

The Cancer Mukta Jagrukta Abhiyan: Arunachal Pradesh

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Abstract

The **Cancer Mukta Jagrukta Abhiyan-Arunachal Pradesh** is a joint project by **Government of Arunachal Pradesh, Mon Indigenous Culture & Welfare Society, Chabbi Sahayog Foundation and Dev Desh Viadyakiya Shaikshanik Samajik Pratishthan** with the aim to create awareness about cancer prevention, early detection, and treatment among the residents of Arunachal Pradesh. The project will involve conducting awareness campaigns, providing training and education to healthcare professionals, and establishing cancer screening and treatment centres in the state.

Cancer incidence and its related mortality has been a public health concern for Arunachal Pradesh in India. However, there is a lack of evidence about the knowledge, attitude and practice (KAP) for cancer risk factors, screening programmes and preventive behavior – especially among indigenous tribal populations. A health camp based survey was conducted from 21st November 2023 to 28th November 2023 among an indigenous population of Tawang District Arunachal Pradesh. Snowball sampling was used to enroll 705 participants (233 were male and 472 were female). Univariate and bivariate analyses were conducted using SPSS version 23 to test the hypothesis of KAP. (There is no difference in the level of knowledge / in the attitude / level of practice among study participants with respect to any independent (socio-demographic and other) factors.) The Papumpare Cancer Registry reported the highest cancer density among women and the second highest among men among all population-based cancer registries in India (Indian Council of Medical Research, Report of National Cancer Registry Programme, Bengaluru, India 2020). Knowledge about the cause of cancer and risk factors was poor among the respondents. Attitude towards screening was negative. Practice levels to prevent cancer were also low. More than 50% of the cases were treated outside the state and at private hospitals. Knowledge about cancer symptoms and risk factors was limited in the population. There is a need for more effective health promotion services in the state. Mass screening facilities and behavioral change activities are required and could be disseminated through social media platforms. Our analysis of a north-eastern region of India, which has unique geographical and cultural characteristics, informs future policy designs and other related studies for controlling cancer in the area.

Keywords: Cancer Mukta, Arunachal Pradesh, Cancer Detection

Background

Brief geographical characteristics of the North-eastern states of India and Arunachal Pradesh

India has 28 states and 8 union territories. The north-eastern part of India consists of eight states. Most of the population (45,587,982) belong to the hilly and tribal population, per the 2011 Census . Arunachal Pradesh comprises 3% (1,382,611) of the total population of the North-eastern states of India (68.8% tribal population). The state has a sex ratio that is 938. The literacy rates among women and men are 57.7% and 72%, respectively . The five major tribal communities—Monpa, Apatani, Nissi, Adi, and Galo—constitute 41% (558,546 people) of the population .

Cancer epidemiology in Arunachal Pradesh

Cancer registries are maintained for three major geographical sites of Arunachal Pradesh .Papum Pare (central region), Pasighat (eastern region) and West Arunachal (western region of Arunachal Pradesh). Approximately 3017 cancer cases were reported in Arunachal Pradesh from 2014 to 2016 (51% men and 49% women) . The age-adjusted rate of cancer is highest in Papum Pare region, for both men and women .

The top four cancer sites among men in West Arunachal Pradesh are stomach, liver, esophagus and lungs. Among women, stomach, breast, cervix uteri, thyroid and liver are the most prevalent in West Arunachal . In Pasighat, the proportion of stomach cancer (18.1%) was highest among men, followed by lung (7.8%) and liver (5.9%) cancer. In women, the cervix uteri was the leading cancer site (18.5%), followed by breast (16.8%) and stomach (9.6%) cancer .

The state has 1 medical college, 6 general hospitals, 15 district hospitals, 51 community healthcare centers, 148 primary healthcare centers, 4 urban primary healthcare centers and 582 sub-healthcare centers . Arunachal Pradesh has developed 136 health and wellness centers, which provide non-communicable disease (NCD) screening facilities along with screening of 3 types of cancers, breast, cervical and oral, for those aged ≥ 30 years . A tertiary cancer care facility was established under the new medical college; however, a dedicated cancer hospital is absent in the state .

Cancer poses a major public health problem worldwide owing to its high prevalence and incidence along with the associated socio-economic burden. The projected number of patients with cancer in India was 1,392,179 in 2020, with a higher reported incidence among women (712,758) than men (679,421) . The top five common cancer-reported sites are breast, lungs, mouth,cervix, uteri and tongue.. There is marked heterogeneity in the cancer incidence (age-adjusted rate per 100,000 people) among both men and women across different regions within Indian states.

The higher incidence of cancer was attributed to higher consumption of tobacco in the North-eastern states, followed by the West and Central regions of India. Among men, the most common cancer sites included lungs, mouth, esophagus and stomach. Among women, the predominant cancer site was breast, followed by cervix, uteri and ovaries .

Awareness about cancers and cancer screening procedures will help in early diagnosis and subsequent treatment and a better outcome. Thus, the authors have tried to collate information related to cancer awareness and attitude towards screening methods to get an overall view of the situation. With rolling out of the screening services in the country, there is the need to synthesize a review on cancer awareness.

Such information would aid in making systematic changes in the programme if required to improve uptake of the screening programme and overall awareness related to cancer in the population. Hence this report was commenced after receiving ethical approval from the Director of Health Services Arunachal Pradesh.

GOVERNMENT OF ARUNACHAL PRADESH
DIRECTORATE OF HEALTH SERVICES :: NAHARLAGUN
dhsnlg@gmail.com

No. MEST-2008/266 Dated Naharlagun, the 14th Nov, 2023.

To, ✓
The Chairman,
Mon Indigenous Culture & Welfare Society, (MICWS)
Chhabi Sahayog Foundation and Dev Desh
Vaidyakiya Shaikshanik Samajik Pratishthan

Sub:- **Approval for project Cancer Mukta Jagrukta Abhiyan – Arunachal Pradesh**

Sir,

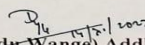
With reference to your letter No. Nil Dtd. 14th Nov'2023, I am to inform you that the Dept. of Health & FW, Govt. of A.P. has agreed to your proposal for **Cancer Mukta Jagrukta Abhiyan**, Arunachal Pradesh. The Dept. believes that your organization namely Mon Indigenous Culture & Welfare Society, Chhabi Sahayog Foundation and Dev Desh Vaidyakiya Shaikshanik Samajik Pratishthan has expertise and resources necessary for successful implementation of this important initiative in our State.

The Dept. appreciates your efforts to raise awareness about Cancer and educate the people of Arunachal Pradesh about its prevention, early detection, and treatment options. Your wide range activities and initiatives including education dissemination and community outreach programmes will greatly contribute in reducing the burden of Cancer in our State.

On behalf of Dept. of Health & FW I would like to express our thankfulness to your tireless efforts and dedication for improving the health and well-being of our citizens. The Cancer Mukta Jagrukta Abhiya Arunachal Pradesh campaign will make a significant difference in raising awareness and reduce the prevalence of Cancer in our State.

Thanking you for your valuable contribution. We look forward to witness the positive outcomes of this campaign.

Warm regards.

Yours sincerely,

(Dr. Dondu Wange) Addl. DHS
I/C Director of Health Services,
Arunachal Pradesh, Naharlagun

Memo No. MEST-2008/266 Dated Naharlagun, the 14th Nov, 2023.
Copy for information to:-
1. PS to Secretary (Health & FW) Govt. of Arunachal Pradesh, Itanagar.
2. The State Nodal Officer (CCP) of this Directorate.
3. Office copy

(Dr. Dondu Wange) Addl. DHS
I/C Director of Health Services,
Arunachal Pradesh, Naharlagun

WHY ARUNACHAL PRADESH



THE TIMES OF INDIA

12/04/23, 5:48 PM

Cancer screening awareness low in Arunachal: Survey - Times of India

Printed from
THE TIMES OF INDIA

Cancer screening awareness low in Arunachal: Survey

PTI | Sep 12, 2022, 10:43 AM IST



ITANAGAR: Awareness about cancer screening continues to be low amongst the people of Arunachal Pradesh, with only 5.6% of the population aware of it, according to data revealed by a recent survey.

The ICMR- NCDIR monitoring survey of cancer risk factors and health system response in the northeast region found that only 5.6% of the people in Arunachal Pradesh it surveyed were aware of cancer screening. Among those, 5% of men were aware of it while 6.2 per cent of women knew about cancer.

Even fewer people had undergone any screening themselves. The survey found that only 0.6% of people in urban areas had ever undergone oral cavity examination for cancer, while in rural

populations it was 0.2%. It also found that only 1.4% of women in urban areas had undergone breast cancer screening while it was only 0.2% in rural areas.

The figures were even lower for women who had undergone cervical cancer screening - 0.3 and 0.1 per cent in urban and rural areas, respectively.

<https://timesofindia.indiatimes.com/itnanagars/cancer-screening-awareness-low-in-arunachal-survey/articleshow/94141737.cms>

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12/04/23, 5:59 PM

Cancer among top 5 leading causes of death in state | The Arunachal Times

The Arunachal Times



Cancer among top 5 leading causes of death in state

September 4, 2022

Staff Reporter

ITANAGAR, 3 Sep: Cancer is among the top five leading causes of death in Arunachal Pradesh, where one out of four persons in Papum Pare district alone has a chance to develop cancer in his/her lifetime in between 0-74 years, according to an ICMR-NCDIR survey report.

According to the reports of the National Cancer Registry Programme, the incidence, mortality, and cumulative risk of developing cancer has been consistently high in the Northeast region.

"As per data collected from the population-based cancer registries (PBCR) at the Lomo Riba Institute of Health & Medical Sciences in Naharlagun and the Bakin Pertin General Hospital 'In Raighat', the report says, "the leading sites of cancer among men include cancer of the stomach, liver, lung and oesophagus, while in women, cervix, stomach and breast comprise the leading cancer sites."

The PBCRs were established in 2011 with 40 and 65 sources of registrations, respectively.

Some of the key findings of the survey are high intake of preserved, salted, fermented, and smoked foods; high use of chewing tobacco; high exposure to second-hand smoke at home and workplace; and poor health system response and preparedness.

The report states that there is "low screening of non-communicable diseases like diabetes, hypertension and common cancers, poor health treatment seeking behaviour, majority of cancer patients seeking cancer treatment outside the state, and high out-of-pocket expenses in cancer treatment."

The report, however, does not elaborate how non-communicable diseases (NCD) are linked to cancer.

It points out that the rate of tobacco (both smoke and smokeless) use is 36.1 percent, while

<https://timesofindia.indiatimes.com/00229904/cancer-among-top-5-leading-causes-of-death-in-state/>

12/04/23, 5:59 PM

Cancer among top 5 leading causes of death in state | The Arunachal Times

The report states that the percentage of women who underwent screening for breast cancer is 0.4, while the percentage of women who underwent screening for cervical cancer is 0.1 percent.

The report further states that the rate of cancer patients seeking treatment outside the state is 60 percent, "out of which 100 percent of rural patients manage their treatment cost by themselves, or by taking loans, or by selling assets."

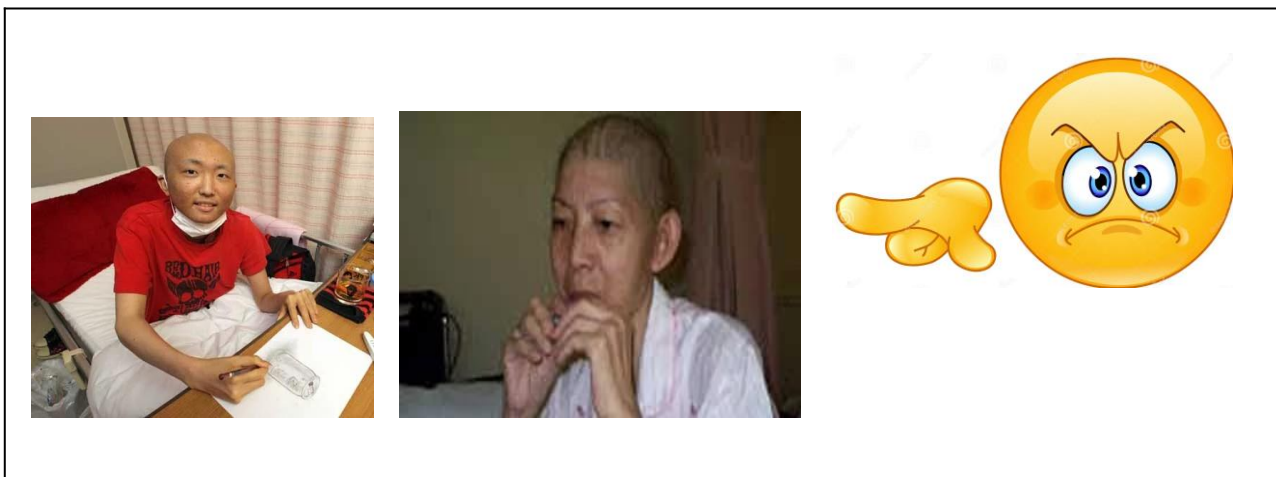
The survey was undertaken as a part of cancer research in the Northeast region, a multidisciplinary programme run by the ICMR-NCDIR, Bengaluru, to prevent and control cancer in the Northeastern states.

It aims to create a baseline database of cancer and other NCD-related risk factors that can be compared in future surveys, which would help establish an NCD risk factor surveillance programme.

"As cancer registration is an important aspect of cancer surveillance, continued risk factor surveillance will show a link between cancer incidence and risk factors. Moreover, with the set time-bound and attempts provided by NCD targets and indicators by 2025 to achieve universal health coverage, ongoing surveillance would determine the outcomes of national health programmes," the report added.



This is not a Burden



But this Could be ?

The incidence, mortality, and cumulative risk of developing cancer have been consistently high in the Northeastern Region (NER) of India, according to reports from the National Cancer Registry Programme (NCRP). While the Population Based Cancer Registries (PBCRs) under the NCRP have been instrumental in providing the much-needed cancer data for the geographic area covered by a registry, it is vital to understand the likely reasons for the reported cancer incidence and its outcomes. Cancers share several common risk factors and comparable health system needs with other significant NCDs (cardiovascular diseases, diabetes, stroke, chronic obstructive pulmonary disease and chronic kidney disease) for prevention, early detection and control. These include major behavioral and metabolic risk factors such as tobacco use, unhealthy diet, inadequate physical activity, alcohol use, raised blood glucose and overweight/obesity. Therefore, establishing a cancer risk factor surveillance system within a cancer registry is essential to track changes, implement suitable interventions and evaluate their impact, which would be reflected in the magnitude of cancer that is periodically reported from the registry.

Hence, this survey is an approach to implementing a baseline monitoring system to drive us to understand the linkage between exposures to risk factors, other NCDs and cancer incidence derived from the PBCRs in the NER and would aid in analyzing the trends over time. This will enable the

policymakers and stakeholders to make the best decisions to address cancer prevention and control in the State.

SCOPE & OBJECTIVES OF THE CANCER MUKT JAGRUKTA ABHIYAN -ARUNACHAL PRADESH

Primary objectives: To generate the prevalence of key cancer and other NCD related risk factors a health system response in Arunachal Pradesh

Secondary objectives:

- a. To set a baseline to monitor and track trends in the prevalence of risk factors associated with CANCER and other NCDs in Arunachal Pradesh.
- b. To link or correlate risk factors with cancer incidence and burden collected by the PBCRs' in the state
- c. To assess the knowledge about cancer risk factors and preventive behaviors among an indigenous population.
- d. To explore the indigenous population's awareness of screening methods.
- e. To determine the socio-economic impact of cancer on families.
- f. To determine the perception of the public for stakeholder's role in the population.

PREPAREDNESS

Preparedness - Building the foundations for success)

As Benjamin Franklin said it best when he quipped, "Give me six hours to chop down a tree and I will spend the first four sharpening the axe." Preparation is vital - it holds the keys to success. Without thorough preparation, we are not setting ourselves up to succeed.

Meeting with key persons of Arunachal Pradesh



Meeting with Shri . Alo Libong ji Hon. Health Minister Arunachal Pradesh



Meeting with Dr Sam Tserinng Nodal Officer - Arunachal Pradesh Oncology Head - TRIHMS - Arunachal Pradesh



Meeting with Dr. Leena Gupta Radio Oncologist- TRIHMS Arunachal Pradesh

Material Preparation

 <p style="text-align: center;">ID CARDS</p>	 <p style="text-align: center;">BACKDROP</p>	 <p style="text-align: center;">PINK RIBBON</p>
	 <p style="text-align: center;">PHOTO PROPS</p>	

SELFIE POINT		POSTERS
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<div style="text-align: center;">  <p>CANCER MUKT JAGRUKTA ABHIYAN- ARUNACHAL PRADESH</p> <p>DATE: _____</p> <p>NAME: _____</p> <p>AGE /SEX: _____</p> <p>ADDRESS: _____</p> <p>CONTACT NO: _____</p> <p>OCCUPATION: _____</p> <p>PAST MEDICAL HISTORY - _____</p> <p>PERSONAL HISTORY - _____</p> <p style="text-align: center;">PHYSICIAN CHECK UP</p> <p>COMPLAINTS :- _____</p> <p>PULSE :- _____ /MIN</p> <p>BP :- _____ mm of Hg</p> <p>GENERAL APPEARANCE _____</p> <p style="text-align: right;">Page 1 of 2</p> </div>	<div style="text-align: center;">  <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>SYSTEMIC EXAMINATION</p> <p>SKIN</p> <p>_____</p> <p>LYMPH NODE</p> <p>_____</p> <p>LUNGES</p> <p style="text-align: center;"></p> <p>BREAST</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">R</td> <td style="width: 50%; text-align: center;">L</td> </tr> <tr> <td style="height: 20px;"> </td> <td style="height: 20px;"> </td> </tr> </table> <p>ABDOMEN</p> <p style="text-align: center;"></p> </td> <td style="width: 50%; vertical-align: top;"> <p>ADVISE</p> <p>_____</p> <p style="text-align: right;">Page 2 of 2</p> </td> </tr> </table> </div>	<p>SYSTEMIC EXAMINATION</p> <p>SKIN</p> <p>_____</p> <p>LYMPH NODE</p> <p>_____</p> <p>LUNGES</p> <p style="text-align: center;"></p> <p>BREAST</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">R</td> <td style="width: 50%; text-align: center;">L</td> </tr> <tr> <td style="height: 20px;"> </td> <td style="height: 20px;"> </td> </tr> </table> <p>ABDOMEN</p> <p style="text-align: center;"></p>	R	L			<p>ADVISE</p> <p>_____</p> <p style="text-align: right;">Page 2 of 2</p>
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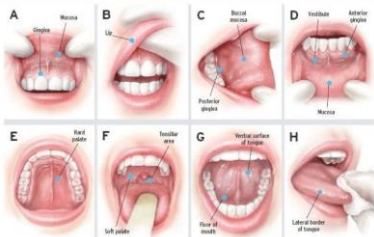
MODUS OF CONDUCTION OF CAMP & AWARENESS






Patient's Demographic information was captured at the Registration point. Information like Name, Age, Address, Contact details was noted for every beneficiary.




Oral Cancer Screening



Oral cancer screenings help healthcare providers look for signs of cancer in your mouth. They'll examine the lining of your cheeks, gums, lips, tongue, and floor and roof of your mouth to check for lesions and abnormalities. We have taken pictures of tongue & oral cavity .If we have anything suspicious, they'll refer to an oncologist for further testing



The most common types of cancer among women are skin, breast, lung, colorectal and uterine. Cervical and ovarian cancer affect only women and are also a significant cause of cancer worldwide. With early detection, cancer is more likely to be treated successfully



Male cancer screening tests are medical examinations that aim to detect early signs of cancer in men. These tests include screenings for various types of cancer that commonly affect men, such as prostate cancer, testicular cancer, and colorectal cancer.





Self-Breast Examination is a step by step method women can use to examine their own breast every month to note any changes. Our team of Doctors ensured that all the women understood and learned the steps of Self Breast Examination and were made aware about its importance. The Concept of Shower cards was introduced. The Card contained Steps of Self Breast Examinations written in English and Hindi which could be hung in the bathroom. The idea was that it would remind the women of Self Examination without missing any step



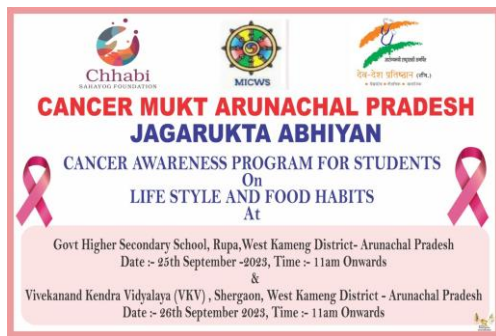
One to One Counseling was done for each patient. For all those women who were noted to have any lump or abnormality related to breast were counseled to go for further evaluation.

Counselling for Cancer



Awareness Sessions in Schools

Schools play a crucial role in educating and shaping the minds of young children and adolescents.



These activities help students develop a sense of empathy and compassion towards cancer patients and contribute to the larger cause of fighting against this disease.

Sr No.	Dates	School Name & Place
1	25.09.2023	ndary School , Rupa , District -West Kameng , Arunachal Pradesh
2	26.09.2023	nd Kendra Vidyalay (VKV), Shergaon , District -West Kameng , Arunachal Pradesh
3	28.11.2023	ary School , Jang , District - Tawang , Arunachal Pradesh

Photo Props and Selfie Points for Awareness of Cancer

Photos were clicked with props raising awareness themes. Smiles were captured in Selfie Point to commemorate their involvement in this awareness event.



DATA COLLECTION

A structured pre tested clinical evaluation form with a questionnaire was used to collect the data from participants. The forms had the following sections: demographic information, breast screening practices, risk factors of cancer and awareness of cancer.

Demographic data was collected by volunteers, (like Name, Age, Sex, address & anthropometric measurements like height, weight & BMI). Then the 1st group of doctors did oral examinations along with paramedic staff took pictures of tongue & oral cavity

Then the 2nd group of doctors recorded vitals, Family History, Habits & occupation history to record risk factors and did general consultation & did clinical examination and recorded source and danger symptoms and signs of cancer if any.

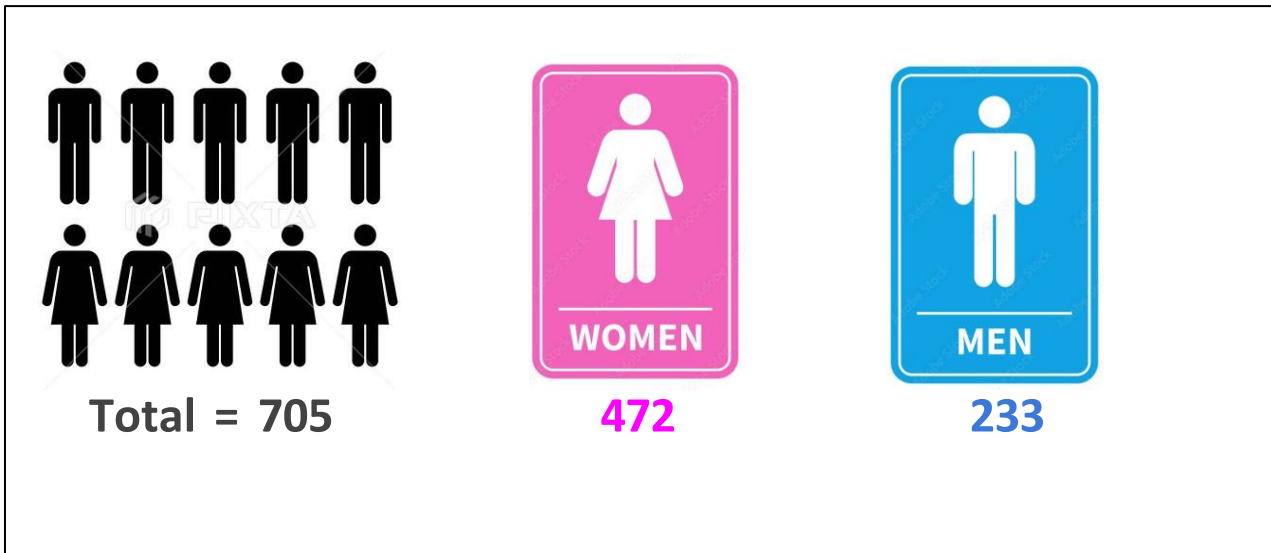
DATA ANALYSIS & RESULTS

All analysis was carried out; descriptive statistics were used to describe the study population in relation to relevant variables.

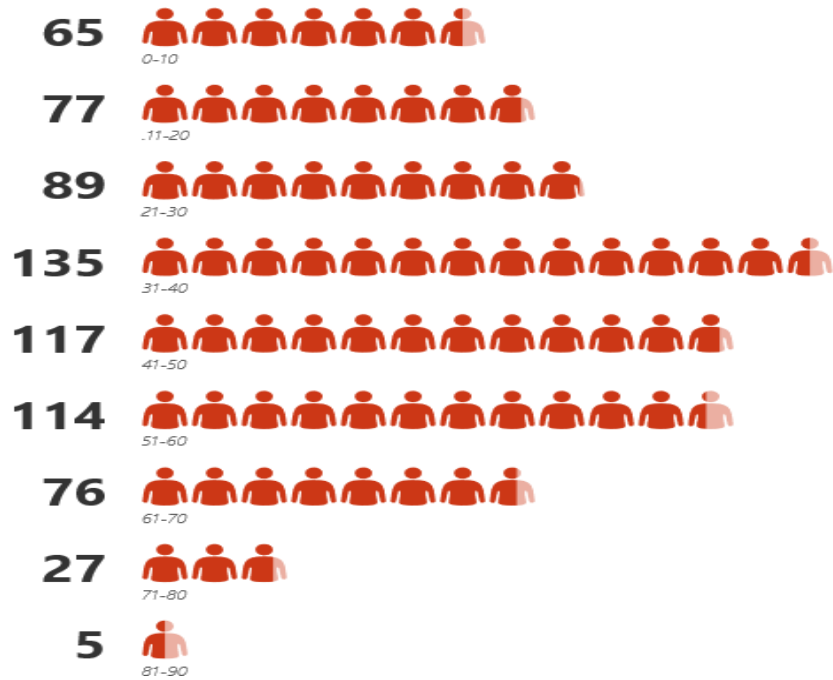
First variable of interest, Participant's age, family history of breast cancer, having known or seen a breast cancer patient, perceived risk for cancer, physical activity, current use of alcohol or tobacco or any betel was examined. Second variables were considered for inclusion to construct a model with risk factors and symptoms independently associated Detailed analysis is as follows

DEMOGRAPHIC PROFILE OF PATIENTS

1. Classification of Respondents by Gender










2. Classification of Respondents by Age group



RISK FACTORS

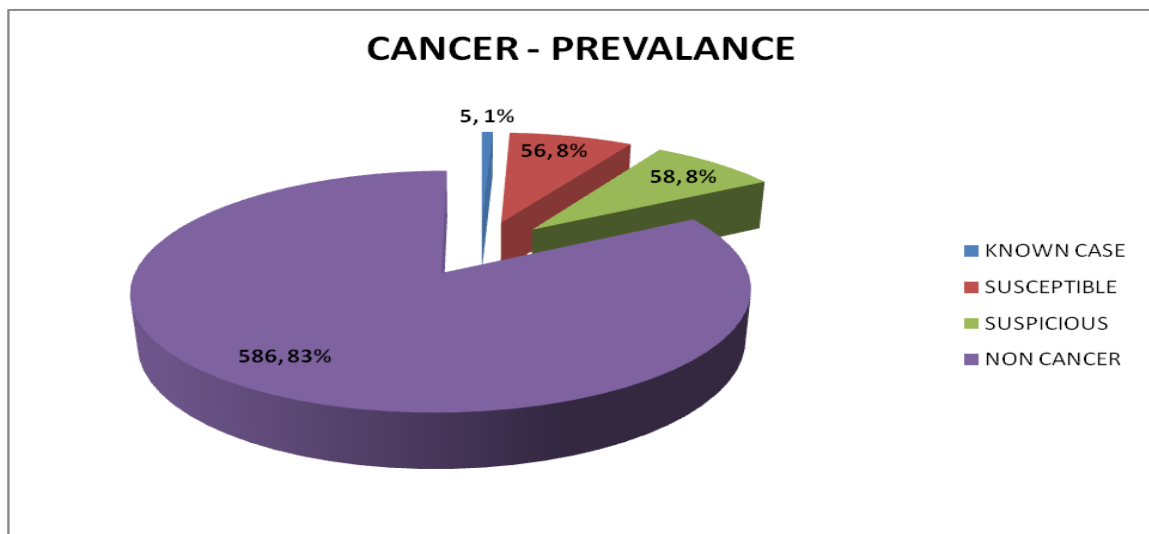
Risk factors of Cancer like Habits

RISK FACTORS - HABITS		
 ALCOHOL	67	9.5%
	3	0.43%
	8	1.13%
	5	0.71%
	18	2.55%
	16	2.27%
	1	1.14%
NO ADDICTION	587	83.26%

CANCER PREVALENCE

The common ailments and issues were seen among the participants in the camp TABLE – Response on existence of common ailment

SR NO	CANCER PREVALENCE	NOS	PERCENTAGE
1	KNOWN CASE	5	0.71
2	SUSEPTIBLE	56	7.94
3	SUSPICIOUS	58	8.23
4	NON CANCER	586	83.12
TOTAL		705	100.00



CANCER PREVALENCE SITE WISE

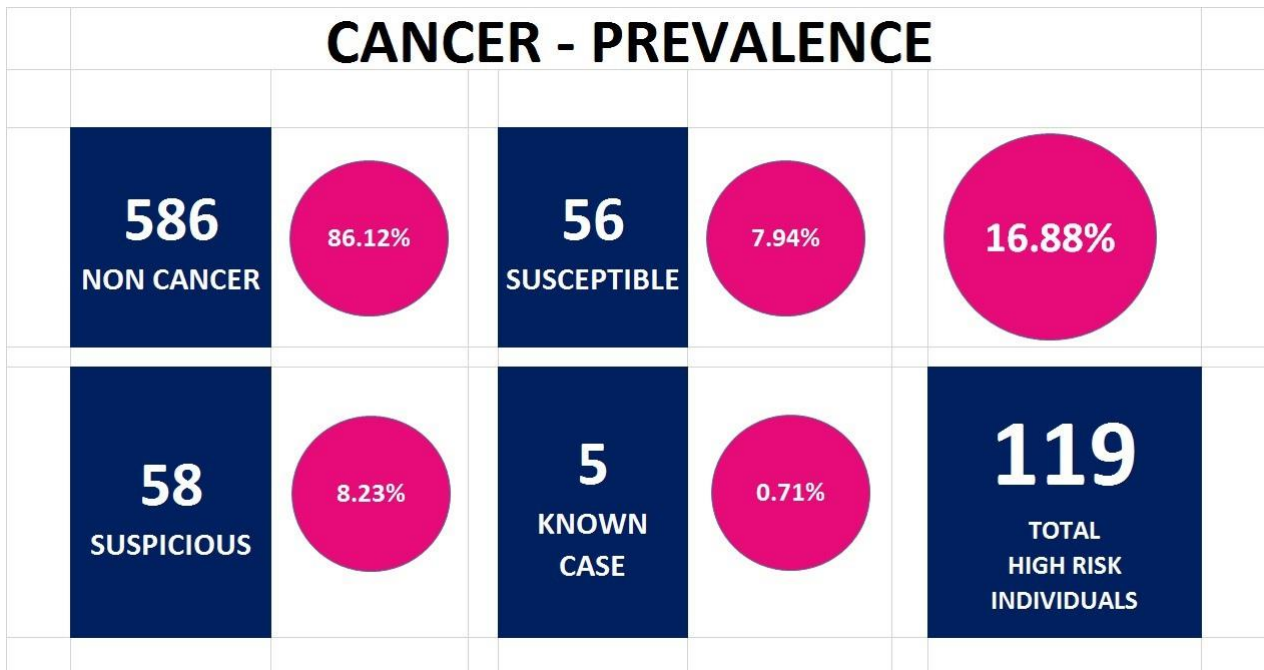
SR NO	CANCER PREVALANCE	SITE	NOS	PERCENTAGE
1	KNOWN CASE	BUCCAL MUCOSA	1	0.14
		NASOPHARUNX	1	0.14
		BREAST	1	0.14
		STOMACH	1	0.14
		UTERUS	1	0.14
2	SUSCEPTIBLE	GYNAC	7	0.99
		THROAT	1	0.14
		GIT	33	4.68
		ORAL	14	1.99
		SKIN	1	0.14
3	SUSPICIOUS	ORAL	51	7.23
		BREAST	1	0.14
		ENT	2	0.28
		GIT	2	0.28
		ORAL+GE	1	0.14
		SKIN	1	0.14
4	NON CANCER		586	83.12
TOTAL			705	100.00

KEY FINDINGS

Out of **705** participants **05 (0.71%)** are known case of cancer showed symptoms /signs related to diseases

Out of **705** participants **56 (7.94%)** were susceptible about cancer due to risk factors like habits and history

Out of **705** participants **58 (8.23%)** were suspicious about cancer (Benign or Malignant) So out of **705** participants **119 (16.88%)** were high risk individuals



DISCUSSION

Increasing community awareness about cancer and screening for common cancers provides the most cost-effective approach for the prevention and control of cancers and has high public health potential. To move toward the Universal Health Coverage (UHC), health systems should devise mechanisms to include noncommunicable diseases including cancer screening and management in the health-care package at district and subdistrict levels.

There are many strengths of our experience. All sectors such as district- and subdistrict-level health systems, PRIs, local education department, and department of community medicine of a tertiary care institute, as nodal coordinating department, contributed. Thus, for achieving UHC, if one needs to add a new service, this model demonstrates – how to involve political and health system leaders, and demonstrate the service provision in a limited population. The same service can then be extended to other populations with their support without financial burden on the population. This model also demonstrates that intersectoral coordination can not only help mobilize the resources but also increase the stake of possible stakeholders. Second, the acceptability of the population for cancer screening and oral cancer screening was high as everyone consented to undergo these, giving a response rate of 100%. In this model, they had used qualified workers after providing 3 months' training, to screen the population for cancers. Only the project staff did the screening activity and other sectors were not actively involved.

There are some other examples of organizing camps for cancer screening. Most of these screening camps were organized at health facilities at district or sub district level. In this context, our experience of organizing an integrated cancer screening camp at village level in the community setting by involving specialists and creating a professional setup for examination with intersectoral coordination can be

considered successful and a unique model.

On the spot, 20min' health education talk was given to highlight the need and significance of periodic examinations and the fact that any individual may have cancer without experiencing any symptoms. With this minimal effort, about 100% got themselves screened for cancer. We believe that with additional health educational efforts during the weeks preceding the camp, screening output could have been increased.

CONCLUSION

Our model of community-based integrated cancer screening camp for common cancers sets a successful example of cancer control activity in low-resource settings. 119 cases of High Risk Individuals were detected in the camp, which shows its success for early detection of cancers. The current model of organizing integrated cancer screening camps for common cancers may be scaled up for cancer screening and prevention for common cancers in all low-resource settings at district, state, and country levels.

The study concludes that the awareness of cancer and its causes, risk factors and disease manifestation was unsatisfactorily low. We are on the verge of not only breast cancer but also other types of cancers in women.

Without a commitment to, concomitant investment in, understanding and overcoming the psychosocial, institutional and access barriers that perpetuate health disparities, overcoming these problems will be for naught. It is important to create awareness among the community through educational programmes on cancer prevention, preventable cancer risk factors, benefits of early diagnosis and availability of screening facilities.

The use of this study positively influenced knowledge of breast cancer risk factors, symptoms and types of screening and increased.

RECOMMENDATIONS

This report gives a detailed current health system scenario in Arunachal Pradesh. This survey conducted among the PBCR covered areas of Arunachal Pradesh helps reiterate the need for cancer awareness and strengthen the health care system to provide its treatment. The recommendations hence can be described under the following topics:

Risk Reduction:

Risk factors like tobacco & alcohol use, physical inactivity, and unhealthy diet start as young as early adolescence. Measures for behavioral change and awareness creation become crucial in such stages. Efforts to provide information and awareness generation for the younger population and their caretakers should be implemented at educational Institutions and workplaces. IEC & BCC provision among the teachers and faculty of the institution should be strengthened for implementing changes and guidance among the younger population. Counseling providers should be made available in schools, colleges and hospitals to help in cessation programmes of tobacco & alcohol use and provide a healthy diet and lifestyle change guidance. Such provisions should also be strengthened among the HWC of sub-centres

and PHCs for easier access.

Tobacco and Alcohol Cessation:

The prevalence of tobacco use is 36.1% in the State of Arunachal Pradesh, with 30% of the current tobacco users being consumers daily. The programmes that help in the cessation of tobacco & alcohol use should be catered at the level of PHC & CHC, which will cover comparatively a larger population. Given the mean age of initiation of tobacco use as 18.3 years in the State, more focus should be given to the reduction among early adolescent population and guide in the follow up process.

Policy Implementation for Risk Factor Control:

Strengthening the existing healthcare policies like COTPA Act (2003) which promotes smoke-free indoor air, should be enforced at work places, leisure zones and educational Institutions. The provision of alternative livelihood for those who practice indigenous methods of producing alcohol should be considered. This may help to reduce the availability of locally available alcohol products.

The Government of Arunachal Pradesh must take an appropriate policy decision to contain the tobacco sale and use in the State. COPTA Act (2003) must be implemented in letter and spirit.

Similarly, there must be some policy for curbing excessive alcoholism affecting the population of the State, especially the younger population.

Early detection and Screening:

Conducting periodic surveillance of behavioral and metabolic risk factors to measure the baseline prevalence and monitor changing trends through regular surveys would help track the impact of preventive measures. To enforce screening practices among a larger population, the regional & community leaders, along with the help of peripheral healthcare workers can be used. Practicing Village/urban nutrition day and sanitation day will help achieve community participation. Through such measures, social and cultural acceptance of health practices can be achieved.

Health System Strengthening:

Expanding the availability of cancer care services with consideration of access in such geographical terrains should be prioritized. Also, it facilitates the adoption of health technology for the prevention and treatment of cancer, including digital tools for early detection and telemedicine for improved access to care in the healthcare system.

Strengthening the medical certification of cause of death for the availability of accurate and complete cancer mortality should be given utmost importance. As there is a shortage of healthcare workers, increasing the capacity building of healthcare providers through regular training, re-training and skill enhancement should be done. Also, expanding and strengthening the services at secondary and tertiary level health facilities would help reduce treatment-seeking for cancer outside of the region.

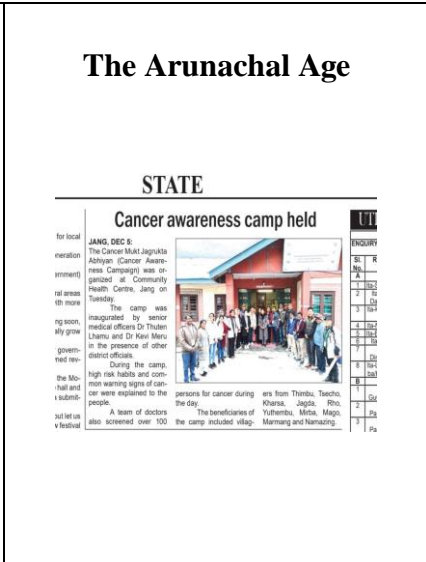
The Government ought to consider having proper secondary level facilities in all the districts of the State so that people are not denied proper health care access considering the topography and terrain of the State.



हिन्द सागर
अरुणाचल प्रदेश के कैंसर मुक्त जागरूकता अभियान में महाराष्ट्र का सहभाग



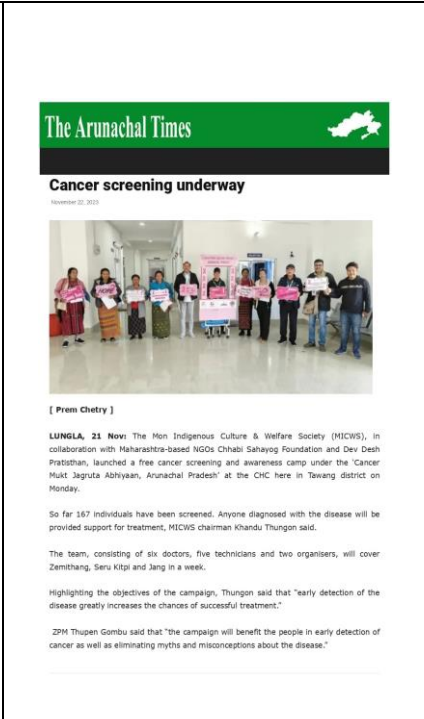
तहलका समाचार
अरुणाचल प्रदेशातील कर्करोग जनजागृती अभियानात महाराष्ट्राच्या डॉक्टर तुमचा सहभाग



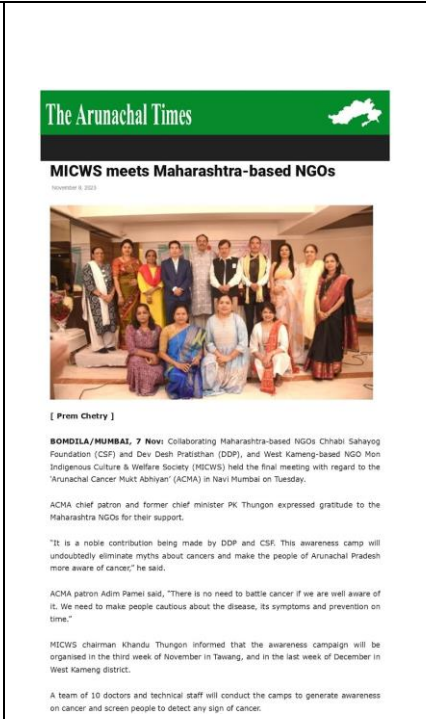
The Arunachal Age
STATE
Cancer awareness camp held



मुंबई तरुण भारत
अरुणाचल प्रदेशातील कर्करोग जनजागृती



The Arunachal Times
Cancer screening underway



The Arunachal Times
MICWS meets Maharashtra-based NGOs

Gratitude

Thanks For Accepting Our Report of **CANCER MUKT JAGRUKTA ABHIYAN- ARUNACHAL PRADESH**



Shri. G Kishan Reddy Ji

Hon. Cabinet Minister of Development of North Eastern Region, Minister of Culture and Minister of Tourism



Smt. Dr. Bharati Pravin Pawar ji

Hon. MoS Health and Family Welfare and Tribal Affairs , Govt. of India



Shri. Kiren Rijju ji

Hon. Minister of Earth and Science, Govt. of India and Hon. MP - Arunachal West LS Constituency



A big Thank You to -Government of Arunachal Pradesh

Our **CANCER MUKT JAGRUKTA ABHIYAN- ARUNACHAL PRADESH**

Health Check up camps , could not have been complete /possible without support of



Shri.Pema Khandu ji

Hon. Chief Minister - Arunachal Pradesh



Shri.Alo Libang ji

Minister of Health and Family Welfare of Arunachal Pradesh



Smt . Tsering Lhamu ji

MLA -Lumla Assembly constituency, Arunachal Pradesh



Shri. Tsering Tashi ji

MLA -Tawang Assembly constituency, Arunachal Pradesh



Dr. Dondu Wangeji (Addl.DHS)

I/C Director of Health Services Arunachal Pradesh



Dr. Sam Tsering ji

State Nodal Officer Cancer Control Programme at Govt of Arunachal Pradesh

Special Thank You to

Shri. Thutan Gombu Ji - ZPM Lungla- Arunachal Pradesh

Shri. Parvez Mulani ji - Circle Officer - Jangi Paltan

Shri. Lhundup Chosang - Convenor - Tawang District [Cancer Mukta Jagrukta Abhiyan - Arunachal Pradesh]

Shri. Jambay Tsering - Convenor - Lungla Block [Cancer Mukta Jagrukta Abhiyan - Arunachal Pradesh]

Shri. Dorjee Nyima - Convenor - Tawang Block [Cancer Mukta Jagrukta Abhiyan - Arunachal Pradesh]

Shri. Lhakpa Dondup - Convenor - Jang -Mukto Block [Cancer Mukta Jagrukta Abhiyan - Arunachal Pradesh]

Pradesh]

Dr. Rinchin Tsering -Medical Officer, Lungla CHC

Dr. Hage Sombyo- Dental Surgeon,Lungla CHC

Capt. Dr. Yajveer Singh - Medical Officer, Zemithang CHC

Shri. Rinchin Tsering - Headmaster - Seru Secondary Govt. School **Shri. Rinchin Tashi** - Headmaster - Kitpi Secondary Govt. School **Dr. Thupten Lhamu**- S.M.O SG-Jang CHC

Dr. Keviseto Meru - S.M.O SG-Jang CHC

Dr. Genden Tsering - S.D.S SG - Jang CHC

CANCER MUKT JAGRUKTA ABHIYAN ARUNACHAL PRADESH PATRON COMMITTEE

Chief Patron	Hon. Shri. P.K. Thungon	Former Chief Minister of Arunachal Pradesh and Former Union Minister
Patrons	Dr. Vaibhav R. Deogirkar	<ul style="list-style-type: none"> Chairman- Dev Desh Vaidyakiya Shaikshanik Samajik Pratishthan Medical Director – H. J. DoshiGhatkopar Hindu Sabha Hospital, Mumbai
	Hon.Dr.Amit Sengupta	<ul style="list-style-type: none"> Director – FI2MT, Mumbai Former Technical Consultant - Tata Memorial Cancer Center, Mumbai Former Sr. OB GYN Consultant (SAG), Govt. of India (CHS), MOHFW, GOI Programme Director – Tata Trust - RkSS Safe Motherhood Program, Baster
	Dr. Vishwanath Gargote	<ul style="list-style-type: none"> Former Administrative Officer - Terna Medical College & Hospital, Navi Mumbai Advisor - Chhabi Sahayog Foundation
	Hon.Dr. Adim Pamai	<ul style="list-style-type: none"> Advisor Rani Ma Gaidinliu Foundation Ambassador Action for Greening Manipur
	Shri. Khandu Thungon ji	<ul style="list-style-type: none"> Chairman- Mon Indigenous Culture & Welfare Society - Arunachal Pradesh North East Convenor- Bharat Tibet Sahyog Manch
	Hon.Dr. Siddharth Bhaskar Peshattiwar	Consultant Radiologist

Team

Sr No.	Name	Designation	Role
1	Partha Roy ji	General Secretary- Chhabi Sahayog Foundation	Organiser
2	Dr.Ravindra Kamble	Volunteer -Dev Desh Pratishthan	Clinician + Counseling
3	Dr Sneha Bhatte	Volunteer -Dev Desh Pratishthan	Clinician +Counseling

4	Dr.Pratika Kamble	Volunteer -Dev Desh Pratishthan	Clinician +Counseling
5	Dr.Renu	Dental Surgeon	Clinician +Counseling
6	Sachin Mamgain	Member- Executive Committee Chhabi Sahayog Foundation	Organiser
7	Charumati Sawant	Volunteer -Dev Desh Pratishthan	Data + Counseling Support
8	Jaiganesh Lingathar M.	Volunteer -Dev Desh Pratishthan	
9	Mudra V.Deogirkar	Volunteer -Dev Desh Pratishthan	Data + Support
10	Thutan Gombu	ZPM Lumla Block	Organiser
11	Dr.Rinchin Tsering	MO -Lugla CHC	Organiser
12	Dr.Hage Sombyo	DS -Lugla CHC	Organiser
13	Phurpa Lhaton	SN -Lugla CHC	Organiser
14	Thutan Yangzom	SN -Lugla CHC	Organiser
15	Sonam Tsomu	SN -Lugla CHC	Volunteer
16	Dawa Leiki	LO RWD	Volunteer
17	Jambey Tsering	Convenor -Lungla Block	Organiser
18	Londup Chosang	Dist. Convenor Tawang	Organiser
19	Sangey Wangchu	GCP Lumla Village	Volunteer
20	Tsering	Public Leader	Volunteer
21	Kesang	Public Leader	Volunteer
22	Man Tsering	Public Leader	Volunteer
23	Thutan Penjor	Public Leader	Volunteer
24	Tenzin Gyatso	Public Leader	Volunteer

25	Capt. Yajveer Singh	M.O -Zemithang CHC	Organiser
26	Shinde Dn	HAV/NA -Zemithang CHC	Volunteer
27	Prashant Kumar	HAV/DVR-Zemithang CHC	Volunteer
28	A K Singh	NK/DVR-Zemithang CHC	Volunteer
29	Riyaz Khan	SEP/AA-Zemithang CHC	Volunteer
30	Vikas Dwivedi	SEP/AA-Zemithang CHC	Volunteer
31	Theerthagiri	SEP/BTA-Zemithang CHC	Volunteer
32	V K Mishra	SEP/ORA-Zemithang CHC	Volunteer
33	Shri. Rinchin Tsering	Seru Govt Secondary School	Organiser
34	Mrs. Choizom	PRT-Seru Govt Secondary School	Volunteer
35	Mrs. Neem Choizom	PRT- Seru Govt Secondary School	Volunteer
36	Shri. Lobsang Jampa	PRT- Seru Govt Secondary School	Volunteer
37	Shri. D. Kumar	PRT- Seru Govt Secondary School	Volunteer
38	Shri. S.R.Yadav	TGT- Seru Govt Secondary School	Volunteer
39	Shri. S.D.Thungon	TGT- Seru Govt Secondary School	Volunteer
40	Nawang Tender P	TGT- Seru Govt Secondary School	Volunteer

41	Shri. Lama Jangchu	TGT- Seru Govt Secondary School	Volunteer
42	Mrs. Dorjee Lhaton	RP- Seru Govt Secondary School	Volunteer
43	Shri. Lham Tashi	PRT- Seru Govt Secondary School	Volunteer
44	Mrs. Rinchin Tsomu	PRT- Seru Govt Secondary School	Volunteer
45	Rinchin Tashi	Kitpi Govt Secondary School	Organiser
46	Choikyong Lhamu	Kitpi Govt Secondary School	Volunteer
47	Dorjee Lhamu	Kitpi Govt Secondary School	Volunteer
48	Thutan Lobsang	Kitpi Govt Secondary School	Volunteer
49	Tashi	Kitpi Govt Secondary School	Volunteer
50	Sangey Tsering	Kitpi Govt Secondary School	Volunteer
51	Sangey Wangchu	Kitpi Govt Secondary School	Volunteer
52	Pema Dorjee	EAC (JANG)	Organiser
53	Dr.Tashi Tsering	AE(HYDRO)Tawang	Organiser
54	Dawa Chotton	Higher Sec.School Jang	Organiser
55	Dr.Thupten Lhamu	SMO,SG- Jang CHC	Organiser
56	Dr.Genden Tsering	SDS,SG- Jang CHC	Organiser

57	Dr.Keviseto Meru	SMO,SG- Jang CHC	Organiser
58	Sr.Tashi Lhamu	N.O- Jang CHC	Volunteer
59	Sr.Rinjen Pema Sona	N.O- Jang CHC	Volunteer
60	Sr.Karma Zomba	N.O- Jang CHC	Volunteer
61	Sr.Tashi Drema	N.O- Jang CHC	Volunteer
62	Pasang Bhutes	BCM- Jang CHC	Volunteer
63	Pasang	Jang CHC	Volunteer
64	Rinchin Lhamu	N/A- Jang CHC	Volunteer
65	Wangdi Tsering	N/A- Jang CHC	Volunteer
66	Tashi Dorjee	Driver Jang CHC	Volunteer
67	Rangilal Ram	S/A- Jang CHC	Volunteer
68	Pende	S/A- Jang CHC	Volunteer

References

1. Cancer scenario in North-East India & need for an appropriate research agenda Neha Shanker, Prashant Mathur, Priyanka Das, K. Sathishkumar, A.J. Martina Shalini, and Meesha Chaturvedi Indian J Med Res. 2021 Jul; 154(1): 27–35. doi: 10.4103/ijmr.IJMR 347 20 PMCID: PMC8715693PMID: 34782528
2. Profile of Cancer and related Health Indicators in the North East region of India by ICMR-National Center for Disease informatics and Research
3. POPULATION BASED CANCER REGISTRY, ARUNACHAL WEST Arunachal State Hospital:
4. Naharlagun Dr Sopai Tawsik, Head, Department of Pathology, Arunachal State Hospital, Principal Investigator, Dr Moji Jini, Chief Medical Superintendent, Arunachal State Hospital, Naharlagun,Dr Shyam Tsering MD, Radio-Oncologist, Co-Investigator,Dr Adishi Kri MD, Radio-Oncologist, Co-Investigator,Dr Gamba Padu, Pathologist, Co-Investigator,
5. Cancer vulnerability in an indigenous Himalayan population in Arunachal Pradesh Chaitan Kumar a,

- and Moirangthem Momocha Singh b - Department of Management & Humanities, National Institute of Technology, Itanagar, Arunachal Pradesh, India a <https://orcid.org/0000-0002-5117-1083> b <https://orcid.org/0000-0002-2507-698X>
6. Share of cancer among women in West Arunachal, India 2012-2016, by site Published by A. Minhas, Jul 12, 2023
 7. High incidences of hepatocellular carcinoma – A report from Population-Based Cancer
 8. Registry Center in Western Arunachal Pradesh Sopai Tawsik, Hage Nobin, Tame Kena, Shyam Tsering, Adisi Kri, Jyothinath Kothapalli.
 9. REPORT ON MONITORING SURVEY OF CANCER RISK RESPONSE IN NORTH EAST REGION ICMR (INDIAN COUNCIL OF MEDICAL RESEARCH)& NCDIR (NATIONAL CENTRE FOR DISEASE INFORMATICS AND RESEARCH)
 10. Office of the Registrar General & Census Commissioner, India (ORGI). Census 2011. Available on <https://censusindia.gov.in/census.website/>
 11. ICMR-NCDIR, Profile of Cancer and Related Health Indicators in the North East Region of India – 2021, Bengaluru, India
 12. Report on medical certification of cause of death 2019. New Delhi: Government of India. Available from:
 13. https://censusindia.gov.in/2011-Documents/mccd_Report1/MCCD_Report_2019.
 14. Government of India Ministry of Health and Family Welfare Statistics Division Rural Health Statistics, 2020-2021.
 15. Government of India Ministry of Health and Family Welfare Statistics Division Rural Health Statistics, 2019-2020.
 16. Central Bureau of Health Intelligence. Dte General of Health Services, Ministry of Health and Family Welfare, Govt of India National Health Profile 2021.16th Issue
 17. National Medical Commission. www.nmc.org.in
 18. Press Information Bureau (<https://pib.gov.in/PressReleasePage.aspx?PRID=1576623>)
 19. National Cancer Control Programme (<https://main.mohfw.gov.in/Organisation/Departments-of-Health-and-Family-Welfare/nationalcancer-control-programme>)
 20. Department of Health & Family Welfare – Government of Arunachal Pradesh [Internet]. [Health.arunachal.gov.in](http://health.arunachal.gov.in).2022 [cited 23 March 2022]. Available from: <http://health.arunachal.gov.in/>
 21. National action plan and monitoring framework for prevention and control of noncommunicable diseases (NCDs) in India. Ministry of Health and Family Welfare, Government of India. Developed through the WHO-Government of India 2012-2013 biennial work plan. [Internet]. Geneva, World Health Organization.
 22. Availablefrom:
https://www.iccpportal.org/sites/default/files/plans/National_Action_Plan_and_Monitoring_Framework_Prevention_NCDs.pdf.
 23. ICMR-NCDIR, National Noncommunicable Disease Monitoring Survey (NNMS) 2017–18, Bengaluru, India