NON-COMMUNICABLE DISEASES AND POVERTY IN INDIA

Overview: Non-communicable Diseases (NCDs) are an alarming public health concern in India, accounting for 53% of total deaths in the country. Additionally, NCDs have come to be recognized as major contributors to poverty and thus a barrier to economic development. The United Nations High Level Meeting on the Prevention and Control of Non-communicable Diseases in 2011[1], recognised NCDs as a major health, economic and development issue, and one of the most significant, emerging challenges to poverty eradication. While the linkages between NCDs and poverty at the individual, household and national levels have been established by several studies from India and abroad, this is yet to find reflection in the country's poverty reduction strategies. The policies and programmes geared to combat NCDs and poverty need to be mutually inclusive and reinforcing.

NCDs in India[2]

- In India, 53% total deaths every year are due to NCDs and over 60 million Indians will die from them by 2020.
- Cardio Vascular Diseases are the major killers (24%) followed by Respiratory Diseases (11%), Cancers (6%), Diabetes (2%) and other NCDs (10%). Projected deaths from Diabetes will

Prevalence of poverty in India

- According to the World Bank (2011), 32.7% of Indians live below the international poverty line of US$1.25 per day, while 68.7% live on less than US$ 2 per day[4].
- United Nations Development Programme (2010) also estimates that 37.2% of Indians live below the country's national poverty line[5].
- Tendulkar Committee appointed by the Government of India determined India's poverty line factoring in spendings on health and education in addition to calorie intake. According to the panel 37% of Indians live below the poverty line[6] 41.8% of the rural population as against 25.7% of urban residents. Based on the indicators of health, education, sanitation, nutrition and income in the National Sample Survey Organization data of 2004-05, the panel concluded every third Indian to be poor.

NCDs and poverty

Loss of income& opportunities: NCDs affect adults in their productive years[7] and it often requires long-term treatment. Loss of productivity and income on account of NCDs cause double burden on poor households, leading to loss of savings and assets, reduced opportunities for children's education and malnutrition.

High treatment expenditure: The out-of-pocket expenditure for NCD treatment (primarily for medicines, diagnostic tests and medical equipments) has increased

Table 1: NCDs and their Risk Factors

	Tobacco Use	Unhealthy diets	Physical Inactivity	Harmful Use of Alcohol
Cardio-vascular	✓	✓	✓	✓
Diabetes	✓	✓	✓	✓
Cancer	✓	✓	✓	✓
Chronic Respiratory	✓			

Source: **The Cameron Institute Report, 2010.[3]**

by nearly 50% in under a decade i.e from 31.6% in 1995-96 to 47.3 % in 2004.[8] 25% of Indian families with a member with Cardio Vascular Disease (CVD) experience catastrophic expenditure[#]. The treatment cost increases with Cancer- 50% of households experience catastrophic spending, which drives 25% of them to poverty.

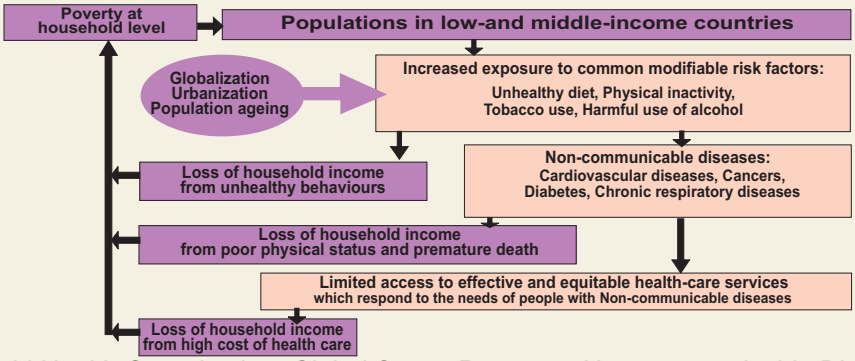
Exacerbation of Poverty: The chronic nature of NCDs implies protracted treatment and significant treatment costs, felt most acutely by the poor. The high treatment costs, combined with likely loss of jobs and lost incomes of the affected individual or/and caregivers, implies heavy economic burden on the households driving them to destitution[9]. An estimated 1.4 million to 2 million Indians experienced catastrophic spending in 2004 and 600,000 to 800,000 people were impoverished by the cost of caring for CVDs and Cancer. Living close to the poverty line, these households face much higher risk of falling into the poverty trap from treatment expenditure[10].

Reduced health care utilization: The essential drugs for treating NCDs are often unaffordable to the poor families who are already overburdened with loss of

Catastrophic expenditure implies healthcare expenditure exceeding 40% of a household ability to pay

income and productivity due to a breadwinner suffering from NCDs. The high expenditure for NCD treatment makes limited access or lower utilization of health care services by poor income households, further aggravating their medical condition. Catastrophic expenditure here implies healthcare expenditure exceeding 40% of a household's ability to pay.

Figure 1: Poverty Contributes to NCDs and NCDs to Poverty



Source : World Health Organization. Global Status Report on Non-communicable Diseases, 2010.[11]

Table 2: NCD Risk Factors and Poverty

Risk Factor	Link with Poverty
Tobacco use Tobacco use is a modifiable risk factor common to all the four major NCDs. India has 274.9 million tobacco users of which 163.7 million use smokeless, 68.9 million smoking, and 42.3 million use both smoking and smokeless tobacco[12].	At the individual and household levels, money spent on tobacco use deprives the family of basic necessities such as nutritious food, shelter, education, and health care. Tobacco users face a higher risk of falling ill and dying prematurely of NCDs and other tobacco-related diseases, depriving their families of income and costing health expenditure, leading to a vicious cycle of lifelong debt[13].
Harmful consumption of alcohol In 2005, there were 62.5 million alcohol users in India, with 17.4% (10.6 million) dependant users. 20-30% of hospital admissions are due to alcohol-related problems[14]. Between 15-20 % of Indians consume alcohol. Over the past twenty years, the number of drinkers has increased from one in 300 to one in 20[15].	Harmful consumption of alcohol has socio-economic and psychological implications for the society and family, in addition to causing injury and chronic diseases. An alcohol addict drains the financial resources of his family, which may result in impoverishment of his family members. It can also reduce the household income through morbidity associated with the drinking habit resulting in increase in medical expenditures and loss of income and sometimes, resulting in the premature death of sole wage earners in a household[16].
Unhealthy diet Consumption of food high in fat, sugar and salt contributes to obesity hypertension and chronic diseases such as Cardio Vascular Diseases and Diabetes. Adequate quantity of fruits and vegetables are essential for a balanced diet. In India, 86% of adults consume less than five servings of fruits and vegetables a day[17].	High pricing of fruits and vegetables, coupled with the poor economic conditions and lack of awareness affect the daily fruit and vegetable intake particularly among the poor[18]. Higher levels of obesity or overweight and hypertension are associated with lower levels of education and income in India[19].
Physical inactivity Decline in physical activity is a key contributor to obesity, which in turn leads to chronic diseases. A study on temporal changes associated with pattern of life style (1989-2003) revealed that there had been a decline in levels of physical activity in that period of time. The regular use of motorized vehicles increased from 86.6% to 93.4% whereas the percentage of people watching television regularly increased to 70.1% from the baseline value of 57.2% in 1989[20].	While physical inactivity was previously associated with affluence, prevalence of physical inactivity, central obesity, overweight and hypertension were found to be statistically similar among illiterate and literate population after controlling the effect of age, sex and place of residence (P>0.05)[21]. Physical activity among urban slum dwellers in India is found to be five times lesser than rural populations[22].

NCDs and the First Millennium Development Goal: Eradication of Extreme Poverty and Hunger

NCDs and their far-reaching damage on individuals, families and communities threaten to impede the country's development gains. Although The Millennium Development Goals (MDGs) do not address NCDs directly, the country's efforts to reduce poverty and hunger in achieving the first goal are thwarted by the increasing burden of NCDs. NCD prevention and control are therefore critical in achieving poverty eradication that the first MDG seeks to achieve by 2015.

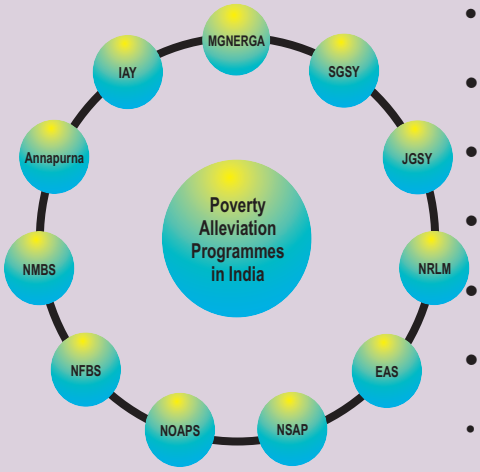
"Non-communicable diseases and their risk factors lead to increased burden on individuals, families and communities, including impoverishment from long-term treatment and care costs, and to a loss of productivity that threatens household income and leads to productivity loss for individuals and their families and to the economies of Member States, making Non-communicable Diseases a contributing factor to poverty and hunger, which may have a direct impact on the achievement of the internationally agreed development goals, including the Millennium Development Goals;"

Source: Para 31, Political Declaration of the UN High Level Meeting on the Prevention and Control of Non-communicable Diseases, September 2011

India's Poverty Alleviation Initiatives

The Government of India has initiated a host of poverty alleviation and social empowerment programmes for different target groups under various agencies to combat poverty. Some of the prominent ones that could be of relevance to NCD prevention and control are:

- **MGNREGA:** Mahatma Gandhi National Rural Employment Guarantee Act.
- **SGSY:** Swarnajayanti Gram Swarozgar Yojna-Livelihood generation for poor households.
- **JGSY:** Jawahar Gram Samridhi Yojna-Creation of sustained employment for rural poor households.
- **NRLM:** National Rural Livelihood Mission.



- **EAS:** Employment Assurance Schemes.
- **NSAP:** National Social Assistance Programme.
- **NOAPS:** National Old Age Pension Scheme.
- **NFBS:** National Family Benefit Schemes.
- **NMBS:** National Maternity Benefit Scheme.
- **Annapurna:** Nutrition for the underprivileged.
- **IAY:** Indira Awas Yojna -for rural housing.

Figure 2: Poverty Alleviation Programmes in India

Despite decades of Governmental efforts to address poverty, India is yet to eradicate poverty and curb related problems of unemployment, hunger and malnutrition. An integrated approach that addresses other contributing factors and implications of poverty such as NCDs is critical both to prevent NCDs and eradicate poverty.

Key messages

- Poverty, both a determinant and a consequence of NCDs, has a detrimental effect on the development of individuals, families and nations.
- NCDs aggravate poverty, reduce productivity and retards development.
- Prevention and control of NCDs contribute to alleviation of poverty; eradication of poverty contributes to improved health.
- Synergistic programming on poverty alleviation and NCD prevention and control can be mutually enhancing.

Way forward

- Generate awareness among different stakeholders about the linkages between NCDs and poverty.
- Initiate multi-sectoral collaboration to tackle NCDs with a view to alleviating poverty.
- Integrate NCD prevention and control into relevant poverty alleviation and social empowerment programmes.
- Identify and leverage resources across programmes addressing NCDs and poverty.
- Review policies of diverse agencies for synergistic action to tackle poverty and NCDs.

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