

## Non Communicable Diseases

### Why in news?

A recent study published stated that the prevalence and morbidity of NCD in India has been increasing in the past decade.

### What is non-communicable disease (NCD)?

- Non-communicable disease (NCD) are chronic diseases that are not caused by infectious agents and *doesn't spread from person to person*.
- These diseases are long-lasting, progress slowly and often require prolonged treatment.
- **Global concern** - They are a major cause of death and disability worldwide, accounting for approximately **74% of all deaths globally**.
- It results in **86% premature deaths** (died before reaching 70 years of age) in low- and middle-income countries.
- **Low middle income countries contributes 77%** of all NCD cases.

### Status of NCDs in India

- NCD prevalence **has tripled since 1995**, with increasing burden in both urban and rural areas
- **Rising Burden** - NCDs account for over 60% of deaths in India.
- **Common NCDs** - Hypertension, diabetes and cancer are leading contributors.
- **Premature Deaths** - About 55% of NCD deaths occur before the age of 70, disproportionately affecting working-age populations.
- **Regional Disparities** - Higher prevalence in urban areas, but rural regions are increasingly affected.
- Kerala has reported the highest prevalence of non-communicable diseases of 177 per thousand individuals followed by Pondicherry, Andhra Pradesh, Goa, Tamil Nadu and Punjab.
- The north-eastern States have reported the lowest prevalence of non-communicable diseases.
- **According to WHO's report, deaths caused by NCDs in India are:**
  - Cardio vascular - 22.66 lakhs.
  - Chronic respiratory diseases - 11.46 lakhs.
  - Cancer - 9.20 lakhs.
  - Diabetes - 3.49 lakhs.

### What are the Risk factors for NCDS?

- A risk factor is a condition that increases the possibility of developing a non-communicable disease. The more risk factors one has, the greater the chance of getting a particular disease.
- **Lifestyle choices** - Poor diet, lack of physical activity and tobacco or alcohol use.

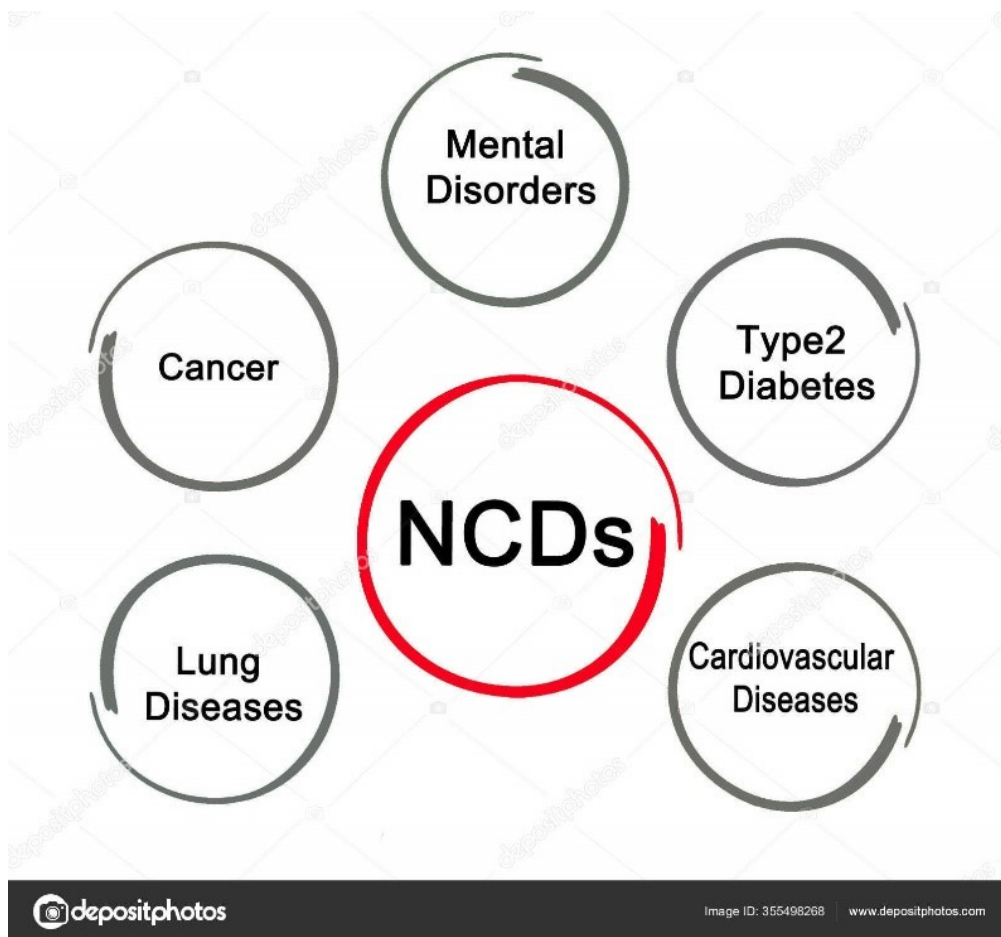
- The Lancet Global Health found that nearly 50% Indian adults insufficiently physically active.
- **Genetic factors** - Family history or genetic predisposition to certain diseases.
- **Environmental factors** - Exposure to pollution, unsafe drinking water and workplace hazards.
- **Ageing** - Increased risk due to natural wear and tear of body systems over time.
- **Environmental factors** - Air pollution is the major contributor to NCDs that accounts for 5.7 million deaths globally.

#### Risk factors of noncommunicable diseases (NCDs)

Genetic factors	Environmental factors	Sociodemographic factors	Factors of self-management	Factors of medical conditions
<ul style="list-style-type: none"> <li>• Family diseases history</li> <li>• Genetic inheritance</li> <li>• Epigenetic changes</li> <li>• Environment exposure-based (e. g. radiation)</li> <li>• toxic material-based mutations</li> </ul>	<ul style="list-style-type: none"> <li>• Air pollution</li> <li>• Weather changes</li> <li>• Sunlight (UV radiation)</li> </ul>	<ul style="list-style-type: none"> <li>• Age</li> <li>• Gender</li> <li>• Race</li> <li>• Ethnicity</li> <li>• Education</li> <li>• Income</li> </ul>	<ul style="list-style-type: none"> <li>• Tobacco use</li> <li>• Alcohol use</li> <li>• Physical activity</li> <li>• Person's weight</li> <li>• Food choice</li> <li>• Dental health care</li> </ul>	<ul style="list-style-type: none"> <li>• Medications</li> <li>• Blood pressure</li> <li>• Lipids</li> <li>• Glucose</li> <li>• Viruses</li> <li>• Obesity</li> <li>• Stress</li> </ul>

#### What are the types of non-communicable diseases?

- **Cardiovascular diseases (CVDs)** - Includes heart attacks, strokes and hypertension.
- **Cancer** - Is an uncontrolled cell growth in specific tissues or organs contributing 9.3 million cases annually.
- **Chronic respiratory diseases** - Examples include asthma and chronic obstructive pulmonary disease (COPD).
- **Diabetes (type-2)** - A metabolic disorder resulting in high blood sugar levels.
- **Mental health disorders** - Conditions such as depression and anxiety, increasingly recognized as NCDs.



## What are the effects of NCDs?

- **Increased health burden** - Urban communities face a *triple health burden* during health crises due to hazardous work environments, limited healthcare access, and financial vulnerability.
- **Financial instability** - Catastrophic out-of-pocket on healthcare expenditures jeopardize family livelihoods and financial stability.
- Marginalized communities often lack health insurance, compounding financial stress.
- **Impact on Vulnerable Populations** - Informal workers, including sanitation workers, gig workers and migrants are disproportionately affected due to lack of hygiene, nutrition and contract protections.
- Social and economic marginalization of these vulnerable people exacerbates the impact on health outcomes.
- **Generational health impacts** - Limited access to preventive care contributes to worsening health conditions in marginalized families often persist across generations, creating a cycle of vulnerability.
- **Inaccessible health care** - Public health systems, designed to support the lowest 40% of the population, are often inaccessible to urban marginal.
- Growing NCD cases causes overburden on health systems that inturn fail to cater effectively.
- **Widening inequality** - Slum-dwelling populations and other marginalized groups face unequal access to health care highlights systemic issues in urban planning and governance.
- **Economic productivity loss** - Illnesses like diabetes and cardiovascular diseases

*reduce workforce efficiency and productivity.*

- Untreated or poorly managed NCDs contribute to absenteeism and long-term incapacity among urban workers.

### Government Measures in India

- **National Programme for Prevention and Control of NCDs (NP-NCD)** - Focuses on awareness, prevention, and affordable treatment.
- **Ayushman Bharat** - Provides financial support to following initiatives under the Pradhan Mantri Jan Arogya Yojana (PMJAY).
- Setting up of **State Cancer Institutes (SCI)** and **Tertiary Care Centers (TCCC)** in different parts of the country to strengthen cancer facilities scheme.
- **PM Swasthya Suraksha Yojana** - To setup oncology department in in new AIMS and upgrade the others.
- **Health and Wellness Centers (HWCs)** - To offer screening and management of common NCDs.
- **Tobacco control initiatives** - Campaigns like the National Tobacco Control Programme (NTCP) and increased taxes on tobacco products to curb tobacco product.
- **Fit India Movement** - Promotes physical activity and healthy lifestyles.
- **POSHAN Abhiyaan** - To combat malnutrition and promote healthy eating habits.
- **Integrated Disease Surveillance Programme** - Which offers regular health check-ups and digital data collection.
- **Mobile Medical Units (MMUs) & Telemedicine** are implemented with National Health Mission support to improve healthcare access particularly in rural areas.

### What are the measures to address NCD?

- **Strengthen primary health care** - Improve access to publicly run primary health care, especially for urban marginalized communities.
- **Leverage technology** - Implement real-time health monitoring using digital tools for conditions like hypertension and diabetes.
- Use screening for population-level evidence and individual awareness.
- **Promote community-based solutions** - Create health awareness and education among public to coordinate and work in communities with ASHA workers.
- Develop community-led NCD surveillance systems for marginalized urban settlements.

*ASHAs are trained to work as an interface between the community and the public health system.*

- **Engage all stake holders** - Engage employers, municipalities, traffic systems, schools and health systems in dialogue to address interconnected health determinants.
- Create solutions for healthy cities through collaboration with urban local bodies and experts.
- **Improve Primary Health Centers** - In rural areas by increased participation and enhanced accountability for provision of better facilities to the patients in the public health facilities.
- **Address Social Determinants of Health** - Tackle issues related to workplace safety, housing, family connections, and community health infrastructure.
- Recognize that health outcomes are deeply tied to social identities, employment and

migration status.

- **Policy-level interventions** - Scale up state-level action plans for better access to primary health care.
- Emphasize preventive measures to avoid catastrophic out-of-pocket (OOP) healthcare expenses.

## References

1. [The Hindu |India's and its Non-Communicable Disease Burden](#)
2. [The Hindu |Prevalence Of NCDS Tripled](#)
3. [WHO |Non Communicable Diseases](#)

