STANDING COMMITTEE ON HEALTH AND FAMILY WELFARE

Cancer Care Plan & Management: Prevention, Diagnosis, Research & Affordability Of Cancer Treatment

ONE HUNDRED THIRTY NINTH REPORT

CHAPTER 1- INTRODUCTION : INCIDENCES OF CANCER CASES

The growing burden of Cancer cases in India triggered an urgent need for the comprehensive assessment of cancer treatment in the country. According to the global case scenario, the number of cases is set to rise to 28.4 million by 2040.

In India, the burden of cancer is projected to result in a loss of 26.7 million Disability Adjusted Life Years (DALYs) in 2021 and 29.8 million DALYs in 2025. The cases are estimated to be higher in the north and north-eastern region of the country, and more among males than females

Cancer not only leads to premature deaths but also impacts the quality of life. Although cancer can affect any part of an individual's body, the report identified **mouth, lung and stomach cancer among men and breast and cervical cancer among women, having higher prevalence**. The role of gender provided the insight that men were more likely to die of cancer than women due to behavioral factors. Men are more likely to be impacted from Cancer of the lungs, due to higher consumption of tobacco, against women. Breast cancer and Cervical cancer are the most common cancers amongst women.

Cancer is not classified as a notifiable disease which results in **underreporting of cancer deaths**. Often death is reported as a cardiovascular failure and there is ambiguity regarding the actual cause of death. Making cancer a notified disease would help to identify the actual cause of death, an accurate mortality database in the hospital would improve cancer registry and determine accurate incidence and prevalence of cancer.

The **National Cancer Registry Programme** under ICMR has been in existence since 1982 and only 10% of Indian population is covered under Population based Cancer Registry (PCBR), therefore it was recommended to have more **rural based Population based Cancer Registries (PBCR) to obtain realistic information** about the incidence and types of cancers across the country. Such action was necessary to collect data and information for uniform distribution of cancer care.

An urgent need to **disincentivize consumption of tobacco and alcohol** in addition to increasing taxes on the products. Government should encourage **region based cancer research projects** to understand the cause of specific cancer in a specific region and bring the conclusion and research outcome for cancer treatment. Age adjusted incidence rate in rural India is half of that of urban India. The burden of cancer in rural Indian settings is higher due to the high percentage of rural population.

It was recommended to **streamline and improve data collection a CO-WIN like web portal** for the registration, real-time data collection, counseling, supportive resources for cancer care along with interactive tools can be created by the Government. In addition to ensuring the **linking of Cancer Registry data with Ayushman Bharat / PMJDY, mortality data bases, and the Hospital Information System (HIS) would improve cancer registration, follow up and outcome data.**

Despite progress, inequity in access, over diagnosis, overtreatment and escalating costs without achieving better outcomes demonstrate that cancer control in wealthy regions is no panacea. Hence, a **diagonal approach to harness linkages and forge a synergistic and mutually symbiotic relationship to improve outcomes is proposed**. Diagonal approaches to health-system strengthening leverage horizontal systemic programmes and policies, linking them with vertical, risk factor, or disease-specific interventions. Diagonalising cancer control can drive universal health coverage, while harnessing systemic platforms facilitates the scale-up of cancer control

CHAPTER 2- PREVENTION, SCREENING, EARLY DETECTION AND DIAGNOSIS OF CANCER CASES

In India, **Cancer Control Continuum Framework presents the case for focus on prevention, screening and early detection**. Such emphasis on prevention, screening and early detection may reduce the cancer burden on the healthcare infrastructure of the country in the coming years and thus provide time and free more resources to strengthen the entire gamut of cancer care infrastructure not only at the tertiary level but also at the secondary and the primary level.

The three most commonly occurring cancers in India are that of the breast, uterine cervix and oral cavity. Together they account for approximately 34% of all cancers, and hence are a public health priority in India. If detected each of these three cancers is amenable to early detection and treatment, reducing the burden of cancer related mortality and morbidity. In India the **Human Papilloma Virus (HPV) for girls** in the eligible age group can substantially reduce the burden of Cervical Cancer to near elimination levels. Cancers associated with cervical, vaginal and vulvar can be tackled with HPV vaccination.

According to WHO, **screening and early detection of cancer greatly increases the chances for successful treatment** as it focuses on detecting symptomatic patients as early as possible and testing healthy individuals to identify those having cancers before any symptoms appear.

The **National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)**, focuses on three most common types of cancer namely **Oral cancer, Breast cancer and Cervical cancer**. The programme aims at **strengthening infrastructure, human resource development, health promotion, early diagnosis, management and referral.**

- Population based prevention and control, screening and management initiative for common NCDs (Diabetes, Hypertension and common cancers viz. Oral, Breast and Cervical Cancer) is being implemented as part of comprehensive primary health care under National Health Mission (NHM).
- **Population Based Screening** can help in better management of diseases by the way of early stage of detection, follow up and treatment adherence.
- **Training Modules** have been developed for training of various categories of health staff viz. Nurses, ANMs, ASHAs and Medical Officers. Awareness for prevention of cancer and early detection of cancer is being carried out at all levels through NCD Clinics at Districts & CHC levels.
- ICMR's National Institute of Cancer Prevention & Research has designed a portal on ``India against Cancer'' that provides information on the leading cancers in India with a major focus on awareness, prevention and treatment of these cancers. The portal focuses on information for the general public and patients.
- A need for prevention and screening,increasing awareness among masses by decreasing load on existing health infrastructure and for the government to implement compulsory cancer screening measures on certain age groups like the 30+ age group population
- Vaccination against **Human Papilloma Virus (HPV)** for girls in the eligible age group can substantially reduce the cervical cancer incidence to near elimination levels in the foreseeable future. It was recommended **to authorize a few more projects to study the**

efficacy of the vaccine on Indian women,including the HPV vaccine in the vaccination programme of India.

Information dissemination through village panchayats, local cable networks,students, resident medical officers, helpline number integrated with telemedicine for cancer awareness. The vaccination for Cancer like the disease itself, is associated with stigma and fear and hence it is **necessary to raise awareness for both primary care physicians and patients on early warning signs/ symptoms of Cervical Cancer**. It is required to sensitize people about the danger of the disease and it recommends information dissemination through village panchayat, local cable networks,school students, resident medical officers and lastly, use a helpline number integrated with telemedicine (eSanjeevani-app of government) for cancer awareness.

Changing lifestyle practices that enhance the risk of cancer. This can be done by two ways, Firstly, **better rural and urban planning emphasizing on physical activities** like jogging, walking and cycling tracks, promoting yoga, and secondly, **dissuading children from consuming ultra processed foods,** and lastly, by increasing taxes on junk and sugary foods. Also, improper methods for food preservation is one of the main reasons for incidence of cancer in North East India and the government should encourage people to avoid processed food, promote hygiene as even small amounts of consumption of such kinds of food increases the risk of cancer.

There are various challenges being faced in the prevention of Cancer and the majority of the people with cancer prefer approaching the private sector, due to low trust and inadequate public cancer care services. T**he Ministry should work actively towards bridging the trust deficit in public health institutions by improving the overall healthcare infrastructure of the public health facilities**. The need of the hour is to **upgrade existing cancer care facilities** and expand the same to the areas which have high incidence of cancer cases especially in the North Eastern Region so that the patients get access to quality and cost-effective cancer care.

Cancers like that of breast, cervix and oral are preventable if diagnosed early and are focused under the NPCDCS since its inception. The Government should formulate a scheme to start a **country wide population based screening at the PHC (primary health care) level under the NHM (National Health Mission)**. Each PHC should take up the responsibility of screening people who reside in its catchment area. The Medical Officer, Public Health Nurse, Health Assistants, and Health Workers should be encouraged to take a lead in the screening camps organized under the scheme. The Central Government in tandem with State Governments should commence **mobile detection programmes with vehicles equipped with colonoscopy, mouth inspection, uterine-cervix tools & instruments**, and other laboratory facilities in every district of the country.

Cancer is diagnosed with a combination of tests including advanced diagnostic methodologies and the DoH&FW and ICMR should establish standard diagnostics protocol and explore the inclusion of new diagnostic technology as modern technology could make the Cancer management more precise, targeted, cost effective and efficient. Certain **capping of the charges of diagnostic testing** to provide relief to patients.

One major hurdle in successful early detection of cancer cases is lack of knowledge at the physician level about early signs of cancer.

- All Primary Care Physicians and frontline Healthcare workers should be trained for identification and detection of red flags for early diagnosis, further referral and follow up care management.
- A structured course including clear clinical pathways may be mandated to be taken on regular intervals. This will promote early diagnosis and treatment.
- The Ministry should set up well-defined and established **referral mechanisms** so that patients are referred to the nearest and appropriate‟ diagnostic facility (including imaging, laboratory or molecular tests) for pathological confirmation and staging studies.
- To ensure high quality treatment at affordable prices the respective state governments to smooth linkage between the screening facilities to diagnosis centers and subsequent treatment facilities like CHCs, District Hospitals and tertiary level hospitals.

CHAPTER 3- INSTITUTIONAL FRAMEWORK FOR CANCER CARE & MANAGEMENT

Institutional Framework for Cancer Care and Management refers to the diagnosis and treatment of cancer at various levels in the Government Health Care Delivery System which includes Sub Centre, Primary Health Centre (PHC), Community Health Centre (CHC), District Hospital besides medical colleges and tertiary care institutions. Financial and technical support is provided upto the District level. To enhance the facilities at tertiary level, the Central Government is implementing the strengthening of Tertiary Care for Cancer Centre (TCCC) scheme.

The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease & Stroke (NPCDCS) has been implemented since 2010 in India by the Ministry. **National Cancer Control Programme** operational since 1975 is now merged with NPCDCS since 2010. Under the aegis of **Pradhan Manti Swasthya Suraksha Yojana (PMSSY)**, setting up of 22 new AIIMS and upgradation of 75 Govt. Medical Colleges has been taken up. Treatment of cancer under **Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)** has been one of the prime focus areas to safeguard the beneficiaries from catastrophic expenditure of cancer treatment.

Institutional Arrangement for Cancer-Patient Care

Cancer must be dealt with separately and must not be grouped under other lifestyle diseases because the merger of the NCCP into the NPCDS has reduced the focus and handling of proper cancer screening. **The Ministry should devise a targeted plan for tackling cancer before it blows out of proportion and consumes a major part of human and financial resources of the country.**

The early diagnosis of cancer is the best chance for successful treatment . A delay in detection of cancer, the cost of cancer treatment and risk increases and systematic data collection and aggregation can optimally utilize the healthcare resources. The Ministry must make a realistic requirement of funds to support the National Programme for Prevention and Control of Cancer,

Diabetes, Cardiovascular Diseases and Stroke and is recommended to assess the continued relevance of the Scheme and the progress made towards achieving the envisaged objectives under the Scheme.

Functioning of Non Communicable Disease (NCD) Cells

Only 1.2% of the population is covered in population based cancer screening programme.The Non Communicable Disease Cells could have been optimally utilized for screening of cancer patients, however, the NCDs have failed to emerge as centers of first line screening for cancer patients. The Ministry should ensure that the NCD Clinics are made fully functional and robust screening of common cancer is done in the clinics. **The Ministry should provide adequate training to the health care professionals at the NCD Clinics/ Primary Health Centre/ Community Health Centre for the screening of common Cancer.**

Tertiary care for cancer

The Central Government is implementing **'Strengthening of Tertiary Care Cancer Facilities'** Scheme. Under the scheme, support is provided to States/UTs for setting up of State Cancer Institutes (SCIs) and Tertiary Cancer Care Centres (TCCCs) in different parts of the country. The States and the Centre should work in tandem to complete all the SCIs and TCCCs within the revised schedule. **The Ministry should hold regular review meetings with the States and ensure the successful completion of all the 19 State Cancer institute (SCI) and 20 Tertiary Cancer Care Centre (TCCC).**

Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)

Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), a Central Sector Scheme, was announced in the year 2003 with the objectives of correcting regional imbalances in the availability of affordable/reliable tertiary healthcare services and augment facilities for quality medical education in the country. The timely diagnosis of cancer is crucial for providing comprehensive cancer care, however, the Government Medical Colleges and Hospitals at district level lack the infrastructure and facilities for accurate cancer diagnosis. **Under the GMC upgradation component of the PMSSY, the Ministry must ensure that screening and diagnostic tests**

especially for common cancer are present in the District Hospitals. The Ministry of Health and Family Welfare must also ensure that adequate number of healthcare workforce is present in the GMCs that are well trained in cancer screening and diagnosis

National Cancer Grid

An initiative of the Department of Atomic Energy (DAE), Government of India, it was created in 2012 with the broad vision of creating uniform standards of cancer care across India. The DAE along with the Ministry of Health and Family Welfare must make consistent efforts to bring in a uniform criterion for prevention, early diagnosis, treatment protocol and follow up of cancer patients.

There is huge variation in the treatment procedure followed and the standards of cancer diagnosis across the country and uniform high standards of cancer care must be provided throughout the country. **The Government machinery must ensure that the Cancer Centres across the country follow a common standard management guideline for cancer care and the Ministry of Health and Family Welfare must bring in a mechanism to capture the data of each cancer patient. Assessment of the pattern of cancer across the country is also required.**

Hub and Spoke Model of Cancer Care

The Hub and Spoke model stands for a network of hospitals on two levels. SCI/TCCCs are envisaged for cancer treatment as Hub and Spoke for providing cancer care, giving support to district hospitals and medical colleges. SCI will serve as the nodal and apex Institution to mentor other Government Institutes (including TCCC and RCC). Similarly, the TCCC should mentor cancer related activities including at the district level and below in their respective footprint area (the areas from where patients are accessing the TCCC). SCI would be hub and TCCCs as spokes, and facilities being created under NHM – District NCD clinics, CHC NCD clinics, Day Care Centres – as sub-spokes. Creating a network of these facilities is required for continuum of care, for which steps are being taken.The committee notes that hubs and spoke is an efficient model of providing comprehensive care by creation of hubs and spokes throughout the country. The Committee recommends the Ministry of Health and Family Welfare to work in close collaboration with the Department of Atomic Energy to decide a timeline for implementing

the hub and spoke model in each State. The Government should ensure that the existing SCI/TCCCs are upgraded to hubs and spokes depending on their existing infrastructure and capabilities.

Pradhan Mantri Jan Arogya Yojana (PM-JAY)

Ayushman Bharat programme is aimed towards provision of promotive, preventive, curative, palliative and rehabilitative aspects of Universal Health Coverage. It is being implemented through two interrelated components, viz., Health and Wellness Centers (HWCs) to provide primary care and Pradhan Mantri Jan Arogya Yojana for providing financial protection for accessing hospitalization care at the secondary and tertiary levels. Adopting continuum of care approach, Ayushman Bharat is being implemented through two 42 interrelated components, viz., Health and Wellness Centers (HWCs) to provide primary care and Pradhan Mantri Jan Arogya Yojana for providing financial protection for accessing hospitalization care at the secondary and tertiary levels. **The scheme should include diagnostic tests to timely detect cancer and improve cancer mortality rate. The Ministry should strengthen the existing referral mechanism which will ensure a robust treatment plan and also facilitate better documentation of cancer related data and should conduct a mandatory annual cancer screening checkup for all Ayushman Bharat beneficiaries which will facilitate early cancer diagnosis**

Changes needed in the institutional framework

- Need for a centralized Public Health Research Institute
- Region wise equitable distribution of Government-run Cancer Centers
- Care center and adopt best practices and provide standardized treatment protocol in these centers
- Price negotiation : Group negotiation for cancer drugs would facilitate better prices for the anti cancer drugs by increasing the bargaining power.
- Human resource forecasting and planning
- Inadequate insurance coverage
- Need for focused approach to pediatric cancer
- Strengthening the institutional arrangement

CHAPTER- 4 ACCESSIBILITY AND AFFORDABILITY OF CANCER TREATMENT

Cancer is diagnosed by various specialities like biochemistry, pathology etc and by the specialists of concerned areas like neurologist for brain, orthopedics for bone cancer etc. the cost of treatment depends on various factors which include the stage of diagnosis, type, site of cancer and type of treatment etc. The responsibility for cancer care in the public health institutions lies with the Department of Health and Family Welfare and the Department of Pharmaceuticals is mandated to regulate issues related to pricing and availability of medicine at affordable prices.

The **National Pharmaceutical Pricing Authority** has to fix and revise prices of scheduled formulations under Drugs Prices Control Order along with monitoring and enforcement of prices. The 16% margin for retailers in determining prices was considered to be too high as the same was applied on the price of life saving medicines and says that the government while providing health care services to the patient should not have a profit making motive as in case of other business lines. The government should rationalize the retailer's 16% margin in the interest of the patients who are struggling for their life.

AMRIT (Affordable Medicines and Reliable Implants for Treatment) initiative by the Ministry of Health and Family Welfare launched this initiative to provide affordable life saving medicines, other drugs and medical disposables for treatment of cancer and other diseases.
Efforts of the **Pharmaceutical and Medical Devices Bureau of India (PMBI)** are appreciated in implementing PM-JAP (Pradhan Mantri Jan Aushadhi Pariyojana) which provides quality generic medicines at affordable costs through 8700 Jan Aushadhi Kendras. Committee is of the view that PMBI should open the Jan Aushadhi kendras at the block levels. Through cooperative federalism, institutional arrangements of cancer treatment should be well knitted and integrated to provide cancer treatment at affordable cost from primary health centers at the block level to the tertiary level of cancer care.

RAN (Rashtriya Arogya Nidhi) provides one time financial assistance up to 15 lakh to patients who are poor and living below the poverty lines.

CANCER CARE PATHWAYS LIMITS

- Recommends the government for making policy for decentralization of cancer care facilities
- Regional disparity, socio economic diversity, gaps in knowledge, health seeking behavior of the public, infrastructure constraints are the limitations.
- Poor availability of radiation machines in the government hospitals and committee recommends the ministry to work on a mechanism where either machines are assembled in the country or are manufactured in the country.
- Lack of equipment in hospitals

Cost of Cancer Treatment

The cost of cancer treatment not only includes the price of the medicine but also includes the cost of healthcare for any patient in the country including a variety of charges viz. doctor consultation and nursing fee, room charge, pathological and maintenance charges thereby increasing the overall cost of the treatment.

The poor availability of radiation machines in the Government Hospitals is a major hassle and the Ministry should work on a mechanism under which either the machines are assembled in the country or are indigenously manufactured in the country. Also, the prevention and screening scenario would work if the diagnostic infrastructure should be ramped up to ensure there is matching of demand and supply. **The Ministry should improve both technological and human resources in the healthcare institutions as trained manpower .**

Imported cancer drugs: some medicines are being imported which are extremely costly and the committee recommends the government to provide basic infrastructure to manufacturers of drugs and incorporate it under the make in india programme so that the prices can be reduced and made affordable and the country can become atmanirbhar.

The charge for cancer treatment is high in the Private Hospitals, therefore, more Government Hospitals should be established across the country for providing affordable cancer treatment private hospitals charge exorbitant rates from patients. **The existing Government hospitals**

should be upgraded to create oncology departments; these departments should also have "private patients" who pay for their care, and partially subsidize the "free" patients who are not charged. Similarly, 25% reservation on cancer services provided in private hospitals should be earmarked for patients treated on government schemes. The measures undertaken would ensure not only affordability of care but also ensure that the doctors in both Government and private hospitals deliver healthcare services and treatment of patients from all strata of society.

Patient Assistance Program (PAP)

The government should encourage effective patient assistance programs which make newer innovative therapies and treatments affordable for patients and the program could provide immense financial assistance.

Tariffs and Taxes on cancer medicines

The drugs and medicines should carry minimum GST and should be exempted from custom duties which will bring down the prices significantly.

The Government should undertake the following strategic course of action for enhancing affordability of cancer treatment

- Strengthening of every District hospital with Oncology Wing (Surgery, chemotherapy & palliative care)
- Upgradation of the existing RCC to Cancer hospital
- More awareness programme on utilization of central financial assistance to public & doctors for cancer treatment
- Opening of cancer patient accommodation and transportation centers in every district under Govt.support or NGOs.
- Increased awareness among public and health workers about certified generic anti cancer drugs
- Increased availability of certified generic anti cancer drugs in the market.

CHAPTER-5 ACADEMIC TRAINING AND RESEARCH ACTIVITIES

The cancer diagnosis as well as treatment that have been adopted by patients and healthcare providers at large is conventional in nature. Hence, in order to develop and introduce innovative therapies in India, it is imperative to promote R&D and clinical trials. The Ministry undertakes research in cancer treatment through ICMR under the Department of Health Research. Besides, the cancer prevention and research was being carried out by the institutions under the aegis of various Govt. Ministries/Departments. India was an active member of the International Agency for Research on Cancer (IARC) which is the specialised cancer arm of World Health Organisation (WHO). It also partners with EU, USA and other countries for pushing the frontiers of knowledge on cancer. Through the multi-pronged strategies and interventions, it was envisaged that the cancer burden would be reduced in the years to come, as the Government of India was committed to save lives and eliminate suffering.

DBT implemented a program entitled **'Pilot Projects for Young Investigators'** to investigate new hypotheses for establishing proof-of-concept in cancer research under which 113 young investigators have been supported with a budget of Rs 26.52 crores. It funded several projects under Basic, Diagnostic/Biomarkers, Nanotechnology & Therapeutics, Animal model systems for the development of chemotherapeutic agents, target identification, synthetic chemistry for target inhibition, genetics & epigenetics of nationally relevant cancers, cancer stem cells and its use in diagnosis & therapeutics. It funded three 5-year Centers of Excellence; six Units of Excellence and two Virtual National Cancer Institutes, one on Breast Cancer and other on Oral Cancer. Council of Scientific & Industrial Research (CSIR) through its constituent laboratories. has been pursuing R&D activities in the area of cancer. In doing so, CSIR efforts are focused on understanding the disease biology; disease diagnostics; drug discovery and development; studying the environmental & genetic causes of specific cancers in India and creating innovative platforms for enhancing the innovation in the domain.

The Department of Health Research (DHR) launched the 100% central government funded schemes in 2013-14 for **establishment of the Multidisciplinary Research Unit (MRUs) in State Govt. Medical Colleges and Model Rural Health Research Units (MRHRUs)**

Indian Council of Medical Research- The Budget provision for cancer research activities of ICMR is approximately Rs 250 crore during the last five years. Various training courses in cancer education and research are being imparted by national and international organizations viz: WHO, African and SAARC/ASEAN countries, INCTR and IAEA.

Higher funding allocation for organizations like ICMR, DBT and DST for clinical and translational research that has the potential to change the practice in India and the world and which results in Ayurvedic formulations.

The funding can also lead to rigorous testing of other plant products for novel indications or to mitigate toxicity using the technical know-how and research innovations at ACTREC

Collaboration with International Cancer Research Organization- India is one of the founding members of **ICGC (International Cancer Genome Consortium)** and chose oral cancer to provide new insights by comprehensive genomic characterisation. As research on India centric cancer centers are receiving a great impetus from the Government of India through the AYUSH Ministry, novel compounds from Ayush products and Ayurvedic formulations, other plant products can be rigorously tested collaboratively between Ayush institutes and other institutes having modern technical know-how and research innovations like ACTREC, IISc, IITs, NIPERs and such other institutes. This can be enhanced further by testing these products/ innovations on cancer patients attending both the AYUSH hospitals and modern allopathic hospitals in the setting of large trials which will be acceptable to people in other parts of the world.

The **Public-Private Partnership** in the field of cancer research activities should be taken up on the format of the National Cancer Institute, USA. It will encourage investigators to come forward and do research based on the cancer scenario in India and therefore will be more useful in the Indian clinical setting. This should not be confined to the research activities only, but provision should also be there for support for publication in journals as well as circulation of results of

these research activities. the government should devise strategies for linkages of cancer research with various industries/companies for funding under Corporate Social Responsibility (CSR)

Establishing interoperability between the population based and hospital-based Cancer registries by adopting digitization of healthcare, which will improve the quality of data collection through standardization and by removing the duplications

National Policy to Catalyse Research & Development and Innovation in the Pharma Sector in India- Establishment of a meaningful R &D ecosystem in India, along with a robust IP environment to protect patents and promote innovations

Harmonization of regulatory norms: The Pharma sector needs greater alignment with the rest of the world, particularly with the countries which are at a similar level of development and competency.

Adopting a reliance pathway to ensure that the drug reaches the patients faster and at the same time when it reaches the overseas patients. It is also important to ensure a stable, predictable patent environment and improved patent enforcement. The committee proposes to introduce post graduate courses related to specializations in different types of cancers and to fill the sanctioned posts in cancer care units.

All the medical institutions across India should prioritize research in addition to patient care and education as is being done at TMC.

CHAPTER-6: CANCER CARE PLAN, RESEARCH AND MANAGEMENT IN AYUSH

The increasing incidences of cancer cases in the country and the constraints in access to quality and affordable cancer care, besides that, the physical, mental, emotional and financial toll make the entire process of the treatment extremely difficult for the patient. Amidst such a scenario, the Indian system of medicine raises hopes through its various systems which can complement the modern system of medicines in better management of cancer and help in improving the quality of life of cancer patients through supportive, prophylactic, palliative and even curative therapies and drugs.

Ayurveda has a significant role to play at all phases of Cancer care continuum i.e., prevention (screening/ detection/ primary-secondary tertiary), diagnosis and treatment. Integration of Ayush/ Ayurveda with Conventional management of cancer will have benefits in terms of reducing toxicity, leading to compliance to treatment with a better outcome along with improved quality of life and reduction in expenditures. **The Ayush systems can play a significant role at all phases of Cancer care continuum particularly prevention and palliative care.** Therefore, the Ministry should prioritize prevention and palliative care and put in concerted efforts to make Ayush verticals like Ayurveda, Homeopathy and Yoga viable and effective options in these aspects of cancer control continuum. The need of the hour is evidence-based Ayush practices and treatments which can complement modern medicine further. It is, therefore, imperative to **evaluate traditional practices scientifically and integrate the beneficial practices with modern medicine**.

There should be separate allocation for **expansion of cancer care facilities**. Along with this, the focus should be on healthy diet, yoga and celebrating various days. Three treatments- ayurveda, homeopathy and siddha treatment need to be incorporated in cancer care. Lives of cancer patients can be improved through awareness, screening and research.

The North-Eastern regions have higher incidence of cancer, thus the Cancer unit should get operationalised soon in North Eastern Institute of Ayurveda & Homeopathy (NEIAH), Shillong. **The Ayush Health and Wellness centers need to be strengthened and upgraded for delivering health facilities to cancer patients**. Further, the Ministry should work towards integrating non-pharmacological therapies of Naturopathy and Yoga with mainstream medical care as this may greatly help in reducing various adverse effects of conventional treatment and go a long way in strengthening cancer care through Ayush.

The evaluation of Ayush drugs by Advanced Centre for Treatment, Research & Education in Cancer (ACTREC), TMC was appreciated as such evaluation and scientific studies will bring out credible results which will go a long way in furthering integrative oncology. This will also ensure efficacy and safety of Ayush drugs like carcitol for its anti-cancer properties. The Ministry should promote such **evaluation studies of all Ayush drugs so as to provide scientific backing to efficacy of Ayush drugs**

CHAPTER- 7 PALLIATIVE CANCER CARE AND MANAGEMENT

Palliative Care or Supportive Care, is required in the terminal cases of Cancer, AIDS etc., which can be provided relatively in simple and inexpensive manner in tertiary care facilities, in community health centers and even in patients‘ homes. Effective palliative care requires a broad multidisciplinary approach that includes the family and makes use of available community resources. It improves the quality of life of patients and families who face life-threatening illness, by providing pain and symptom relief, spiritual and psychosocial support from diagnosis to the end of life and bereavement.

The Ministry of Health & Family Welfare stated that the need for palliative care was increasing at a rapid pace due to the world‘s aging population and increase in chronic diseases. Accordingly, the Government has been implementing the **National Program for Palliative Care (NPPC)** which is a part of the National Health Mission (NHM).

The NPPC has the following objectives :

- Improving capacity within government health programs.
- Refine the legal and regulatory systems and support implementation to ensure access.
- Encourage attitudinal shifts amongst healthcare professionals.
- Promote behaviour change through enhanced public awareness

Implementation mechanism of the programme :

- Activities would be initiated through the National Program for prevention and control of cancer, CVD, Diabetes & Stroke. The integration of national programs are being attempted under the common umbrella for synergistic activities.
- The regulatory aspects for increasing Morphine availability would be addressed by the Department of Revenue in coordination with the Central Drug Standards Control Organization.

The Service Delivery Framework for Palliative care under NCCP programme covers the following:-

- As part of the population enumeration and empanelment process, ASHAs will identify bed-ridden patients and others needing palliative care and such individuals are visited by the Multi-Purpose Worker (MPW)/Community Health Officer (CHO) for a further assessment using the Palliative Care Screening tool.
- ASHAs and volunteers undertake periodic, home visits to the patients and support to the patient and family members. Families are assisted with routine home care, simple nursing skills and accessing various services as needed including mobilization of local resources.

As per WHO estimates each year, an estimated 40 million people need palliative care, 78% of whom live in low and middle-income countries. Worldwide, only about 14% receive it.
The lack of a robust National Palliative Care Policy and institutional arrangement in palliative care across States resulted in the neglect of care, also with increasing incidences of chronic lifestyle diseases and cancer, the need for a comprehensive policy was affirmed. It was recommended to **integrate palliative care with the healthcare policy at all levels and make active use of the community based resources** and explore the involvement of the **Private Sector in Palliative care institutions in different communities.**

All non-pharmacological palliative therapies of Naturopathy and Yoga should also be started in all the Health and Wellness Centres of Ayush.
Pain relieving drugs are an incumbent part of Palliative care thus effective measures for **availability of medication at Palliative Care Units** and Cancer Centres need to be maintained.
Each medical college should have a Palliative Medicine Department and the availability of Morphine and technical expertise to prescribe Morphine must also be present throughout the country.
National health systems are responsible for including palliative care in the continuum of care for people with chronic and life-threatening conditions and linking it to prevention, early detection and treatment programmes. Hence there is a need for developing health system policies that

integrate palliative care services into the structure and financing of national health-care systems at all levels of care. Policies are required for strengthening and expanding human resources, including training of existing health professionals, as well as educating volunteers and care takers

Palliative Cancer Care by AYUSH Systems

AYUSH Public Health KARUNYA (AYUSH Palliative Services) has been included in the revised guidelines of NAM. **Its objective is to ensure quality assured, integrated supportive palliative care for the needy patients including chronic diseases**. Supportive Palliative care can be given anywhere - at home or in the hospital. Homecare is considered better because patients are more comfortable in their own home. Supportive Palliative care can be provided through AYUSH Dispensaries/Health & Wellness Centres (HWCs), secondary level AYUSH Hospitals or the referral hospitals, along with the patient‘s regular treatment. It should be a part of existing AYUSH healthcare at all levels of care. Low cost, effective supportive palliative care can be delivered as part of primary care even in far-off areas. Palliative care should be started early, preferably from the time of diagnosis. This helps build trust, plan ahead to prevent symptoms and have timely discussions with the family.

The Ministry should improve its presence in the remote areas and further train and empower Ayush faculty as trained manpower in intra-Ayush integrative oncology and the upgraded facility will definitely deliver good palliative cancer care to the needy in the remote and rural area in a more economical way.

Ayurveda interventions should be used for palliative cancer care. The palliative care facilities at Ayush hospitals should be upgraded through the strengthening of the manpower in terms of training in intra-Ayush integrative oncology.

The Ministry of Ayush through its research council runs **"Swasthya Rakshan Programme"** to provide health care facilities at the remote/rural areas and the same can be utilized for providing similar facilities like screening, follow up and prevention strategies through mobile units to cover rural and remote regions of the country