

# Tobacco Use in Pakistan

## POLICY BRIEF

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Based on "Tobacco Taxation and Consumption in Pakistan". Durre Nayab, Muhammad Nasir, Junaid Alam Memon, Mahmood Khalid and Anwar Hussain. 2018.

High tobacco use and associated health burden in Pakistan is a major national concern. Earlier studies have estimated that there are 22 million active tobacco consumers in Pakistan and have attributed an annual death toll of 100,000 to tobacco consumption. Nevertheless, there is little information on tobacco consumption at the household level, including information on how much of the family budget is spent on it. There is also a lack of information on how tobacco consumption varies across regions and income groups. Exploring such trends is an important initial step for the formulation of effective policy measures.

This brief provides some preliminary indicators of household level tobacco prevalence and budgetary allocations across different regions, provinces and income groups in Pakistan. It is based on a descriptive analysis of the Household Integrated Income and Consumption Survey (HIICS) produced in 2015-16 by the Pakistan Bureau of Statistics. The HIICS combined the Family Budget Survey and the Household Income and Integrated Survey (HIES).

Since HIICS gathers data at the household level on tobacco expenditure, this brief does not offer any insight on the individual-level tobacco prevalence and budgetary allocations. Given that the actual prevalence and spending maybe higher than those reported in the HIICS, the figures in this brief can be conservative, and may have underestimated the actual prevalence and spending.

## Major Trends

### Regional

Around 45% of the HIICS households reported consuming tobacco in some form; with cigarette consumption at 26% and chewed tobacco at 13% (Table 1). The prevalence rates of cigarettes, chewed tobacco products and overall tobacco consumption are higher in the rural areas.

Households in Pakistan allocate about 3% of their budget for purchasing tobacco products. In both

**Table 1: Tobacco Prevalence Across Regions (%)**

Country/ Region	Tobacco Products		
	Cigarettes	Chewed	Any
<b>Pakistan</b>			
Prevalence	26.44	13.8	45.51
Budget Share	3.6 (5,837)	1.24 (4,111)	2.87 (10,835)
<b>Rural</b>			
Prevalence	27.81	15.62	48.24
Budget Share	3.85 (2,071)	1.25 (1,743)	3 (4,123)
<b>Urban</b>			
Prevalence	24.06	10.65	40.79
Budget Share	3.09 (3,766)	1.2 (2,368)	2.61 (6,712)

**Notes:**

- Number of households in parentheses.
- Expenditure shares averaged over households who bought at least one of the tobacco products.
- All values are weighed using sampling weights.
- "Any" is all tobacco products consumed by the household, including but not restricted to cigarettes and chewed.

**Source:** Authors' calculations from PSLM 2015-16 (HIICS) data

urban and rural regions, this share is higher for cigarette consumption than for users of chewed tobacco (Table 1). The budget shares for chewed tobacco are similar for both rural and urban households. In contrast, expenditure on cigarettes constitutes a higher budget share of the rural households compared to their urban counterparts because of the regional price variations and differences in rural and urban household income earnings.

Provincial

Table 2 gives the province-wise analysis of household tobacco consumption and budgetary allocations. Two-thirds of those from Balochistan consume tobacco in one form or another. Punjab has the lowest percentage of tobacco consuming households among all the provinces, but even that figure stands at 40%.

Khyber Pakhtunkhwa (KP) presents an intriguing scenario: it has the lowest prevalence of cigarette consumption and the highest percentage of chewed tobacco consuming households. A possible reason

being the tradition of chewing naswar, which is popular among the largest ethnic group (Pashtuns) in the province. Balochistan has the highest percentage of cigarette consumers and the second highest of the chewed tobacco consumption. Punjab has the lowest percentage of chewed tobacco consuming households while Sindh and KP have the highest and lowest shares of tobacco expenses in household budgets respectively.

Income Group

Table 3 reveals the prevalence and budgetary shares of tobacco products across the two income groups: namely the upper 40% and the lower 60%. Clearly, the prevalence of cigarettes exceeds that of the chewed tobacco among the households in the higher income group. Nonetheless, when it comes to the consumption of any form of tobacco, there are no significant variations across the two groups. The lower income group, however, apportions higher share of their budget on tobacco consumption.

Table 2: Tobacco Prevalence Across Provinces (%)

Provinces	Tobacco Products		
	Cigarettes	Chewed	Any
KP			
Prevalence	10.24	43	49.86
Budget Share	1.76 (644)	1.13 (1,942)	1.36 (2,400)
Punjab			
Prevalence	29.28	5.92	40.19
Budget Share	3.4 (2,857)	1.4 (504)	3.07 (3,762)
Sindh			
Prevalence	27.05	14.76	52.57
Budget Share	4.52 (1,567)	1.36 (989)	3.34 (3,286)
Balochistan			
Prevalence	29.43	37.77	66.27
Budget Share	2.98 (769)	0.91 (676)	2.12 (1,387)

Notes: - Number of households in parentheses.  
- Expenditure shares averaged over households who bought at least one of the tobacco products.  
- All values are weighed using sampling weights.  
- “Any” is all tobacco products consumed by the household, including but not restricted to cigarettes and chewed.

Source: Authors’ calculations from PSLM 2015-16 (HIICS) data

Table 3: Tobacco Prevalence Income Groups (%)

Income Groups	Tobacco Products		
	Cigarettes	Chewed	Any
Upper 40%			
Prevalence	27.13	13.57	44.84
Budget Share	2.51 2,422	0.85 1,564	2.08 4,158
Lower 60%			
Prevalence	26.12	13.91	45.83
Budget Share	4.13 3,415	1.41 2,547	3.24 6,677

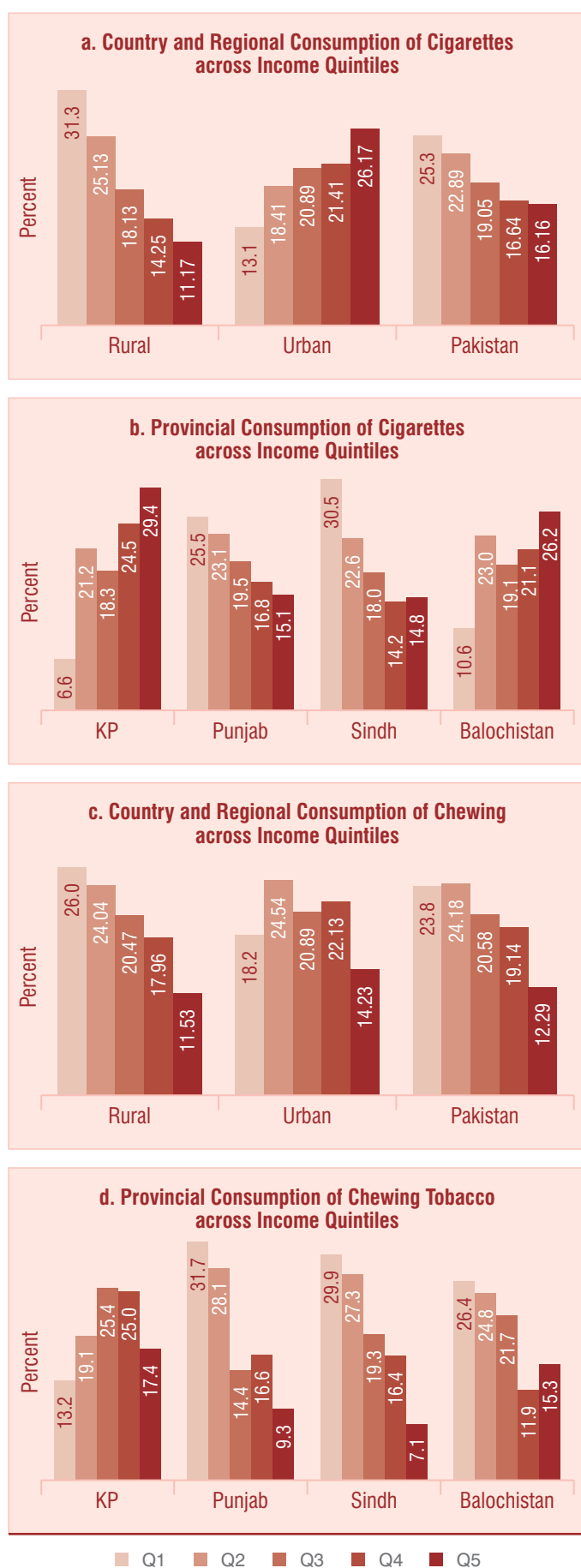
Notes: - Number of households in parentheses.  
- Expenditure shares averaged over households who bought at least one of the tobacco products.  
- All values are weighed using sampling weights.  
- “Any” is all tobacco products consumed by the household, including but not restricted to cigarettes and chewed.

Source: Authors’ calculations from PSLM 2015-16 (HIICS) data

Overall

Figure 1a demonstrates the cigarettes and chewed tobacco consumption across income quintiles by region and province. The two main tobacco products (cigarettes and chewed tobacco) are mostly consumed by the lower- and middle-income

**Figure 7: Tobacco Consumption by Income Quintiles across Regions and Provinces**



Source: Authors' calculations from PSLM 2015-16 (HIICS) data

households; while, the prevalence rate for these products, barring few exceptions, is lower among the highest income quintiles. The World Health Survey report, in 2003, for Pakistan corroborates the findings of this study for the tobacco consumption pattern vis-à-vis income levels. The regional cigarette consumption reveals different patterns for rural and urban areas. Contrary to the trend in the rural areas, the prevalence rate in the urban areas is higher in the upper income quintiles.

For chewed tobacco, higher consumption is observed in the lower income quintiles (Q1 being the poorest quintile) in the rural areas. The urban areas, on the other hand, have a mixed distribution of tobacco consumers, albeit the highest income group which essentially has the lowest proportion of tobacco chewers (Figure 1c).

The provincial graphs reveal interesting patterns of cigarette consumption across income quintiles (Figure 1b). For instance, both Punjab and Sindh follow similar pattern of cigarette consumption as is observed for Pakistan on the whole. However, in case of KP, the pattern is reversed. Not only does the province have the lowest percentage of cigarette consuming households, but also has the highest proportion of consumers in the top income quintiles. This could have important implications for price elasticity demand for cigarettes in the province.

A similar trend, though a less pronounced one, can also be observed for Balochistan. In KP, the households in the fourth- and fifth-income quintiles (the top 40%) account for 54% of the total smoked cigarettes in the province, while the same income group in Balochistan smokes 47% of the total.

Figure 1d exhibits the distribution of chewed tobacco consuming households across income quintiles in the four provinces. Similar patterns are observed in all the provinces except for KP which has a bell-shaped distribution signifying the fact that chewed tobacco is consumed in significant proportions across all income groups. Nonetheless, in all the four provinces, more than 50% of the tobacco consuming households lie in the lower income group (the bottom 60%).

## Conclusions

- Almost half of the households in Pakistan report some form of tobacco consumption. Since the HIICS collects data on tobacco consumption at the household level, it would not be wrong to assume that the actual prevalence can be higher than what is reported here as there can be members, most probably young, who are consuming tobacco out of home, and the incurred cost is not reflected in the household's reported tobacco expenditure.
- There are significant differences in the consumption of cigarettes and chewed tobacco products across regions, income groups, and provinces. These can have implications for how prices might affect tobacco consumption and subsequently on the effectiveness of policy interventions. Such differences should, therefore, be considered when formulating policies to curtail tobacco consumption.
- Tobacco consumption results in loss of economic productivity due to tobacco-related illnesses and death. Countries like Pakistan where tobacco consumption is very high and health facilities are very limited, tobacco causes not only the loss of productivity but also overburdens the health care system.

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