNAC, tumor markers, Radiological investigations and their interpretation Modalities of radiotherapy.

#### 6. BRIEF OF THE CAMPAIGN (WHY? WHAT? HOW? WHEN? BY WHOM?) AND FACILITIES AVAILABLE IN MEDICAL COLLEGES FOR DIAGNOSIS AND TREATMENT OF CANCER AND THE ROLL OF THE SPECIALISTS THEIR IN.

#### GROUP DISCUSSION

About important issues or any doubts/ cancer awareness and symptom based early detection.

**PROPOSED TRAINING SCHEDULE FOR MOs (SPECIALIST)**

Sr no.	Time	Sessions
1.	09:00 am to 09:30 am	Registration
2.	09:30 am to 10:00 am	<ul style="list-style-type: none"> <li>• Introduction to course and participants</li> <li>• Pre-Test</li> </ul>
3.	10:00 am to 10:45 am	Magnitude of problem and warning signals for early detection of cancers.
4.	10:45 am to 11:00 am	TEA
5.	11:00 am to 01:30 pm	Practical session on diagnosis of carcinomas, e.g. Breast, Cervix, Oral Cavity, Oesophagus, Larynx, Colorectal, Hepatobilliary, Urogenital, Others OPD Demonstrations in concerned departments
6.	01:30 pm to 02:30 pm	LUNCH
7.	02:30 pm to 04:30 pm	Practical sessions in the Wards/ Labs/ Departmental teaching
8.	04:30 pm to 05:00 pm	Principles of cancer control

**2<sup>nd</sup> Day Schedule**

Sr no.	Time	Sessions
1.	09:00 am to 09:30 am	Cancer and tobacco & Principles of Tobacco control , Law & Tobacco
2.	09:30 am to 10:30 am	Introduction and Brief of Cancer Awareness & Symptom Based Early Detection Campaign & Role of Specialists.
3.	10:30 am to 12:30 pm	Practical Session in various departments, Clarification of doubts and Outcome assessment.
4.	12:35 pm to 01:35 pm	Group Discussion
5.	01:35 pm to 02:35 pm	Lunch
6.	02:35 pm to 03:00 pm	Post Test and Feedback.
7.	03.00 pm to 04:00 pm	Valedictory & Disbursement of TA/DA

**PROPOSED TRAINING SCHEDULE UPTO LEVEL OF MOs**

Sr no.	Time	Sessions
1.	09:00 am to 09:30 am	Registration
2.	09:30 am to 10:00 am	<ul style="list-style-type: none"><li>• Introduction to course and participants</li><li>• pretest</li></ul>
3.	10:00 am to 10:45 am	Magnitude of problem and warning signals for early detection of cancers.
4.	10:45 am to 11:00 am	TEA
5.	11:00 am to 12:15 pm	The campaign what ? why ? and how?
6.	12.15 pm to 01:30 pm	Check list of warning symptoms
7.	01:30 pm to 02:30 pm	LUNCH
8.	02:30 pm to 03:45 pm	Filling of proformas
9.	03:45 pm to 04:00 pm	TEA
10.	04:00 pm to 04:40 pm	Role of the participants in supervision and medical care of the suspects and detected cases.
11.	04:40 pm to 05:00 pm	Post-Test and feedback from the participants

**PRE TEST/ POST TEST PROFORMA FOR MOs**

**Name of the medical officer:**

**Qualification:**

**Years of service**

**MARK THE FOLLOWING STATEMENTS AS TRUE/ FALSE**

1. Food is the single most important risk factor in cancers.
2. Non breast feeding is one of the risk factors in cancer breast.
3. painless blood in urine is not a symptom of cancer
4. Liver and gall bladder cancers are very rare in Punjab.
5. Most of the times cervical cancer can be suspected by examination in proper light.
6. Sudden change in bowel habits is not a symptom of cancer colon /Rectum
7. Pap smear can be taken only by a fully trained Gynaecologist.



8. Unexplained bleeding from natural orifices can be an indication of hematological malignancies.
9. Best method for early suspicion of breast cancer is self-examination of breast.
10. Early detection is most important in cancer breast and cervical cancer.
11. Commonest cancer in Punjab is Breast Cancer.
12. Cancer awareness is a state wide academic exercise.
13. Chief Minister Relief fund is for reimbursement of the treatment costs of the cancer patients.
14. Now it stands proved scientifically that Punjab has highest incidence of cancer in the country.
15. The only way to consolidate data in cancer awareness is that the whole data is entered by data entry operators in the computers.
16. Persistent hoarseness of voice can be a warning sign of laryngeal cancer.
17. Cancer awareness all over Punjab is to be done by ASHA only.
18. FNAC is an important tool in diagnosis of oral cancers.
19. For suspicion of cancer complete history and examination of the patient by MBBS doctors is not sufficient.
20. During State wide campaign on cancer awareness the role of MOs Shall be only to do the clinical examination of the patients sent to them.
21. The PHCs & other Health Institutions shall be flooded with patients after survey and we will have to bear extreme degree of patient load.
22. Check list has been prepared by the state Health Systems Resource Centre
23. Oral cancer can be detected only in advanced stage.
24. Cancer of cervix is a common cancer in Indian women.
25. Breast cancer is curable if detected early.
26. Awareness campaign envisages detailing of warning sign in each house.
27. An ANM shall visit at least 1000 houses during the campaign.
28. Nursing students shall be visiting at least 500 houses each.
29. Monitoring shall be done by MOs alone during the campaign
30. There shall be external evaluation also during the campaign.

**SOME QUESTIONS RAISED DURING THE MEETINGS OF CORE COMMITTEE REGARDING CAMPAIGN AND RESPONSE THEIR TO**

1. Why do you not carry out a sample study which is considered to be standard method to know the incidence and prevalence of cancer by academicians?

**Response:** - We are not conducting this exercise to find out either the incidence or the prevalence of cancer which of course is the domain of the academicians. We have neither the capacity nor the intention to venture into the academic domain and are leaving the same for the academicians.

2. If it is so then why are you carrying out such a huge and vast campaign

**Response:** - Till date we are being given such figures of cancer load in the State as a grossly variable and the state has not been able to work out a plan for strengthening of its infrastructure on this front. On the basis of the scientific studies conducted by the academicians including that of the PGIMER Chandigarh and Punjab Agricultural University, Ludhiana. There is no unanimity as to the number of cancer patients and the causes of cancer. Cancer registry has received about 4000 cases as yet. However as per further information PGIMER Chandigarh gets about 3000 new cases of cancer annually from Punjab. The reports in press particularly vernacular dailies, give the number and names of patients village wise, that create entirely a different picture all together. So we want to identify all the cancer cases existing in the state and want to link them to the services which they may avail from the concerned institution. We also want to create a rapport between the Link worker and the patient on one hand with the institution on the other hand. This massive exercise shall also act as an indicator of the needs for strengthening our health infrastructure.

3. Why do you not celebrate a cancer week /fort night/ month for awareness?

**Response:-** Those exercises have been carried out in the past in various forms but reach of the same has been to only a very small population, whereas this exercise is going to touch about 81 lakh populations directly in 54 lakh households. Further by this state wide campaign of awareness through schools millions of students shall be addressed. It shall also sensitize our health staff and shall serve as a motivational and capacity building exercise for the state.

4. Why do you not collect information about cancer cases through community leaders by gathering them at a common place in the villages because everybody in the community knows as to who is a cancer patient in the village?

**Response:-** Such exercise has been carried out by the Department of Health & Family Welfare already but the results of the same are also not so encouraging. During the said exercise undertaken twice in 4/5 districts of Punjab, 1748 /1830 patients of cancer had been

identified. Another state wide exercise by the Directorate of Health & Family Welfare, Punjab for identification of cancer patients had been undertaken in the year 2009 wherein 7738 patients of cancer had been located in the whole of the state. The figure so achieved has created more clouds than clarity. Moreover we also want to generate awareness about cancer and its warning symptoms of risk in addition.

5. Why do you not use warning signs as defined by WHO?

**Response:-** The experts in the very first meeting made out that WHO has dealt with major cases but as the state is going to launch such a massive campaign, it would be better to include some more warning signs for broad basing the campaign. Moreover Liver and Gall Bladder cancers which are fairly common in Punjab are not covered in the WHO List. The experts prepared the list of warning symptoms, Punjab Institute of Medical Sciences Jalandhar and Government Medical College Amritsar had sent a provisional list of 13 symptoms each. However, after the thorough discussion in the core committee in the presence of experts a list of 12 warning signs stood finalize.

6. Why do you not depend fully on ROKO Cancer which has very attractive vans?

**Response:-** ROKO Cancer is mainly concentrating on the Breast Cancer screening for last seven years. They had examined 1, 20, 248 women till June 2012. During 2010 to 2012-13, Government of Punjab granted them financial aid to the tune of Rs. 30 lakh per annum for two years. With this aid ROKO Cancer has held 358 camps and examined 54,242 women over a period of 13 months. Mammographies have been performed on 9972 women during this period out of which 358 are the suspects of Breast cancer. As such the present campaign has much wider spectrum and whole population is to be covered by home visits, almost all types of cancers are to be included, at a meager cost of 70 paisa per head.

7. Why not opportunistic screening?

**Response:-** Because we are carrying out awareness campaign and symptom based early detection, while the opportunistic screening stands for and takes care of the persons who visit a doctor/ hospital. Standard screening test are carried out on all of them for screening of the various cancers or a particular type of cancer. So going to each house is a much wider and a useful service delivery exercise rather than the opportunistic screening, which is a passive exercise rather than an active one like the present campaign.

8. Why do you not include the indicators of the cancer registry proforma?

**Response:-** In fact cancer registry proforma is a very long proforma running into 6 pages (4+2). The same is to be filled for each case diagnosed as cancer patient and there is no relevance for collecting all those indicators for all the suspects because more than 90% of them are likely to be suffering from some disease other than cancer.