NATIONAL NONCOMMUNICABLE DISEASE MONITORING SURVEY (NNMS) 2017-18

FACTSHEET

NNMS

National Noncommunicable Disease Monitoring Survey - 2017 - 18

ICMR - NCDIR, Bengaluru

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NATIONAL NONCOMMUNICABLE DISEASE MONITORING SURVEY (NNMS)

The National NCD monitoring framework and the NCD action plan has identified 10 targets and 21 indicators to be achieved by 2025. In order to monitor India's progress towards achieving the National NCD targets, the National NCD Monitoring Survey (NNMS) was carried out between September 2017 to July 2018. The survey was coordinated and implemented by the ICMR-NCDIR (National Centre for Disease Informatics and Research), Bengaluru in collaboration with eleven reputed institutions across India.

The survey had two components – (i) Population-based survey of adults aged 18-69 years and adolescents between 15-17 years, to assess the prevalence of major risk factors for NCDs and coverage with NCD services and; (ii) Survey of primary and secondary health care facilities, in the public and private sectors, to assess their preparedness in addressing to NCDs. Global standard tools like WHO-STEPS, Global School Student Health Survey, Global Adult Tobacco Survey, Global Youth Tobacco Survey, Integrated Disease Surveillance Project – NCD Risk factor Survey and WHO-Service Availability and Readiness Assessment were suitably adapted based on piloting results. To arrive at a nationally representative estimate for India, a multi-stage cluster sampling design was used. The primary sampling units of 300 rural and 300 urban (villages and wards from 348 districts in 28 States) constituted a total of 12,000 households as a national sample. One adult (18-69 years) per household was selected using KISH method and their behavioural and physiological risk factors for NCDs were assessed. The response rates for household and individual (adults) was 95.5% and 96.3% respectively. The prevalence of behavioural and physiological risk factors were estimated for all adults, comprising of tobacco use, alcohol consumption, unhealthy diet, physical inactivity, blood pressure, fasting blood glucose, overweight/obesity and interventions practiced by them to tackle these risk factors. Additionally, urinary sodium excretion estimation using spot urine samples was done in a sub-sample of 3000 adult participants (from 150 clusters), with a response rate of 85.7%. The results for adults by residence (urban, rural) and gender (men, women) are presented below.

ADULTS (18-69 years)

Indicators		Urban			Rural			Total		
Demographic characteristics		Men	Women	Both	Men	Women	Both	Men	Women	Both
1.	Mean age of participants [years]	39.3	39.4	39.4	37.6	37.9	37.7	38.2	38.4	38.3
2.	Those who ever attended school / madrassa / gurukul (%)	92.6	76.5	85.1	77.8	49.2	63.9	82.9	58.1	71.0
Tobacco use (%)										
3.	Current tobacco use (smoke and/or smokeless)	39.4	8.8	25.1	57.3	15.1	36.8	51.2	13.0	32.8
4.	**Daily tobacco use**									
	Either (any) form of tobacco (smoke and/or smokeless)	31.8	7.6	20.5	49.2	13.3	31.7	43.2	11.4	28.0
	Smoked tobacco	15.4	1.0	8.7	18.6	1.3	10.1	17.5	1.2	9.7
	Bidi	8.9	0.4	4.9	16.1	0.8	8.6	13.6	0.7	7.4
	Cigarette	7.5	0.5	4.2	3.0	0.1	1.6	4.5	0.2	2.5
	Hookah / Shisha	0.02	0.003	0.01	0.6	0.04	0.3	0.4	0.03	0.2
	Smokeless tobacco	21.0	6.9	14.4	35.7	12.3	24.3	30.6	10.5	21.0
	Smoke and smokeless (both) tobacco	4.6	0.3	2.6	5.1	0.2	2.7	4.9	0.2	2.7
5.	Smokers who attempted to quit the habit	36.5	74.1	38.3	34.7	35.6	34.7	35.2	46.8	35.8
6.	Adults exposed to second hand smoke at home	27.9	23.4	25.8	40.4	29.7	35.2	36.1	27.7	32.1
7.	Adults exposed to second hand smoke outside home (workplace / transportation)	51.3	26.2	39.6	47.4	21.8	34.9	48.7	23.3	36.5
Alcohol use (%)										
8.	Lifetime abstainers	69.0	98.6	82.8	64.6	96.7	80.2	66.1	97.3	81.1
9.	Current alcohol use	25.6	1.2	14.2	29.7	3.0	16.7	28.3	2.4	15.9
10.	Those who engaged in heavy episodic drinking[1]	10.6	0.01	5.7	11.1	0.8	6.1	10.9	0.5	5.9
Dietary practices										
11.	Mean servings[2] of fruits and/or vegetables per day	2.0	1.8	1.9	1.7	1.5	1.6	1.8	1.6	1.7
12.	Inadequate consumption of fruits and/or vegetables[3] (%)	97.5	98.0	97.7	98.2	99.2	98.7	98.0	98.8	98.4
13.	Mean salt intake[4] (g/day)	9.2	7.3	8.3	8.8	7.0	8.0	8.9	7.1	8.0
14.	Often/always add extra salt just before eating (%)	13.6	12.6	13.1	17.9	14.2	16.1	16.4	13.7	15.1
15.	Thought that lowering salt consumption is important (%)	77.4	65.0	71.6	65.7	55.2	60.6	69.7	58.4	64.3
16.	Took steps to reduce salt intake (%)	50.9	44.4	47.9	47.0	41.0	44.1	48.3	42.1	45.4
Physical activity										
17.	Insufficient physical activity[5] (%)	44.2	60.2	51.7	24.0	48.6	36.1	30.9	52.4	41.3
18.	Mean minutes spent being sedentary[6] in a day	314.8	335.2	324.4	277.9	325.2	301.1	290.5	328.5	308.9
19.	Mean minutes spent in physical activity per day	80.5	41.7	62.2	138.9	61.9	101.1	118.8	55.3	88.1
20.	Voluntary physical activity[7] (%)	22.7	5.9	14.8	14.3	2.1	8.3	17.2	3.4	10.5

Indicators	Urban			Rural			Total		
	Men	Women	Both	Men	Women	Both	Men	Women	Both
Yoga									
21. Practiced yoga[8] (%)	7.5	5.0	6.3	3.3	0.9	2.1	4.7	2.3	3.5
Overweight and Obesity									
22. Mean Body Mass Index (BMI in Kg/m^2)	24.0	24.7	24.3	21.4	21.9	21.6	22.3	22.8	22.5
23. Overweight (BMI ≥25.0 Kg/m^2) (%)	40.2	45.1	42.5	14.6	21.7	18.0	23.3	29.3	26.1
24. Obesity (BMI ≥30.0 Kg/m^2) (%)	8.6	14.1	11.2	2.1	5.5	3.7	4.3	8.3	6.2
25. Central obesity[9] (%)	39.5	58.1	48.2	16.6	32.4	24.2	24.4	40.7	32.2
Raised blood pressure									
26. Mean Systolic blood pressure (mmHg)	129.4	123.6	126.7	124.4	121.0	122.7	126.1	121.8	124.1
27. Mean Diastolic blood pressure (mmHg)	84.3	80.8	82.7	80.4	79.7	80.1	81.8	80.1	80.9
28. Raised blood pressure[10] (%)	37.4	30.2	34.0	26.0	25.4	25.7	29.9	27.0	28.5
Raised blood glucose									
29. Mean fasting blood glucose (mg/dl)	100.4	102.9	101.6	92.4	96.5	94.4	95.1	98.5	96.7
30. Raised blood glucose[11] (%)	14.0	14.7	14.4	5.7	8.1	6.9	8.5	10.2	9.3
Composite risk assessment (%)									
31. Clustering of risk factors[12] (%)	54.5	50.9	52.8	34.9	33.5	34.2	41.4	39.0	40.2
32. **10-year CVD risk as per WHO/ISH guidelines[13]**									
10 to <20%	7.8	11.8	9.7	9.9	12.8	11.3	9.1	12.4	10.7
20 to <30%	7.3	9.7	8.4	4.9	7.2	6.0	5.8	8.1	6.9
≥30% or with existing CVD	15.0	11.5	13.4	12.1	12.8	12.4	13.2	12.3	12.8

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	Inadequate consumption of fruits and/or vegetables constitutes those consuming <5 servings of fruits and/or vegetables per day.
4	Daily salt intake was estimated by measuring the urinary sodium levels in spot urine samples and applying the INTERSALT equation with Potassium.
5	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.
6	Sedentary activities: Sitting, reclining and watching television, working on a computer, playing games in mobile/tablet, talking with friends, or doing other sitting activities like knitting, embroidery etc., including the time spent sitting in office and excluding time spent sleeping.
7	Doing voluntary physical activity during recreational time include sports or fitness related activities.
8	Yoga includes activities like asana, pranayam or meditation.
9	Central obesity was defined as having waist circumference of ≥90 cm in males and ≥80 cm in females.
10	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.
11	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.
12	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/m^2), raised blood pressure (including those on medication) and raised fasting blood glucose (including those on medication) among adults aged 18–69 years.
13	A 10-year Cardiovascular disease (CVD) risk of ≥30% was defined according to the age (40-69 years), gender, systolic blood pressure, current smoked tobacco use and diabetes (previously diagnosed/fasting blood glucose concentration ≥126 mg/dl) as for South-East Asia Region.

ADOLESCENTS (15-17 years)

As part of the NNMS methodology framework, all adolescents (15-17 years) available in the selected household were selected. Their behavioural and physiological risk factors (constituting tobacco use, alcohol consumption, diet, physical activity and overweight/obesity) were assessed. A total of 1402 households and 1531 adolescents participated in the survey. The response rate was 93.2% and the results for adolescents by residence (urban; rural) and gender (boys; girls) have been presented below.

Indicators	Urban			Rural			Total		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Demographic characteristics									
1. Ever attended school / madrassa / gurukul (%)	98.2	96.3	97.3	94.3	91.0	92.7	95.6	92.6	94.2
Tobacco use									
2. Ever used or experimented with tobacco (%)	10.1	0.3	5.6	12.8	2.2	7.7	11.9	1.7	7.0
3. Mean age at initiation of tobacco use [years]	15.0	17.0	15.1	13.9	14.1	13.9	14.2	14.4	14.2
4. **Current daily tobacco use[1] (%)**									
Smoked tobacco	0.2	0.0	0.1	0.5	0.3	0.4	0.4	0.2	0.3
Smokeless tobacco	3.4	0.0	1.9	6.1	0.6	3.4	5.2	0.4	2.9
Both smoked and smokeless tobacco	0.2	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.2
Either (any) form of tobacco (smoke and/or smokeless)	3.5	0.0	1.9	6.5	0.6	3.6	5.5	0.4	3.1
5. Thought that smoke from other people's tobacco smoking can cause harm (%)	87.8	85.8	86.9	86.1	82.7	84.4	86.6	83.6	85.2
Alcohol use									
6. **Who consumed alcohol (%) preceding the survey**									
Ever	4.2	2.1	3.2	5.9	1.1	3.6	5.4	1.4	3.5
In last 12 months	1.4	0.6	1.1	2.0	0.7	1.4	1.8	0.7	1.3
In last 30 days	1.4	0.3	0.9	0.5	0.3	0.4	0.8	0.3	0.5
7. Mean age at initiation of alcohol use among ever users [years]	14.0	14.5	14.1	13.4	11.4	13.1	13.5	12.8	13.4
8. Engaged in heavy episodic drinking[2] in last 30 days (%)	0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.0	0.1
Dietary practices									
9. Mean number of days breakfast was skipped in last 30 days	8.6	10.4	9.5	9.6	9.8	9.7	9.3	10.0	9.6
10. **Usually consume these items at least once a week (%)**									
Fried items	59.3	45.3	52.9	53.3	41.6	47.6	55.3	42.7	49.3
Chips/Namkeen	55.6	61.5	58.3	47.2	51.3	49.2	49.9	54.4	52.1
Pizza/Burger	12.5	7.2	10.1	4.7	4.8	4.7	7.3	5.5	6.4
Instant noodles	27.8	36.6	31.8	10.4	15.9	13.1	16.1	22.1	19.0
Cold or other aerated drinks	29.0	16.2	23.2	22.3	9.3	15.9	24.5	11.4	18.2
Fresh fruits/fruit juices	54.3	42.6	49.0	28.9	25.0	27.0	37.2	30.3	33.9
Energy drinks	10.4	13.1	11.6	4.8	3.6	4.2	6.6	6.4	6.5
Physical activity									
11. Insufficient physical activity[3] (%)	35.8	40.6	38.0	14.5	24.4	19.3	21.5	29.3	25.2
12. Mean minutes spent being sedentary[4] in a day	335.1	392.8	361.4	329.1	333.4	331.2	331.1	351.2	340.7
Overweight and Obesity									
13. Mean body mass index (BMI)	19.3	19.7	19.5	18.0	18.8	18.4	18.5	19.1	18.8
14. Overweight[5] (%)	12.0	11.9	11.9	3.5	3.6	3.6	6.4	6.1	6.2
15. Obesity[6] (%)	5.0	1.7	3.5	1.4	0.4	0.9	2.6	0.8	1.8
Exposure of adolescents to school-based health promotion activities									
16. **Being taught in school about (%)**									
Ill effects of tobacco	69.6	63.5	67.0	66.0	67.1	66.5	67.3	65.9	66.7
Ill effects of alcohol	67.6	61.5	65.0	66.9	66.1	66.6	67.2	64.6	66.0
Benefits of healthy diet	70.9	66.6	69.0	66.0	64.3	65.2	67.7	65.1	66.6
Benefits of physical activity	68.0	56.9	63.2	60.5	70.3	64.8	63.1	65.6	64.2
17. **(%) noticed any poster/wall painting/signboard/any display at school related to**									
Tobacco	50.5	43.1	47.3	48.4	45.3	47.1	49.2	44.5	47.1
Alcohol	40.6	28.2	35.3	27.0	25.5	26.3	31.8	26.4	29.4
Diet	48.6	37.1	43.6	28.9	35.1	31.6	35.9	35.8	35.8
Physical activity	43.1	37.8	40.8	28.1	33.4	30.4	33.4	34.9	34.1
18. Doing physical activity at school (%)	73.7	60.4	68.0	66.5	57.0	62.3	69.1	58.2	64.3
19. Mean minutes spent in physical activity per day at school	21.5	13.9	18.0	19.4	11.0	15.3	20.1	11.8	16.1
20. Reporting presence of a tobacco shop within 100 metres of school (%)	52.6	42.3	48.2	46.3	38.5	42.9	48.5	39.8	44.7

Indicators	Urban			Rural			Total		
	Boys	**Girls**	**Both**	**Boys**	**Girls**	**Both**	**Boys**	**Girls**	**Both**
Reported availability of food items in school canteen									
21. Presence of canteen in school (%)	**36.8**	**31.8**	**34.7**	**18.1**	**25.5**	**21.4**	**24.7**	**27.7**	**26.0**
22. **Food items available in school canteen (%)**									
High fat, salt and sugar (HFSS) foods[7]	**95.4**	**91.9**	**94.0**	**75.6**	**89.7**	**83.0**	**86.1**	**90.6**	**88.2**
Aerated drinks	**44.7**	**28.5**	**38.3**	**40.4**	**47.0**	**43.9**	**42.7**	**39.7**	**41.3**
Fruit/fruit chaat/salad	**10.6**	**28.4**	**17.6**	**9.5**	**17.5**	**13.7**	**10.0**	**21.8**	**15.5**

Definitions	
1	Defined as use of any form of tobacco (smoke and/or smokeless) daily in last 12 months preceding the survey.
2	Heavy episodic drinking among adolescents was defined as drinking ≥5 standard drinks for boys and ≥4 standard drinks for girls in a single drinking occasion in last 30 days.
3	Insufficient physical activity was defined as physical activity of moderate intensity (or its equivalent) for <60minutes per day, which is equivalent to <1680 MET-minutes per week and calculated as (60 minutes × 4 MET × 7 days).
4	Sedentary activity includes sitting, reclining and watching television, working on a computer, playing games in a mobile/tablet, talking with friends, or doing other sitting activities like knitting, embroidery etc., inclusive of time spent sitting in school/college and excluding of time spent in sleeping.
5	Overweight was defined according to the WHO growth reference for school-aged children and adolescents as, those beyond one standard deviation of BMI for age and sex (equivalent to BMI 25.0 Kg/m^2).
6	Obesity was defined according to the WHO growth reference for school-aged children and adolescents as, those beyond two standard deviations of BMI for age and sex (equivalent to BMI 30.0 Kg/m^2).
7	High fat, salt and sugar foods are those high in fat, salt and sugar content, which includes chips/namkeen/samosa/kachori/instant noodles/bakery items (cakes/pastries/patties).

HEALTH SEEKING BEHAVIOURS AND MANAGEMENT INDICATORS (30-69 years)

Disease awareness, treatment and control indicators	Urban			Rural			Total		
	Men	Women	Both	Men	Women	Both	Men	Women	Both
Raised blood glucose (%)									
1. **Blood glucose measured**									
Measured ever in life	41.7	43.0	42.3	16.1	18.7	17.4	25.4	27.1	26.3
Measured in last 12 months	35.2	33.7	34.5	13.0	14.7	13.9	21.2	21.2	21.2
2. **Among persons with raised blood glucose**									
Aware of raised blood glucose	63.3	52.5	58.2	39.6	33.8	36.3	52.8	42.6	47.6
On treatment in last 2 weeks	54.5	43.1	49.1	31.0	24.3	27.2	44.2	33.1	38.5
Took prescribed medication daily in last 2 weeks									
Oral medication	53.6	42.5	48.3	29.5	23.2	26.0	43.0	32.3	37.5
Insulin	7.7	6.9	7.3	3.8	5.7	4.9	6.0	6.3	6.1
Blood glucose under control[1]	21.9	15.7	18.9	11.2	15.3	13.5	17.1	15.5	16.3
3. **Among those aware of raised blood glucose**									
Currently consulting allopathic practitioner in public sector	14.3	25.7	19.2	17.8	26.8	22.5	15.5	26.2	20.4
Currently on treatment with public sector as source of medicines in last 2 weeks	17.4	25.7	20.9	15.8	16.8	16.3	16.9	22.0	19.2
Currently consulting AYUSH[2] practitioner in public sector	14.3	12.9	13.7	26.9	25.1	26.0	18.4	18.0	18.2
Currently on medication from AYUSH[2] practitioners	10.7	11.3	11.0	18.0	20.4	19.3	13.1	15.1	14.1
Raised blood pressure (%)									
4. **Blood pressure measured**									
Measured ever in life	60.5	71.0	65.5	38.8	50.6	44.6	46.8	57.6	52.0
Measured in last 12 months	50.7	57.5	53.9	28.9	38.8	33.8	36.9	45.3	41.0
5. **Among persons with raised blood pressure**									
Aware of raised blood pressure	24.0	40.5	31.2	24.4	31.5	27.8	24.2	34.9	29.2
On treatment in last 2 weeks	13.1	26.7	19.0	11.0	16.8	13.8	11.9	20.6	16.0
Blood pressure under control[3]	7.5	15.6	11.1	12.7	13.6	13.2	10.5	14.4	12.3
6. **Among those aware of raised blood pressure**									
Currently consulting allopathic practitioner in public sector	17.1	22.3	20.1	10.5	23.2	17.5	13.3	22.8	18.6
Currently on treatment with public sector as source of medicines in last 2 weeks	5.6	16.4	11.7	9.6	10.2	9.9	7.9	13.0	10.7
Currently consulting AYUSH[2] practitioner in public sector	16.1	19.2	17.8	14.7	17.9	16.5	15.3	18.4	17.1
Currently on medication from AYUSH[2] practitioners	10.1	16.4	13.7	9.0	7.7	8.3	9.5	11.5	10.6
Raised cholesterol (%)									
7. Blood cholesterol measured ever in life	12.2	13.0	12.6	2.7	3.1	2.9	6.2	6.5	6.4
8. Raised cholesterol[4]	3.2	4.2	3.7	0.9	0.8	0.8	1.7	2.0	1.8
9. **Among persons reported with raised cholesterol**									
On treatment in last 2 weeks	31.9	35.0	33.6	64.1	34.2	50.2	42.2	34.8	38.4
Took prescribed medication daily in last 2 weeks	29.5	28.0	28.7	55.4	31.9	44.5	37.8	29.0	33.3
Cardiovascular diseases (CVDs) (%)									
10. Those diagnosed with cardiovascular condition[5]	4.3	2.4	3.4	3.2	4.0	3.6	3.6	3.5	3.5
11. **Among persons with reported cardiac condition**									
Taking aspirin in last 2 weeks	38.2	19.2	31.9	12.2	8.0	9.9	23.5	10.7	17.4
Taking statins in last 2 weeks	28.9	21.3	26.3	15.9	6.4	10.7	21.5	10.0	16.0
Lifestyle advice (%)									
12. **Among those who reported contact with a doctor / health worker in past 1 year and were advised**									
Against tobacco use	15.5	2.9	9.2	22.1	5.2	13.6	19.6	4.3	11.9
Against alcohol use	10.0	2.0	6.0	13.7	1.5	7.5	12.3	1.7	6.9
Dietary modifications	36.1	38.6	37.3	27.4	33.0	30.2	30.7	35.1	33.0
Increase in physical activity	20.0	20.9	20.4	10.8	9.0	9.9	14.4	13.5	13.9
Reduction/maintenance of weight	13.7	15.0	14.4	7.7	7.3	7.5	10.0	10.3	10.2
Practice of yoga	7.6	6.8	7.2	6.9	4.2	5.5	7.2	5.2	6.2
13. **Drug therapy and counselling to prevent heart attacks and stroke****	40.6	40.5	40.6	23.2	20.5	21.9	30.7	27.5	29.3
Cancer screening (%)									
14. Ever underwent oral cavity examination for cancer	2.1	2.0	2.0	2.3	0.6	1.5	2.2	1.1	1.7
15. **Women who ever underwent screening for**									
Breast cancer[6]	NA*	2.7	NA*	NA*	1.1	NA*	NA*	1.6	NA*
Cervical cancer[7]	NA*	4.5	NA*	NA*	1.1	NA*	NA*	2.3	NA*

Definitions	
1	Control of blood glucose was defined as fasting blood glucose values are <126 mg/dl among those with raised blood glucose.
2	The systems of medicine under AYUSH here include Ayurveda; Unani; Siddha and Homeopathy.
3	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.
4	Percentage with raised cholesterol includes those who reported a known history of raised cholesterol.
5	Cardiovascular conditions diagnosed in a hospital which includes chest pain (heart related) or a heart attack (angina) or a Stroke (cerebrovascular accident).
**	Proportion of eligible adults (defined as those aged ≥40 years with a 10-year cardiovascular risk ≥30%, including those with existing cardiovascular disease) receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and stroke.
	• A 10-year Cardiovascular disease (CVD) risk of ≥30% was defined according to the age (40-69 years), gender, systolic blood pressure, current smoked tobacco use and diabetes (previously diagnosed/fasting blood glucose concentration ≥126 mg/dl) as for South-East Asia Region.
	• Drug therapy was defined as those taking medication for raised blood glucose/diabetes, raised total cholesterol, or raised blood pressure, or taking aspirin or statins to prevent or treat heart disease.
	• Counselling was defined as, received advice from a doctor or other health worker to quit or not to start the use of tobacco, to reduce salt in diet, to eat at least five servings of fruits and/or vegetables per day, to reduce fat in diet, to start or increase physical activity and to maintain a healthy body weight or to lose weight.
6	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.
7	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.
NA*	Not Applicable, since the information included only for women.

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HEALTH SYSTEM RESPONSE INDICATORS - Primary health care facilities

As per the NNMS methodology framework, a total of 537 public primary care facilities, 415 community health centres (CHCs) and 335 districts hospitals (DHs) serving the selected PSUs were surveyed in the public health care system. In addition, 512 private primary care facilities were also surveyed in the same PSUs. The survey covered issues related to implementation of National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), availability of human resources, technologies, medicines and services being provided at these facilities. The data pertaining to the coverage with different services (e.g. screening and treatment for specific NCDs) was also collected as a part of the adult (18-69 years) household survey. The results of the survey for primary and secondary health facilities have been presented below.

Public primary health care facilities (n = 537)		
Indicators	**Urban (n = 257)**	**Rural (n = 280)**
1. **Public health facilities providing ambulatory care for (%)**		
Diabetes	93.0	93.6
Hypertension	94.6	98.2
Cardiovascular diseases including Stroke	53.3	44.6
Chronic respiratory diseases	72.4	68.2
2. **Availability[1] of essential technology and medicines for NCDs (%)**		
As per WHO Guidelines[2,3]		
Technologies		
Diabetes[4]	47.5	52.9
Hypertension & CVDs[5]	67.7	60.0
All[6]	38.1	38.2
Medicines		
Diabetes[7]	21.0	20.4
Hypertension & CVDs[8]	37.4	24.6
Chronic respiratory diseases[9]	15.6	13.9
All[10]	4.3	2.1
Both		
Diabetes[4,7]	10.9	14.3
Hypertension & CVDs[5,8]	32.7	19.3
All[6,10]	2.3	1.1
Private primary care facilities (n = 512)		
	Urban (n = 277)	**Rural (n = 235)**
3. **Availability[1] of essential technology and medicines for NCDs in private primary care facilities as per WHO Guidelines (%)[2,3]**	9.0	6.8

Definitions	
1	Availability of an item was defined as being available within the facility.
2	Essential technologies - at least one "blood pressure measuring instrument, weighing scale, blood glucose and blood cholesterol measurement devices with strips and urine strips for albumin assay".
3	Essential medicines - at least one of each "statin, an ACE inhibitor, thiazide diuretic, long-acting calcium channel blocker, beta-blocker, metformin, insulin, a bronchodilator and steroid inhalant".
4	Any technology related to diabetes are at least one of each "glucometer, glucostrips, urine strips".
5	Any technology related to hypertension & CVDs are at least one of each "blood pressure measuring instrument, weighing scale, stadiometer, stethoscope".
6	All technologies to be available are at least one "blood pressure measuring instrument, weighing scale, stadiometer, stethoscope, glucometer, glucostrips and urine strips".
7	Available medicines for diabetes are "metformin and insulin".
8	Available medicines for hypertension and CVDs are "aspirin, at least one of each Statin, ACE inhibitor, diuretic, long acting calcium channel blocker".
9	Available medicines for chronic respiratory diseases are at least one of each of "bronchodilator and a steroid inhalant".
10	All the medicines to be available are at least one of each "aspirin, a statin, an ACE inhibitor, diuretic, a long acting calcium channel blocker, metformin, insulin, a bronchodilator and a steroid inhalant".

HEALTH SYSTEM RESPONSE INDICATORS - Public secondary health care facilities

Indicators	Community Health Centres		District Hospitals	
	NPCDCS*		NPCDCS*	
	Implemented (n = 281)	Not Implemented (n = 105)	Implemented (n = 290)	Not Implemented (n = 44)
1. Availability of written standard treatment guidelines under NPCDCS (%)	68.7	NA	65.9	NA
2. Availability of following facilities for management of NCDs (%)				
NCD clinic	49.5	1.9	60.3	61.4
ICU / CCU*	11.0	9.5	62.8	65.9
NCD counselling services	37.7	23.8	64.1	47.7
Day care centre for Cancer	2.1	1.0	18.3	34.1
Physiotherapy	26.7	10.5	75.9	72.7
Laboratory testing for major NCDs	95.7	89.5	99.7	100.0
3. Undertaking routine screening among out-patients for (%)				
Diabetes mellitus	92.2	81.0	97.6	95.5
Hypertension	92.5	85.7	98.3	97.7
Oral cancer	38.1	23.8	60.3	52.3
Breast cancer	39.1	22.9	58.3	59.1
Cervical cancer	34.9	20.0	52.8	59.1
4. Availability of medicine specialists in the facility (%)	23.8	28.6	77.6	93.2
5. Availability[1] of package of NCD services prescribed under NPCDCS (%)				
Technologies				
Diabetes[2]	21.7	15.2	50.3	52.3
Hypertension / CVDs[3]	1.1	2.9	20.3	11.4
Chronic respiratory diseases[4]	75.4	65.7	94.5	84.1
Cancer[5]	NA**	NA**	9.7	13.6
Medicines				
Diabetes[6]	55.2	44.8	74.5	75.0
Hypertension / CVDs[7]	39.9	21.9	59.0	63.6
Chronic respiratory diseases[8]	19.2	16.2	36.6	29.5
Cancer[9]	NA**	NA**	96.6	97.7
Both technologies and medicines				
Diabetes[2,6]	17.1	10.5	42.1	43.2
Hypertension / CVDs[3,7]	1.1	1.0	16.6	9.1
Chronic respiratory diseases[4,8]	17.4	14.3	35.2	29.5
Cancer[5,9]	NA**	NA**	9.7	13.6
6. Health facilities displaying/having audio-visual materials related to NCDs (%)	87.9	49.5	84.8	84.1
7. Average number of patients attending facility including NCD clinic last month				
Diabetes mellitus	199	265	508	432
Hypertension	272	271	586	518
Cardiovascular diseases	42	36	147	134
Chronic Obstructive Pulmonary Disease	143	118	288	95
Daily NCD clinic attendance (new and old cases) reported among those with NCD clinic	109	18	177	204

Definitions	
*	NPCDCS - National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke
	ICU - Intensive Care Unit; CCU - Cardiac Care Unit
NA	Not Applicable
1	Availability of an item was defined as being available within the facility.
2	Availability of any technology related to diabetes refers to availability of at least one "glucometer, biochemical analyser, glucostrips, urine strips reagents/kits for glucose test, reagents/kits for lipid profile, centrifuge and lancets".
3	Availability of any technology related to hypertension/CVDs refers to availability of at least one "blood pressure measuring instrument, weighing scale, stadiometer/wall markings for height, measuring tape, stethoscope, cardiac monitor, defibrillator, ECG machine, 12-Channel stress ECG tread mill and ECG roll".
4	Availability of any technology related to chronic respiratory diseases refers to availability of at least one "nebuliser and pulse oximeter".
5	Availability of any technology related to cancer refers to availability of at least one "torch/examination light, vaginal speculum, x-ray machine, ultrasound machine, CT Scan machine, haemoglobinometer, microscope, dental chair, dental mirror, 5% acetic acid and cotton tipped swabs".
6	Availability of medicines related to diabetes includes at least one "hypoglycaemic agent and insulin".
7	Availability of medicines related to hypertension/CVDs are at least one "anti-platelet agent, statin/cholesterol lowering drugs, ACE inhibitor, diuretic, nitrates, long acting calcium channel blocker, beta blocker, drugs for shock and heart failure."
8	Availability of medicines related to chronic respiratory diseases includes at least one "bronchodilator, a steroid inhalant".
9	Availability of medicines related to cancer at least one of each "sedative/tranquilizer, local anaesthetic".
NA**	Not Applicable, since NPCDCS guidelines do not prescribe technology and medicines for cancer in CHCs.

DISCLAIMER

"The second round of Global Adult Tobacco Survey [GATS-2] - India was conducted in 2016-17 in the age-group 15 years and above involving 74,037 individuals [34.5% urban and 65.5% rural distribution] adopting a multistage cluster sampling state wise.

Whereas, the National Noncommunicable Diseases Monitoring Survey (NNMS) was conducted during the year 2017-18 in the age-group 15-17 and 18-69 years involving 12000 households [equal rural and urban distribution] adopting a multi-stage cluster sampling nationally.

Therefore, there are expected few differences observed in the results related to use of tobacco between NNMS and the GATS-2 (India). Upon expert review, it is stated that these could be related to differences in study design, sampling strategy, coverage, age groups selected, weighting procedures and the questionnaires adopted."

This issues with the approval of Competent Authority.

Under Secretary to the Government of India

Disclaimer approved: File No. Z.21020/39/2019-TC, Government of India, Ministry of Health & Family Welfare (Tobacco Control Division), dated on 26th August, 2020.

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