

Economic Burden of Tobacco Related Diseases in Andhra Pradesh Highlights

According to the Global Adult Tobacco Survey India (2009-10), in Andhra Pradesh 29% of adults (15 years and above) used tobacco. About 17% of adults were smokers and 15% used smokeless tobacco. Furthermore, 31% of adults were exposed to secondhand smoke at home.

The study on *Economic Burden of Tobacco Related Diseases in India*, was conducted to estimate the economic burden of disease attributable to tobacco use. The study estimates the direct¹ and indirect² costs from all diseases due to tobacco use as well as the cost of each of the following four diseases: cardiovascular diseases, cancers, respiratory diseases and tuberculosis in 13 states in India.

Major state level estimates (Andhra Pradesh)

- The total economic costs attributable to tobacco use in Andhra Pradesh amounted to Rs 3118 crores in the year 2011 for persons aged 35-69, of which 54% was direct medical costs and 46% was indirect morbidity costs.
- The economic cost for four specific diseases (CVD, cancer, tuberculosis and respiratory disease) amounted to Rs 882 crores.
- Cardiovascular diseases (CVDs) shared the highest economic burden (Rs 426 crores) on account of tobacco use, followed by tuberculosis (Rs 217 crores), respiratory disease (Rs 165 crores) and cancers (Rs 74 crores).
- Among the four diseases, CVD contributed the highest at 48% of the total direct medical cost and 49% of the total indirect cost.
- The direct medical cost for all diseases due to tobacco use was higher in males, except for tuberculosis where the cost in females (due to smoking) was higher at Rs 100 crores (compared to Rs 34 crores for males), and for cancer where the cost for females (due to smokeless tobacco) was higher at Rs 9.8 crores (compared to 0.8 crores for males).

At national level

The estimated economic cost of diseases attributable to tobacco use at Rs 1,04,500 crores was 1.16% of the GDP. This was 12% more than the combined state and central government expenditures on health in 2011-12. The total central excise revenue from all tobacco products in the year 2011-12 amounted to only 17% of the estimated economic costs of tobacco.

Of the total economic burden, direct cost was 16%; indirect costs were 84%, of which premature mortality cost contributed significantly by nearly 70%. For state level estimates, only direct medical and indirect morbidity costs were estimated. If the cost of premature mortality was to be included in the estimates the actual expenditure would increase manifold.

¹Direct medical costs included the direct health care expenditures for inpatient hospitalization or outpatient visits, including surgeon's fees, medicines, diagnostic tests, bed charges, attendant charges, medical appliances, ambulatory services for treating tobacco related diseases and other such expenditures that are directly related to the inpatient hospitalization or outpatient visit.

²Indirect costs are of two types: (1) indirect morbidity costs comprising of expenditures incurred for transportation other than ambulance and lodging charges for caregivers, and additionally the loss of household income to the whole household due to inpatient hospitalization or outpatient visits as a proxy for the value of lost productivity; and (2) indirect mortality costs which is the cost of premature mortality.

Table 1. Health Costs of Disease among tobacco users in Andhra Pradesh (in Rs crores)

	Andhra Pradesh		India	
	4 diseases	All diseases	4 diseases	All diseases
Male	615.8	2413.3	8438.1	24707.9
Female	265.9	704.7	1705.1	6768.0
Total	881.7	3117.9	10143.3	31475.9

Table 2. Direct cost of smoking and smokeless tobacco in Andhra Pradesh (in Rs crores)

	Smoking		Smokeless tobacco	
	Male	Female	Male	Female
CVD	174.2	43.8	20.4	28.8
Cancer	17.3	7.4	0.8	9.8
Tuberculosis	34.2	100.3	2.5	16.4
Respiratory disease	94.0	4.4	NA	NA
All diseases	1164.0	225.2	55.1	252.3

Table 3. Indirect cost of smoking and smokeless tobacco in Andhra Pradesh (in Rs crores)

	Smoking		Smokeless tobacco	
	Male	Female	Male	Female
CVD	121.9	14.2	14.3	9.1
Cancer	14.1	10.2	0.7	13.6
Tuberculosis	52.9	5.7	3.9	0.9
Respiratory disease	64.2	1.9	NA	NA
All diseases	1140.2	107.2	53.9	120.1

The report calls for prioritisation of tobacco control for larger population level benefits in Andhra Pradesh.

Increased resource and budget allocations for NCD prevention and control, including full implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC) and the tobacco control laws is imperative.

We need to act now to save lives!