Journal of Oncology Research and Treatment

Thomas, J Oncol Res Treat 2025, 10:1

Review Article Open Access

Public and Private Financial Protection Schemes/Programs for Cancer Patients in the North-East Specially with Regard to Sikkim, Mizoram and Arunachal Pradesh-(A Systematic Review)

Toms K Thomas, Tenzing Sherpa*, Satish Kumar, Anitta Nath, Sayanti Chakraborty, Roma Basnett and Navnit Basnet

Department of Oncology, University of Delhi, Delhi, India

Abstract

Background and objectives: The North-Eastern (NE) region has the highest incidence of cancer in India, and is also burdened by higher prevalence of risk factors and inadequate cancer treatment facilities. The aim of this study was to describe the cancer profile of the NE region, focusing on the cancer sites that have high incidence and to identify research priorities.

Methods: Incidence data from Population-Based Cancer Registries (PBCRs) in the North-East region (8 states) were utilized and relevant literature was reviewed to identify risk factors.

Results: Aizawl district in Mizoram had the highest incidence of cancer in men (Age-Adjusted Rate (AAR) of 269.4 per 100,000). Among women, Papumpare district of Arunachal Pradesh had the highest incidence (AAR of 219.8) in India. East Khasi hills district in Meghalaya had the highest incidence of oesophageal cancer (AAR of 75.4 in men and 33.6 in women). Aizawl district in Mizoram had the highest incidence of stomach (AAR–44.2 in men) and Papumpare district had highest incidence of stomach (AAR 27.1 in women), liver (AAR–35.2 in men and 14.4 in women) and cervical cancers (AAR–27.7). Lung cancer (AAR–38.8 in men and 37.9 in women) and gall bladder cancer incidence (AAR–7.9 in men and 16.2 in women) were highest in Aizawl and Assam (Kamrup urban) PBCRs, respectively. Nagaland had the highest incidence of nasopharyngeal cancer (AAR of 14.4 in men and 6.5 in women), a relatively rare cancer in other regions of India. Four states (Arunachal Pradesh, Manipur, Sikkim and Tripura) in NE had only one cancer treating facility.

Interpretation and conclusions: Further research on specific aetiological factors in the region and multi-disciplinary research for development of tools, techniques and guidelines for cancer control are the need of the hour.

Keywords: Cancer; Cancer facilities; Cancer incidence; Cancer research needs; North-East India; Research agenda

Introduction

Mutations that originate from errors in DNA replication, inherited mutations, environmental conditions, or all three can lead to cancer [1]. Aging is the main risk factor for carcinogenic in multicellular animal organisms including humans [2]. In 91 of the 172 nations studied, cancer ranks first or second in terms of the primary cause of death, and third or fourth in another 22 [3]. One of the biggest threats to world health today is cancer. The number of new cancer cases is predicted to increase globally by almost 50% over the next two decades. Successful worldwide cancer care has many challenges, especially in Low and Middle-Income Countries (LMICs) [4]. In both urban and rural India, cancer ranks as the second and fourth most common adult killer, respectively [5]. In India, cancer is currently the main source of catastrophic health cost, financial distress, and rising expenditure before death [6,7]. Inpatient private cancer care in India has an Out-of-Pocket Expense (OOPE) that is three times greater. Borrowing, asset sales, and donations from friends and family help cover about 40% of the cost of treating cancer, which is more expensive than the average yearly household expenditure of 20% in Capita 60% of Indian households with a patient with cancer [8]. India's public cancer facilities are woefully underfunded, and there are several private cancer care facilities there [9]. Some have taken advantage of this circumstance by offering vulnerable individuals experimental cancer treatments that have not been proven to be effective [10,11].

All public cancer treatment facilities are overflowing with patients due to the significant increase in cancer cases, which has led to India's cancer crisis being referred to as an epidemic or pandemic a tsunami [12-15]. Cancer accounts for more than 6% of all deaths in India, where the mortality rate is 79 per 100,000 people. These figures are quite similar to those of high-income nations. Furthermore, it is anticipated that by the end of this decade, India's cancer mortality rate will reach over 900,000 deaths. Additionally, due to increased rates of breast and uterine cancer, India's cancer incidence is known to have a

***Corresponding author:** Tenzing Sherpa, Department of Oncology, University of Delhi, Delhi, India, Tel: 6296859582; E-mail: tenzingp_sherpa@srmus.edu.in

Received: 07-August-2023, Manuscript No. AOT-23-109458; **Editor assigned:** 09-August-2023, PreQC No. AOT-23-109458 (PQ); **Reviewed:** 23-August-2023, QC No. AOT-23-109458; **Revised:** 16-January-2025, Manuscript No. AOT-23-109458 (R); **Published:** 23-January-2025, DOI: 10.4172/aot.1000305

Citation: Thomas TK, Sherpa T, Kumar S, Nath A, Chakraborty S, et al. (2025) Public and Private Financial Protection Schemes/Programs for Cancer Patients in the North-East Specially with Regard to Sikkim, Mizoram and Arunachal Pradesh-(A Systematic Review). J Oncol Res Treat 10: 305.

major gender component. The cost of cancer treatment can push patients and their families into severe unhappiness and even financial ruin. It is also mentioned that Out-Of-Pocket (OOP) spending on hospitalisation for cancer is almost 2.5 times that of the national average for hospital spending. Despite the fact that the cost of treating patients with cancer in hospitals is the highest of all Non-Communicable Diseases (NCDs), many cancer patients are forced to turn to costly out-of-pocket medical expenses to distressed means for treatment financing.

Literature Review

Economic burden of cancer (India)

Cancer has an impact on everyone in the household, not just the patient. Cancer survivors pay higher costs of therapy for a longer length of time due to the continuing nature of cancer care and long-lasting therapeutic effects. The costs of new cancer therapies are increasing as well. In India, the share of cancer in the total disability adjusted life years doubled from 2.3% to 5% from 1990 to 2016. And across all illnesses, cancer treatment was determined to have the greatest Out-of-Pocket Expenses (OOPE) in 2014. Multi-modality treatment protocols incorporating surgery, chemotherapy and radiotherapy, combined with the long duration of treatment, high cost of drugs, sophisticated diagnostic techniques and procedures, post-acute care, readmission, and long-term follow-up of patients lead to considerable financial burden of medical care on patients with cancer. Due to the patients' expenses for food, transportation, and housing (because cancer treatment facilities have a bad geographical location), the cost of cancer care in India has increased dispersion) as well as the indirect cost brought on by their careers' decreased output [1-3].

The financial consequences of the expenditures of cancer treatment consequently disproportionately affect low-income households. As a result of the extensive medical treatment, cancer places a financial strain on a household. This relates to both the direct and indirect expenditures incurred throughout the entire treatment period, Out-of-Pocket (OOP) costs, which are once more included in the direct cost of treatment, lost productivity, and early deaths [4,5]. In addition to the financial effects of cancer, the psychological devastation phenomena of cancer play a critical role in how a patient lives with the disease with cancer. A collective welfare loss is seen in both the family members and patients, which the WHO describes as the loss of valued non market assets, which contribute to the intrinsic value of human life and happiness. Therefore, it is crucial to comprehend patient perspectives on mental health, evolving family dynamics, and how these factors affect the cancer's own healing process [6-8].

Financial implications of cancer

Both direct and indirect expenditures are associated with the cancer treatment procedure. As determined by insurance payments and patient out-of-pocket expenses, the direct cost of cancer is the price patients pay for the medical care they receive. The financial losses associated with time spent obtaining medical attention, time away from work or other daily activities, and lost output due to premature death are known as the indirect costs of cancer.

According to published research on the subject, private and public institutions charge very different prices for breast cancer care. The direct cost of treatment is found more in a private hospital, whereas indirect cost is reported more in government hospitals than private hospitals. The all India institute of medical sciences study from 2006–2007 revealed the financial burden that cancer patients experience for a 5 to 7 week course of treatment that includes radiotherapy represents approximately 330%–450% of the monthly per capita income of the family [9]. Therefore, cancer therapy was out of reach for the majority of sufferers. According to published research, the cost of cancer therapy is significantly influenced by the cost of cancer medications. The majority of anti-cancer medications are out of the reach of the general public due to their high and fluctuating costs.

Out of pocket expenditure

The phrase "OOP expenditure" refers to household spending for which they obtained health services, such as inpatient or outpatient care, as well as non-medical costs like travel or lodging. Rarely is the relative impact of expenditures taken into consideration when estimating the financial burden of cancer.

Numerous studies have shown that cancer patients incur significant OOP costs each month, the most of which are related to career fees, transportation, and travel. Rural households have to bear additional OOP expenses in the form of traveling and boarding/lodging at distant medical institutions. An investigation conducted by Mahal et al., revealed that compared to control households, households affected by cancer had a much greater rate of borrowing money and selling assets [10].

Cancer rates are by no means lower in India, and they constitute a threat to the country's residents' general welfare and development. Using the unit-level data from the 71st round of the national sample survey organization. The Catastrophic Health Expenditure (CHE) incurred by households for cancer and compared it to CHE from other diseases. Among all other illnesses, including heart diseases, neurological disorders, genitourinary difficulties, musculoskeletal diseases, gastrointestinal problems, and traumas, cancer was shown to have the highest CHE (79%). Additionally, they stated that CHE had resulted in problematic financing for homes. The definition of "distress financing" is the borrowing of funds and the selling of assets to pay for medical expenditures. According to the study, those with cancer who were hospitalised had a 3.2 times higher chance of needing distress funding than those with tuberculosis, who had a 2.6 times higher chance. The catastrophic OOP expenses experienced by households across all income groups in India are also not fully covered by the public, commercial, and community based health insurance systems. A study done by Dalui et al., on 253 rural households revealed that 64.3% of the entire sample's households had health insurance. However, almost one-sixth of the sample households experienced CHE on various diseases. It is important to bring up the Pradhan Mantri Jan Arogya Yojana, a government funded insurance and guarantee programme that provides a Rs. 5 lakhs/year per family for private and public hospitalizations in India for the bottom 40% of the Indian population. Although this scheme acts as a major relief for affected poor families, it does not fully solve the problem of the economic burden of cancer patients in India (Supplementary Table 1).

Cancer in North-East

India is a culturally diverse country, with huge urban to rural variation in lifestyle and age-specific adult death rates. Thus, it is important to understand the geographical and social distribution of cancers and their causes if region specific and to target cancer control programs accordingly. In India, the age-standardized mortality rate

due to cancer for women and men is 90 and 65.8, respectively, per lakh population. India's North East region exhibits an odd trend in the incidence of cancer. NE India is emerging as the cancer hub. It is of utmost importance that special attention should be given with multidisciplinary and multidimensional approach, for addressing and mitigating cancer problem which may be accomplished by region specific and state specific endeavor [11]. In India, cancer incidence and mortality data were collected by population based cancer registries and were estimated and reported in terms of crude rate, Age-Adjusted Rates (AARs), and age-adjusted (NCRP) of the Indian Council of Medical Research's national cancer registry programme, called the annualised incidence rate (AAMR). Recently, the NCRP has published a 3-years report of population-based cancer registries 2012-2014. The highest AAR and AAMR for all cancer sites per 100,000 inhabitants of the Indian region were observed in Northeast (NE) states [12]. Of 10 high incidence regions, seven in male and four in female were observed from NE states compared to mainland India. Since the creation of the first cancer registries in this area in 2003, the North-Eastern (NE) States of India have continuously had the highest rates of cancer incidence across all sites. Additionally, compared to other locations, this region has a greater prevalence of upper digestive tract malignancies, including oesophageal, stomach, and hypopharyngeal tumours. Additionally, a combined examination of the HBCR data from the North-East revealed lower survival rates, a lower rate of localised case detection, and distinct cancer patterns compared to other parts of India. Understanding the unique cancer trends in this area, creating suitable strategies, and establishing research objectives are urgently needed. Despite the fact that numerous articles on the subject of the region's cancer burden have been published, many of them have either focused on particular disease kinds or reviews outlining the cancer profile, but a comprehensive analysis of all relevant cancers, associated aetiological factors and possible public health measures is lacking [13].

Table 1: Leading cancer incidence at North-East respective with gender and Age Adjust Rates (AAR).

Males	Age Adjust Rates (AAR)	Females	Age Adjust Rates (AAR)
Esophagus	14.7	Breast	11.3
Stomach	10.5	Cervix uteri	10.1
Lung	13.3	Esophagus	7.1
Hypopharynx	7.4	Lung	7

The desk review shows that Northeast India is at higher risk of developing tobacco related cancers where it shows the leading incidence of cancer of Esophagus, hypopharynx, and stomach in males followed by breast cancer, cervix and esophagus in females. According to National Control Registries Program (NCRP), 57% of all cancers in males 28% in females in north east India are to be known to be associated with tobacco consumption. Whereas, the survival rate is comparatively very low, with higher proportion of distant meta cases at diagnosis.

From Tables 2 and 3 it is observed that the proportion of patients taking treatment outside does not entirely depend on the availability of cancer treating facilities, for example, despite having 11 cancer treating hospitals in Nagaland, 78.7% of patients are seeking treatment outside the region. There is only one palliative care facility and one radiotherapy facility, but no cancer patient welfare programme has been discovered. However, if we look at Assam it has six cancer treating hospitals, six radiotherapy facilities, nine cancer patient welfare schemes, and eight palliative care centres and hence providing better "set of services" to the patients with "multidimensional approach" and that may be the reason why 93.4% of cancer patients are undergoing treatment within the state itself. There could be other possible reasons that compel patients to seek treatment outside their home state such as quality of services, availability of specialized HR, and private treatment centres. It may be also noted that since the cases diagnosed at the localized stage are lower, screening program needs to be strengthened and extensively carried out at the community level. More awareness generation program should be taken up. Women attending health facilities, adolescent girls in schools, etc., should be targeted and informed about self-examination of breast cancer and preventive measures (Supplementary Table 2).

Table 2: Hospitals and facilities that are available in North-East.

State	District hospitals	Cancer treating hospitals	Radiotherapy facilities	Cancer patients welfare schemes	Palliative care centers
Assam	25	6	6	9	8
Arunachal	14	1	1	0	0
Meghalaya	12	7	1	0	1
Mizoram	8	5	1	3	2
Manipur	7	1	0	0	1
Sikkim	4	1	0	0	1
Tripura	6	1	1	0	1

Nagaland	11	11	1	0	1

Table 3: Shows the proportion of cancer patients taking treatments in the institutions within and outside the North East.

State	Within North-East	Outside North-East
Assam	93.40%	6.6%
Arunachal Pradesh	82.4%	17.6%
Meghalaya	80.9%	19.1%
Mizoram	41.8%	58.2%
Manipur	37.6%	62.4%
Sikkim	1.7%	98.3%
Tripura	63.5%	36.5%
Nagaland	21.3%	78.7%

Discussion

Health financing schemes (India along with North-East)

In order to attain universal health coverage and mitigate financial risk, PFHIs (Publicly Financed Health Insurance Plans) are a crucial strategic strategy in low income and middle income countries. The family who are caring for the patients often experience anguish and depression due to monetary, interpersonal, and societal issues. Since 2007, a number of publicly funded health insurance programmes have been introduced in India, including the Rashtriya Swasthya Bima Yojana (RSBY) at the federal level as well as the Chief Minister and Comprehensive Health Insurance scheme (CMCHIS) in Tamil Nadu and the Rajiv Aarogyasri Health Insurance Scheme (RAS) in Andhra Pradesh [14]. The overwhelming majority effects in India shows that it was not successful in providing financial security. Only 12% of the urban population and 13% of the rural population, according to the most recent National Sample Survey (NSS) data, are covered by any sort of health insurance. Cancer is a major cause of catastrophic medical costs in India, where just 25% of the population has access to any type of health insurance. Increasingly frequent health care expense crises are increasingly seen as one of the primary drivers of poverty (Supplementary Table 3).

A cancer diagnosis comes with a price tag that includes not just a large financial burden but also a psychological and physical cost. 6 crore Indians are pushed below the poverty level each year due to the cost of cancer treatment for their families. Households are using a variety of strategies to deal with the rising OOPE on health care, including current income, savings, asset sales, moneylender borrowing, and reductions in consumer spending. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY), funded by taxes, was introduced in 2018 by the Indian government to give 50 million impoverished people in India with cashless hospitalization care for secondary and tertiary health services up to INR 500,000 annually. Except for the North-Eastern region and three Himalayan states, where the ratio is 90:10, the system is funded equally by the federal government and state governments at a 60:40 split (Table 4). Currently, the North-Eastern states of India have launched various health care financed schemes such as Mukhya Mantri Jeevan Rakshya Kosh Scheme in Sikkim, Health Minister Cancer Patients Funds (HMCPF) in Mizoram and Chief Minister's free chemotherapy scheme in Arunachal Pradesh However, the astounding amount of Out-of-Pocket Expenses (OOPE) on health, with cancer accounting for the largest OOPE and pushing millions into poverty overall, hinders progress towards the use of health financing schemes in North East India. In India, both the national and state level Publicly supported Health Insurance programmes (PFHIs) have undergone a thorough evaluation. The methods, enrolment, design, or influence on utilization, Out-of-Pocket Expenses (OOPE), financial risk protection, equality, and overall health repercussions have been the main focus of these reviews. There are, however, few studies that have examined the manner in which cancer care funding schemes are used in the states of the North East, as well as their overall impact on the health outcomes of cancer patients (Table 5) [15].

Table 4: Major public sector health care financing schemes in the North Eastern states.

State	Sl. no	Name of the scheme
Sikkim	1	Sikkim state illness assistance fund
	2	Su-Swasthya
	3	Mukhya Mantri Jeevan Rakshya Kosh scheme
Mizoram	4	Mizoram state health care scheme

	5	Screening of medical reimbursement claims of government employee and their dependent
Arunachal Pradesh	6	Chief Minister's Arogya Arunachal Yojana
	7	Chief Minister's free chemotherapy scheme
Meghalaya	8	Megha health insurance scheme
Tripura	9	Tripura health scheme for poor
Nagaland	10	Chief Ministers (Naga) health insurance scheme
Assam	11	Assam Arogya NIDHI
	12	Chief Minister's free diagnostics services
	13	Free drug service
	14	Sneha Sparsha
Manipur	15	Hakshelgi Tengbang Manipur health protection
	16	Manipur CM's health for all schemes (door to door health care services)

Table 5: Profile of various health care financing schemes in the North East.

S. no	Name of the scheme	Profile of the scheme (Coverage/Premium/ Eligibility)
1	Sikkim state illness assistance fund **Coverage area:** Sikkim List of government health schemes for cancer patients in Sikkim (1 mg.com)	**Coverage:** Cashless treatment facilities up to Rs. 1.5 lakhs. For treatment beyond the Rs. 1.5 lakh limit, funding shall be provided by the Central government. **Premium:** Free **Eligibility:** BPL households of Sikkim with identity card
2	SU-SWASTHYA **Coverage area:** Sikkim SU-SWASTHA YOJNA (suswasthasikkim.com)	**Coverage:** Regular employees in service of the government of Sikkim and dependent family members. It covers maximum of 5 dependents in a scheme that provides 10 lakhs of cover to the family per year. **Premium:** 200 (monthly basis) **Eligibility:** Employees under state Government
3	Mukhya Mantri Jeevan Rakshya kosh scheme **Coverage area:** Sikkim List of government health schemes for cancer patients in Sikkim (1 mg.com)	**Coverage:** The financial assistance is provided from Rs 20,000 up to Rs 2,00,000 for better treatment. **Premium:** Free **Eligibility:** Permanent residents of Sikkim, must not belong BPL category.
4	Mizoram state health care scheme **Coverage area:** Mizoram	**Coverage:** Up to 2 lakhs, with each family enrolling themselves for all ailments requiring hospital admission and selected 26 OPD cases. **Premium:** Rs 100 for BPL families and 1,000 for APL. **Eligibility:** To all the bonafide residents of Mizoram
5	Screening of medical reimbursement claims of government employee and their dependant **Coverage area:** Mizoram	**Coverage:** It screens and recommends the approved amount based on government notified rates, whereupon, the concerned treasury makes the payment to the government servant.

		Premium: Free for only state government employee and there dependent. **Eligibility:** State government employee and their dependent.
6	Chief Minister's Arogya Arunachal Yojana **Coverage area:** Arunachal Pradesh	**Coverage:** Up to 5 lakh per family per year is made available by the state Government In addition to that pre -hospitalizations expenses for up to 3 days and post-hospitalizations expenses for up to 10 days are covered. **Premium:** Free to all the tribal communities that are recognized by the state. **Eligibility:** Belonging to any of the tribal communities that are recognized by the state
7	Chief Minister's free chemotherapy scheme **Coverage area:** Arunachal Pradesh	**Coverage:** Medicines Worth 10 lakhs per year (5 lakhs for 6 months) are provided free of cost. Provide free consultation and free counseling to the eligible patients. **Premium:** Free to the regular state government employee Arunachal Pradesh. **Eligibility:** Applicant must be a resident of Arunachal Pradesh. Regular state government employee and their dependents.
8	Megha health insurance scheme **Coverage area:** Meghalaya	**Coverage:** It cover was increased Rs 1.6 lakhs for all citizens of state. (Excluding state and government employee. The insurance cover was increased over the years 2 lakhs in phase II and 2.8 lakhs in phase III (plus 30,000 senior citizen cover for enrolled senior citizen. 5 lakhs in phase IIII and 5.5 lakhs in phase 5 and now being implemented with PMJAY with coverage on no limits on family size and cover pre-existing diseases. **Premium:** At the time of enrolment, beneficiaries of the scheme are required to pay Rs. 50. **Eligibility:** Residents of Meghalaya, Central and government. Employees are not covered in this scheme. Up to 5 members of family can enrolled in this cover.
9	Tripura health scheme for poor **Coverage area:** Tripura	**Coverage:** This scheme offers financial support in case of hospitalizations, to cover the cost of treatment of surgeries, therapies, critical illness and so on. Each family is granted a health cover of Rs.1.15 lakhs per annually. At all empanel led hospitals, beneficiaries under the scheme can make cashless facility to cover the cost of treatment. **Premium:** Free **Eligibility:** Annual income of the family has to be less than Rs. 1.5 lakh in order to covered THASP all the names of family members have to be mentioned on family ration card that is issued by the government of Tripura.
10	Chief Ministers (Naga) health insurance scheme **Coverage area:** Nagaland CMHIS| Nagaland	**Coverage:** Free and cashless hospitalization care for various ailments including pre-existing conditions/ diseases, which can be availed from any empanelled hospital across the country. The treatment will include both surgical and medical procedures and limited day-care packages.

		Premium: Free to all the permanent residential people of Nagaland **Eligibility:** Permanent and indigenous residents of Nagaland.
11	Assam Arogya NIDHI **Coverage area:** Assam	Coverage: AAN provides financial assistance that goes up-to Rs 1,50, 000 that covers all life-threatening tillness such as kidney diseases, heart diseases, cancer, orthopaedic diseases.. **Premium:** Free to the residents of Assam under BPL families. **Eligibility:** Resident of Assam who are under BPL families who's monthly income of less than Rs. 10,000. Govt. employees or govt. pensioners are not entitled.
12	Chief minister's free diagnostics services **Coverage area:** Assam	**Coverage:** In which patients will receive CT scan image along with report prescribed by qualified radiologists. Normal case report was report in within 6 hours and emergency was reported within 12 hours. The patients will receive digital X-ray image along with prescribed by radiologists in which all the patients of GVM will be provided X-RAY service free of cost. **Premium:** Free to all the resident's people of Assam. **Eligibility:** All citizen irrespective of APL/BPL status (Assam).
13	Free drug service **Coverage area:** Assam	**Coverage:** The essential drugs are procured in generic form and provided free of cost to all OPD and IPD patients in government hospitals in Assam. Both the central and state government provide budgetary support for this initiative of providing essential drugs free of cost to patients visiting government hospitals. **Premium:** Free **Eligibility:** Family income of the applicant should be less than 5 lakhs per annum and should be permanent resident of Assam.
14	Sneha Sparsha **Coverage area:** Assam	**Coverage:** Financial assistance up to Rs. 10 Lakh per case for referral of such cases to leading hospitals outside the state equipped with facilities for such treatment. Additionally, under the Snehasparsh Plus scheme, one-time financial assistance of Rs. 50,000/- and 36 instalments of Rs 2500/- will be made to children with cerebral palsy and other neurological disorders who are selected as beneficiaries after a detailed screening by expert committee. **Premium:** Free to children **Eligibility:** All Children below 14 years of age will be entitled to get benefits under this scheme with annual income less than Rs 5 (five) lakhs per annum. However, in exceptional cases the income limit may be relaxed after due consideration at the highest level.
15	Hakshelgi Tengbang Manipur health protection **Coverage area:** Manipur	**Coverage:** Health cover up to Rs 2,00,000 per family per year covers secondary and tertiary care hospitalization. The scheme has provision of payment of air/train fare to the beneficiary plus one attendant for treatment outside the state. **Premium:** Free to BPL people of Manipur. **Eligibility:** Bonafide citizen of Manipur who belongs to any of the category. Bonafide citizen of Manipur

		who claim to be poor. But other category can also apply they will need the verification from district collector of particular state.
16	Manipur Cm's Health for all schemes (door to door health care services) **Coverage area:** Manipur	**Coverage:** Provide free door-to-door health check-ups by health experts, doctors and nurses in every village. Are detection, treatment and follow-up. The primary focus of Cm's Health for All Scheme would be early identification and diagnosis of 10 Non-Communicable Diseases (NCD) diseases: Cancer, hypertension, heart disease, diabetes, kidney transplantation. **Premium:** Free to all the resident's people of Manipur **Eligibility:** Elderly patients above 60 years, bed-ridden patients and NCD patients, who are not on regular follow-up or who have not visited health centre due to financial or physical problem.

What really matters for cancer care

Accessibility, affordability, and equity are determined by the funding, organisation, and delivery of cancer care by health systems, as well as by the larger political, economic, and social context in which those systems are embedded and outcomes of cancer control interventions. Both of these aspects set the parameters for policies and strategies that help protect people's health (e.g., legislation on unhealthy commodities), define options for early detection and prevention (e.g., human papillomavirus vaccination), when and how people seek care, what treatments are available, who gets these treatments, the cost and cost-effectiveness of the treatment and the quality of care delivered. It also frames the science that is being produced by defining research ecosystems and prioritization of what it is believed will drive through the greatest improvements in outcomes.

Conclusion

However, most cancer research funders do not consider these domains a priority for funding, potentially because the impact that investment in cancer systems and policy research would have at a national and international level is not immediately visible to clinical and patient communities. By way of introduction, we consider four major health system themes that exemplify the results of a strategic imbalance in funding and policy, and how investment could serve to redress this discrepancy that is causing a marginal gains-driven depreciation of cancer care globally.

References

1. Tomasetti C, Li L, Vogelstein B (2017) Stem cell divisions, somatic mutations, cancer etiology, and cancer prevention. Science 24: 1330-1334.
2. Albuquerque TA, Drummond do Val L, Doherty A, de Magalhaes JP (2018) From humans to hydra: Patterns of cancer across the tree of life. Biol Rev 93: 1715-1734.
3. Ferlay J, Colombet M, Soerjomataram I, Mathers C, Parkin DM, et al. (2019) Estimating the global cancer incidence and mortality in 2018: GLOBOCAN sources and methods. Int J Cancer Res 144: 1941-1953.
4. Gelband H, Sankaranarayanan R, Gauvreau CL, Horton S, Anderson BO, et al. (2016) Costs, affordability, and feasibility of an essential package of cancer control interventions in low-income and middle-income countries: Key messages from disease control priorities. The Lancet 387: 2133-2144.
5. Smith RD, Mallath MK (2019) History of the growing burden of cancer in India: From antiquity to the 21st century. J Glob Oncol 5: 1-5.
6. Kastor A, Mohanty SK (2018) Disease-specific out-of-pocket and catastrophic health expenditure on hospitalization in India: Do Indian households face distress health financing?. PloS One 13: e0196106.
7. Das SK, Ladusingh L (2018) Why is the inpatient cost of dying increasing in India?. PLoS One 13: e0203454.
8. Rajpal S, Kumar A, Joe W (2018) Economic burden of cancer in India: Evidence from cross-sectional nationally representative household survey. PloS One 13: e0193320.
9. Pramesh CS, Badwe RA, Borthakur BB, Chandra M, Raj EH, et al. (2014) Delivery of affordable and equitable cancer care in India. The Lancet Oncol 15: e223-e233.
10. Chatterjee A, Biswas J, Chatterjee A, Bhattacharya S, Mukhopadhyay B, et al. (2011) Psorinum therapy in treating stomach, gall bladder, pancreatic, and liver cancers: A prospective clinical study. Evid Based Complementary Altern Med 2011: 724743.
11. Chatterjee A, Bhattacharya S, Chatterjee AK, Biswas J, Mukhopadhyay B (2009) A prospective observational clinical study involving an alternative cancer treatment, psorinum therapy, in treating stomach, gallbladder, pancreas, and liver cancers. J Clin Oncol 27: 3050.
12. Gandhi AK, Kumar P, Bhandari M, Devnani B, Rath GK (2017) Burden of preventable cancers in India: Time to strike the cancer epidemic. J Egypt Natl Canc Inst 29: 11-18.
13. Kumar P, Bhattacharyya GS, Dattatreya S, Malhotra H (2009) Tackling the cancer Tsunami. Indian J Cancer 46: 1-4.
14. Shetty P (2012) India faces growing breast cancer epidemic. The Lancet 379: 992-993.
15. Gupta B, Ariyawardana A, Johnson NW (2013) Oral cancer in India continues in epidemic proportions: Evidence base and policy initiatives. Int Dent J 63: 12-25.