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Monitoring survey of cancer risk factors and health system response in North East Region (NER)

FACTSHEET 2022

MEGHALAYA

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MONITORING SURVEY OF CANCER RISK FACTORS AND HEALTH SYSTEM RESPONSE IN NORTH EAST REGION (NER) OF INDIA

Cancer is among the top five leading causes of death in the State. According to the reports of the National Cancer Registry Programme (NCRP), the incidence, mortality, and cumulative risk of developing cancer have been consistently high in the North-eastern Region (NER) of India. The region has a unique cancer profile compared to the other areas of the country. In Meghalaya, the Age-Adjusted Incidence Rate is 176.8 per 100,000 in males. About two-thirds (66.9%) of cancers in males and 43.1% in females were tobacco-use-related cancer sites, among which oesophagus was the leading site in both genders (31.0% in males; 22.3% in females). Hypopharynx (8.8%) and stomach (6.3%) were the other leading sites in males, whereas, in females, cervix-uteri (10.0%) and mouth (8.2%) were other common sites. The PBCR of Meghalaya is situated in Civil Hospital, Shillong. The PBCR was established in 2010 with 22 sources of registrations.

This survey was undertaken as a part of cancer research in the North East Region (CaRes NER), a multidisciplinary programme run by the ICMR-NCDIR, Bengaluru to prevent and control cancer in the north-eastern 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 program. 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 (10) and indicators (21) by 2025 to achieve universal health coverage, ongoing surveillance would determine the outcomes of national health programmes. Therefore, establishing a surveillance system is of vital importance to track changes and evaluate interventions.

Indicators		Urban	Rural	Men	Women	Total
Tobacco use (%)						
1	Current tobacco use (both smoke and smokeless)	3.4	3.0	6.0	0.3	3.1
2	Daily tobacco use					
	Either (any) form of tobacco (smoke and/or smokeless)	36.7	51.5	66.6	29.8	48.1
	Smoked tobacco					
	Bidis	34.3	44.2	42.8	24.2	42.6
	Manufactured Cigarettes	44.8	14.7	19.7	3.3	19.5
	Hand-rolled Cigarettes	23.9	41.9	39.2	17.0	39.0
	Smokeless tobacco					
	Chewing tobacco	47.9	67.7	57.9	65.0	63.3
	Pan with Zarda, Betel with Tobacco quid	32.0	16.9	24.9	18.8	20.2
	Tuibur, Tobacco Snuff, by mouth					
3	Smokers who attempted to quit the habit (smoked tobacco)	15.3	19.5	19.0	0.0	18.8
4	Adults exposed to second hand smoke at home	50.6	73.8	66.3	70.7	68.5
5	Adults exposed to second hand at workplace	44.9	62.9	68.9	48.7	58.8

Alcohol use (%)						
6	Lifetime abstainers	85.1	77.6	60.2	98.3	79.3
7	Current alcohol use (consumed in last 12 months)	10.8	18.8	33.1	1.0	17.0
8	Those who engaged in heavy episodic drinking[1] (18+ years)	8.1	10.2	19.3	0.2	9.7
Dietary practices						
9	Mean servings[2] of fruits and/or vegetables per day	2.2	1.8	1.8	2.0	1.9
10	Mean intake of red meat in a week (Days/week)	2.1	1.9	2.0	1.9	1.9
11	Mean intake of either Birds/Poultry or Fish or Red Meat* (Days/week)	2.6	2.3	2.4	2.3	2.3
Physical activity (%)						
12	Insufficient physical activity[3]	13.0	6.8	10.1	6.3	8.2
13	Work related activity at home/workplace	80.9	91.9	83.6	95.1	89.4
Overweight and Obesity (%)						
14	Overweight (BMI 25.0 – 29.9 Kg/m^2)	13.7	6.7	8.3	8.2	8.3
15	Obesity (BMI ≥30.0 Kg/m^2)	1.5	1.1	1.0	1.6	1.2
16	Central obesity[4] (18+ years)	22.1	20.9	6.1	36.7	21.1
Raised blood pressure (%)						
17	Prevalence of raised blood pressure[5]	18.0	16.2	19.4	13.7	16.6
18	Pre-hypertensive[#]	66.7	59.0	69.0	52.4	60.7
Raised blood glucose (%)						
19	Fasting blood glucose (≥126 mg/dl) 18+ years	0.7	0.5	0.2	0.8	0.5
20	Prevalence of raised blood glucose[6]	2.5	1.5	1.3	2.2	1.7
Composite risk assessment (%)						
21	Clustering of risk factors[7] (18+years)	19.4	16.2	23.9	10.0	17.0

*If an adult consumed more than one meat item, the maximum number of days for any one item was considered
#Pre – hypertensive - where SBP = 120-139, DBP = 80-89

HEALTH SEEKING BEHAVIOURS AND MANAGEMENT INDICATORS						
Disease awareness, treatment and control indicators		Urban	Rural	Men	Women	Total
Raised blood glucose (%)						
1	Blood glucose measured					
	Measured ever in life	50.6	38.6	33.9	48.7	41.3
	Measured in last 12 months	26.5	20.9	14.1	30.3	22.2
2	Among persons with raised blood glucose					
	On treatment in last 2 weeks	28.2	28.4	25.0	31.0	28.3
	Blood glucose under control[8]	66.4	73.9	83.2	61.4	71.0
3	Among those aware of raised blood glucose					
	Currently consulting allopathic practitioner in public sector	13.0	33.0	21.1	28.5	25.3
	Currently consulting allopathic practitioner from private/ NGO health facility	52.4	24.7	27.9	41.3	35.4
Raised blood pressure (%)						
4	Blood pressure measured					
	Measured ever in life	74.6	69.7	59.1	82.4	70.8
	Measured in last 12 months	43.4	42.2	29.4	55.6	42.5
5	Among persons with raised blood pressure					
	On treatment in last 2 weeks	20.8	15.7	22.7	13.3	17.1
	Blood pressure under control[9]	17.8	24.8	19.8	25.1	22.9
6	Among those aware of raised blood pressure					

	Currently consulting allopathic practitioner in public sector	9.9	49.7	40.1	38.6	39.3
	Currently consulting allopathic practitioner from private/ NGO health facility	43.6	14.5	23.9	20.9	22.1
Lifestyle advice (%)						
7	Among those who reported contact with a doctor / health worker in past 1 year and were advised					
	Against tobacco use	6.4	12.4	13.6	8.4	11.0
	Against alcohol use*	2.4	4.4	6.1	1.8	4.0
	Increase in physical activity*	14.9	20.1	15.7	22.0	18.9
	Reduction/maintenance of weight*	10.1	14.2	12.4	14.0	13.2
	To check blood pressure*	54.1	62.7	49.7	71.7	60.7
	To check blood glucose*	45.2	38.2	31.9	47.7	39.8
Cancer screening (%)						
	Awareness of cancer screening*	16.0	16.5	13.8	19.0	16.4
	Ever underwent oral cavity examination for cancer	0.1	0.5	-	-	0.4
	Women who ever underwent screening for breast cancer[10]	1.2	0.7	-	-	0.8
	Women who ever underwent screening for cervical cancer[11]	0.2	0.0	-	-	0.1
Received advice to screen for cancer by doctor/health worker in past 12 months (%)						
	Oral Cancer	0.8	0.5	0.6	0.6	0.6
	Breast Cancer[#]	3.3	1.5	0.0	1.9	1.9
	Cervical Cancer[#]	1.1	0.0	0.0	0.3	0.3

*18+ years
#Among women respondents

HEALTH SYSTEM RESPONSE INDICATORS

Public Primary Health Care Facilities		Urban (n = 6)	Rural (n = 23)	Total (n = 29)
Availability of following facilities[12] (%)				
1	Written standard treatment guidelines under NPCDCS[13]	66.7	47.8	51.7
2	Cancer screening for oral, breast and cervical cancers	16.7	13.0	13.8
3	Counselling facilities for risk behavior through counsellor or specialized personnel (in house)			
	Tobacco cessation	16.7	34.8	31.0
	Alcohol Cessation	16.7	34.8	31.0
4	Laboratory procedures for cancer screening	50.0	4.3	13.8
5	Equipment & supplies for cancer screening	100.0	78.3	82.8
6	Human Resources			
	Medical Officer (MBBS)	83.3	91.3	89.7
	Pharmacist	100.0	95.7	96.6
	Lab Technician	83.3	95.7	93.1

Public Secondary Health Care Facilities		Community Health Centers (n = 4)	District Hospitals (n = 1)
Availability of following facilities (%)			
1	Written standard treatment guidelines under NPCDCS[13]	25.0	100.0
2	Cancer screening for oral, breast and cervical cancers	75	100.0
3	Day care facility for management of cancer patients (for Chemotherapy)	0.0	100.0
4	Counselling facilities for risk behavior through counsellor or specialized personnel (in house)		
	Tobacco cessation	25.0	100.0
	Alcohol Cessation	25.0	100.0
5	Laboratory procedures for cervical cancer screening	0.0	0.0
6	Equipment & supplies for cancer screening	0.0	0.0
7	Human Resources		
	Medicine	25.0	100.0
	Surgery	25.0	100.0
	Gynecology	25.0	100.0
	General duty Medical Officer	100.0	0.0
8	Palliative care	0.0	0.0

Profile of adults with cancer

Indicators		Urban	Rural	Men	Women	Combined
1	Number of cancer patients	4	5	3	6	9
2	Mean age at diagnosis (%)	54.5	45.0	42.8	52.4	49.2
3	Site of cancer and other chronic illness among cancer patients (%)					
	Breast	75	0.0	0.0	50.0	33.3
	Throat	0.0	80	100.0	16.7	44.4
	Oesophagus	25.0	0.0	0.0	16.7	11.1
4	Sought health care outside the state (%)					
	Within the state	100.0	80.0	66.7	100.0	88.9
	Outside the state	0.0	20.0	33.3	0.0	11.1
5	Sought treatment at (%)					
	Government health facility	100.0	60.0	66.7	83.3	77.8
	Private health facility	0.0	40.0	33.3	16.7	22.2
6	Source of finance (%)					
	Self-Financing/Taking loan/Sale of assets	25.0	20.0	33.3	16.7	22.2
	Health Insurance Schemes/Hospital Incentives	0.0	0.0	0.0	0.0	0.0

Definitions

1	Heavy episodic drinking constitutes those who reported drinking ≥6 standard drinks (equivalent to 60 grams of pure alcohol or ethanol) in a single drinking occasion in last 30 days of interview.
2	Among those who consumed fruits and/or vegetables, one standard serving of fruits and/or vegetables was equivalent to 80-100 grams.
3	Insufficient physical activity constitutes those engaged in <150 minutes of moderate-intensity physical activity per week OR <75 minutes of vigorous intensity physical activity per week OR an equivalent combination of moderate-and-vigorous intensity physical activity accumulating <600 MET minutes per week.
4	Central obesity was defined as having waist circumference of ≥90 cm in males and ≥80 cm in females.
5	Raised blood pressure was when the systolic blood pressure ≥140 mm of Hg and/or diastolic blood pressure ≥90 mm of Hg including those on medication for raised BP among adults aged 18-69 years.
6	Raised fasting blood glucose were when the values of fasting blood glucose were ≥126 mg/dl including those on medication for raised blood glucose among adults aged 18-69 years.
7	Clustering of risk factors was presence of ≥3 risk factors which include, daily tobacco use, inadequate fruits and/or vegetables intake, insufficient physical activity, overweight (BMI ≥25.0 Kg/m2), raised blood pressure (including those on medication) and raised fasting blood glucose (including those on medication) among adults aged 18–69 years.
8	Control of blood glucose was defined as fasting blood glucose values are <126 mg/dl among those with raised blood glucose.
9	Control of hypertension was defined as systolic blood pressure of <140 mmHg and diastolic blood pressure of <90 mmHg among those with raised blood pressure.
10	Screening for breast cancer was defined as any clinical breast examination ever done in women ≥30 years of age by a healthcare professional for breast cancer
11	Screening for cervical cancer was defined as any screening tests ever done for cervical cancer in women aged between 30-49 years by either/and Visual Inspection with Acetic acid (VIA), pap smear or Human Papilloma Virus (HPV) test.
12	Availability of an item was defined as being available within the facility.
13	NPCDCS - National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke

References

- Report of National Cancer Registry Programme (ICMR-NCDIR), Bengaluru, India 2020.
- ICMR-NCDIR, Report on Monitoring Survey of Cancer Risk Factors and Health System Response in North East Region (NER) of India, 2022

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