

Study Details Summary:

Institute: ICMR-National Centre for Disease Informatics and Research (NCDIR), Bengaluru

Title of the study - National Noncommunicable Disease Monitoring Survey (NNMS)

Parameter	Information
Duration of the study	Date of start – 01/07/2017 Date of completion – 30/06/2018
Total sample size:	Adolescents – 1,800 surveyed; 1,531 included for analysis
Total number of variables	120
Unit of analysis	Individual (Adolescents aged 15–17 years)
Study area	All over India
Age	15–17 years
Inclusion criteria	Permanent residents aged 15–17 years in selected households, residing for at least one year
Exclusion criteria	Adolescents with physical or mental conditions that prevented participation
Sampling technique	Multistage cluster sampling
Study Design	Cross-sectional, population-based survey
Methodology	The survey was conducted across 600 Primary Sampling Units (300 urban and 300 rural); 20 households were selected per PSU, totaling 12,000 households (6,000 rural and 6,000 urban), and all eligible adolescents (aged 15–17 years) within these households were included. Tools: Adapted WHO- Global School Student Health Survey (GSHS), Global Youth Tobacco Survey (GYTS)
Ethical approval	Approved by the ICMR-NCDIR Institutional Ethics Committee and local authorities as applicable
Key Findings	Current tobacco use: 3.1% Current alcohol use: 1.3% Insufficient physical activity: 25.2% Overweight (Including obesity $BMI \geq 25.0 \text{ kg/m}^2$) : 6.2% Obesity ($BMI \geq 30.0 \text{ kg/m}^2$) : 1.8%
Funding	Ministry of Health and Family Welfare, Government of India.
Checklist	Yes (Attached)

Brief Description of the Study

The ICMR-NCDIR National Noncommunicable Disease Monitoring Survey (NNMS) for adolescents (aged 15–17 years) was conducted as part of the national NNMS 2017–18 to assess early behavioral and biological risk factors for NCDs and evaluate awareness and access to health services. The adolescent module aimed to provide nationally representative data on key determinants of NCDs in youth.

1. Demographic and Socioeconomic Data
 - Age, sex, and education level
 - Urban/rural residence and household characteristics
2. Behavioral Risk Factors
 - Tobacco and alcohol use
 - Physical activity and sedentary behavior
 - Dietary habits (including fruit and vegetable intake, junk food consumption)
 - Screen time and media exposure
3. Physical Measurements
 - Height
 - Weight
 - Waist circumference
 - BMI (derived)
4. School/college related information
 - Knowledge of NCDs and healthy behaviors
 - Access to health services and preventive interventions

Key Findings – Adolescents (15–17 Years)

- **Tobacco use experimentation:**
 - 10% of adolescents had ever experimented with smoked or smokeless forms of tobacco.
- **Alcohol use experimentation:**
 - 1.3% reported ever using alcohol.
- **Physical inactivity:**
 - 25.2% were insufficiently physically active (less than 60 minutes of moderate to vigorous activity per day on average).
 - Inactivity was more prevalent among females and urban adolescents.
- **Overweight and obesity:**
 - 6.2% were overweight (BMI-for-age $>+1$ SD),
 - 1.8% were obese (BMI-for-age $>+2$ SD), using WHO growth standards.
- **Unhealthy diet patterns:**
 - 45.3% consumed salted and fried Indian snacks at least once per week.
 - 28.5% consumed sugar-sweetened beverages once or more per week.
 - 7.8% consumed fast food items one or more times per week.
- **Meal skipping:**
 - On average, adolescents skipped breakfast on 10 out of 30 days per month.
 - Rural adolescents reported slightly more frequent breakfast skipping than urban adolescents.
- **Health education exposure:**
 - Only 66.1% reported receiving any health education in schools/colleges about NCD risk factors.
 - A lower proportion noticed health promotion materials (e.g., posters, charts) displayed in their institutions.
- **Urban-rural disparity:**
 - Adolescents from urban areas had a higher proportion of behavioral risk factors than their rural counterparts.

Conclusion

These findings provide the **first national-level evidence** on NCD risk factors among Indian adolescents. The results emphasize the **need for targeted school- and community-based interventions**, policy reinforcement, and integration of adolescent-focused strategies into India's broader NCD prevention and control programs.