

Menstrual Hygiene among Adolescent Girls: Key Insights from the NFHS-5 (2019-21)

There are 242 million adolescents aged 10-19 in India¹ comprising 18% of the total population and among them 116 million are girls. In absolute numbers, India has the largest adolescent population in the world - the country accounts for 17.7% of the world's total population, and 20.1% of the world's adolescent population. The health and well-being of adolescents is a key determinant of the country's overall health scenario and in the realization of the demographic dividend.

The onset of menstruation is one of the most important changes that occur among adolescent girls. The use of a hygienic method of menstrual management is imperative for her health and personal hygiene and, vital to her empowerment, and dignity.

The objective of this analysis is to study the socio-economic determinants of the use of hygienic methods for menstrual management by adolescent girls².

The National Family Health Survey (NFHS) collected information about the use of locally manufactured/produced napkins, sanitary napkins, tampons, and menstrual cups among ever-menstruated respondents. The use of any of these methods is considered 'a hygienic method of protection during the menstrual period'. A deeper analysis of the unit-level data of NFHS-5 was conducted for adolescents (15-19) years only. The survey does not collect information among 10-14 year old adolescent girls.

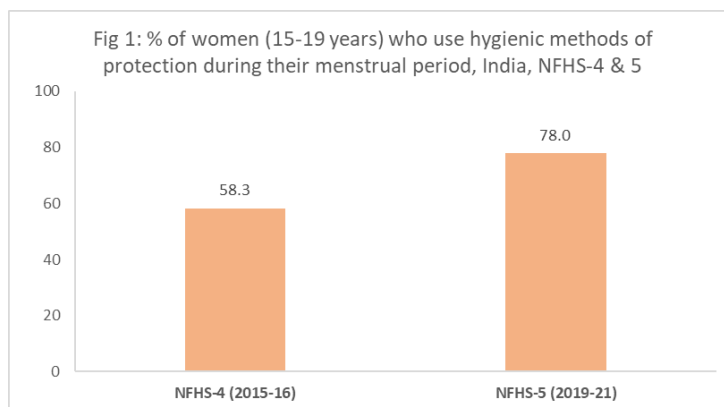
Trends

- ◆ The latest survey found that 64.5% adolescent girls use sanitary napkins, 49.3% use cloth and 15.2% use locally produced napkins (Table 1). There has been a significant increase in the use of sanitary napkins among adolescent girls. It increased by 22% points during the last five years, while the use of locally prepared napkins remains at the same level of around 15%.
- ◆ Overall, 78% of adolescent girls use a hygienic method of protection during their menstrual cycle (2019-21), a substantial increase from 58.3% about five years back (Fig 1).

Table 1: Percent of women age 15-19 who have ever menstruated by type of protection used during their menstrual period, India

Type of protection during menstrual period*	NFHS-4	NFHS-5
Cloths	62.5	49.3
Locally prepared napkins	16.6	15.2
Sanitary napkins	42.2	64.5
Tampons	2.4	1.7
Menstrual cup	-	0.3
Any hygienic method	58.3	78.0
Nothing	0.4	0.2
Number of cases	120,410	121,803

* Multiple answers

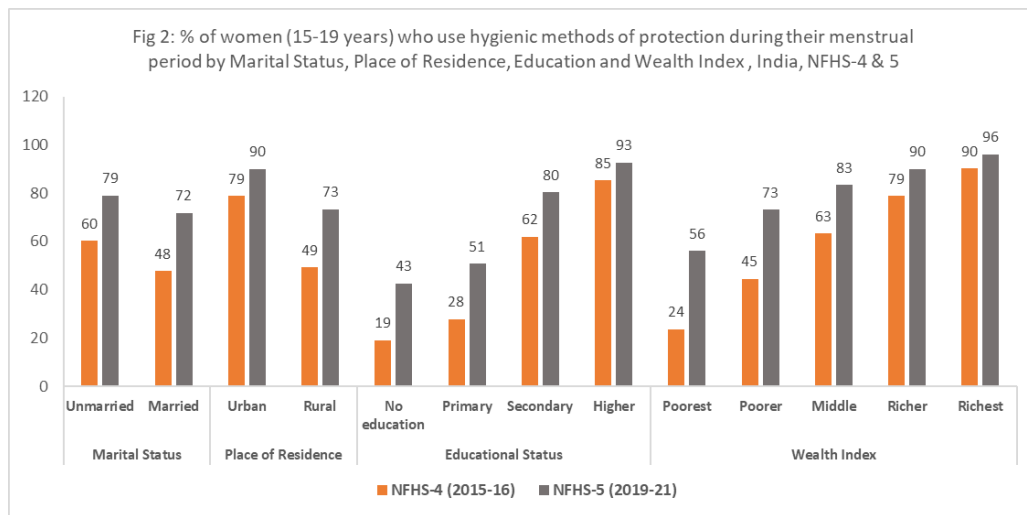


Differentials

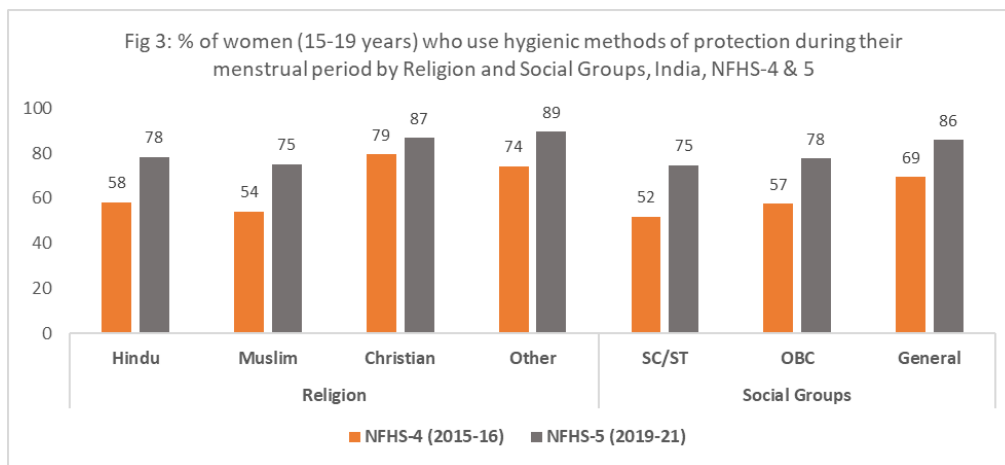
- ◆ Girls with higher than secondary level of education are more than twice as likely to be using a hygienic method than girls without any education level (93% versus 43%) as shown in Fig 2.
- ◆ The use of hygienic methods is slightly higher among unmarried adolescent girls as compared to those married in this age group, which is revealed from both rounds of the survey.
- ◆ In rural areas, the use is significantly lower at 73% versus 90% among those living in urban areas. Such differentials were also observed in the previous round of the survey.

¹ Population Projections of India and States, 2011-2036, Report of the Technical Group on Population Projections, NCP, MOHFW, July 2020

² UNFPA recognizes that menstruators are of diverse gender identities. The analysis is based on NFHS data that only captures the menstrual protection among women and girls in the age group 15-24.



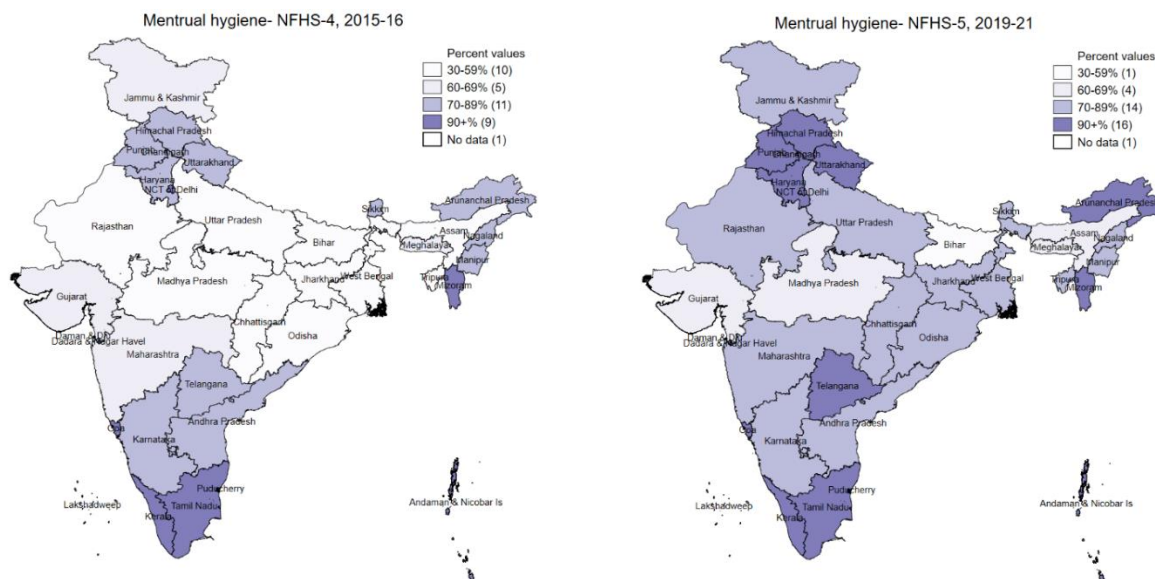
◆ Differentials by religion and caste also persist. The use of hygienic methods is lower among girls from Scheduled Castes and Scheduled Tribes than those belonging to other castes, though the gap has been narrowing over a period (Fig 3).



Differentials by States and Districts

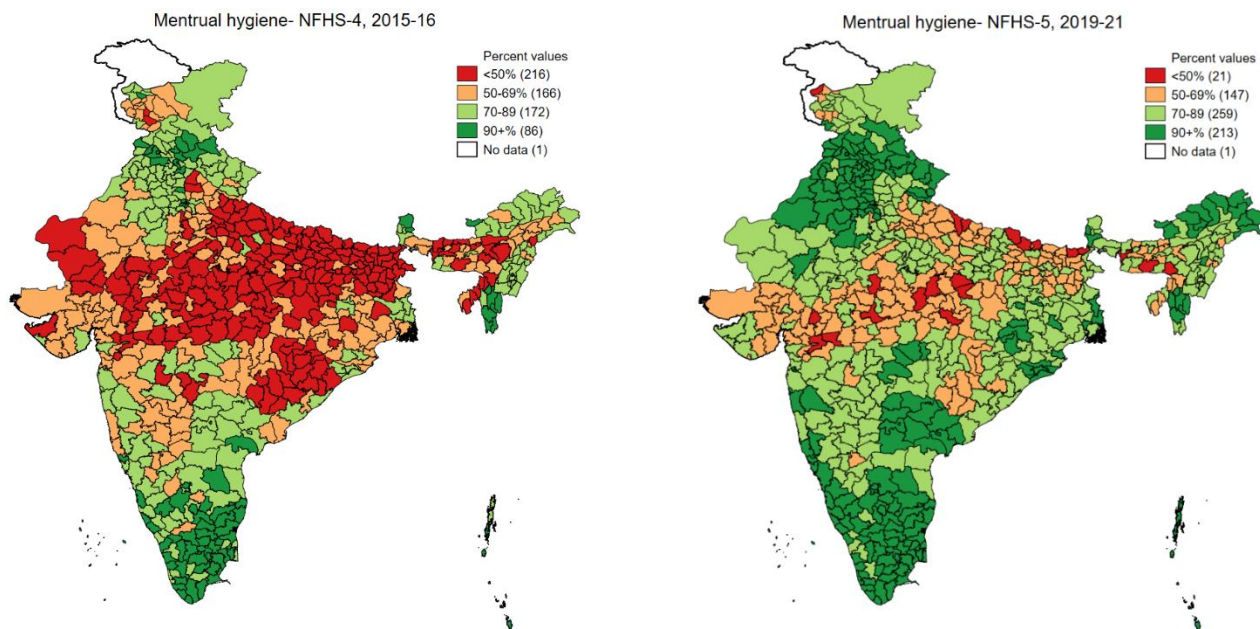
- ◆ The use of hygienic protection by adolescent girls differ by states. Bihar has the lowest percentage of girls using a hygienic method of menstrual protection (59.7%), followed by Madhya Pradesh (61%) and Meghalaya (65.6%).
- ◆ There are only 11 states / Union Territories, which have a lower level of use as compared to the national average, while the remainder 25 States rank above. More than 95% of adolescent girls are using hygienic methods of protection in Tamil Nadu, Goa, Delhi and Telangana (Fig 4).

Fig 4: State wise Trends in Use of Hygienic Method of protection during Menstrual Period by Adolescent Girls, NFHS-4 & 5



- ◆ The state-wise trends indicate that more states have now moved to the range of 70% or above use in 2019-21 than the previous round in 2015-16 – Fig 4.
- ◆ District-wise analysis suggests lower use of hygienic methods of protection in many districts in the Central and Eastern parts of the country in 2015-16, however, many have improved during the last five years. Seven districts still have lower than 40% of use in 2019-21, which include Sidhi, Dindori, Araria, Kisanganj, Purba and Pashim Champaran and Jaintia Hills. Many districts (213) have now achieved more than 90% usage.

Fig 5: District wise Trends in Use of Hygienic Method of protection during Menstrual Period by Adolescent Girls, NFHS-4 & 5



Determinants

- ◆ Logistics regression analysis provides the effect of individual background characteristics on the use and non-use of hygienic methods of protection during menstruation among adolescent girls. An odds ratio (OR) greater than one shows a net positive association of the variable with use and vice versa, after controlling for other characteristics (Table 1).
- ◆ The odds of using a hygienic method during the menstrual period is significantly lower for adolescent girls with either no or primary levels of education in comparison to their counterparts with higher levels of education (OR=0.15 and 0.19 vs OR=1.0).
- ◆ The wealth index also shows a staggering effect on the use of hygienic products, whereby adolescent girls from the lowest quintile have much lower odds ratios (0.09) when compared to the highest quintile category. Even adolescent girls from the second highest quintile are less likely to use hygienic methods of protection in comparison to the next highest category.
- ◆ Girls living in urban areas and those belonging to Christian or other religious groups have a higher probability of using hygienic methods of protection during their menstrual period. After neutralizing the effects of socio-economic characteristics, there is no difference in such use among married or unmarried girls.
- ◆ In terms of caste category, adolescent girls from Scheduled Castes and Tribes have a lower probability of using hygienic products compared to girls from other castes.

Table 1: Odds ratio from logistics regression of women aged 15-19 years using hygienic method of protection during their menstrual period, NFHS-5

Characteristics	Odd Ratio	Characteristics	Odd Ratio
Educational status		Wealth status	
Ref Cat: Higher		Ref Cat: Richest	
No education	0.154 ^{***}	Poorest	0.092 ^{***}
Primary	0.190 ^{***}	Poorer	0.174 ^{***}
Secondary	0.514 ^{***}	Middle	0.290 ^{***}
		Richer	0.455 ^{***}
Religion		Social groups	
Ref Cat: Hindu		Ref Cat: General	
Muslim	0.797 ^{***}	Schedule tribe	0.943 ^{**}
Christian	1.605 ^{***}	Schedule caste	0.797 ^{***}
Other	1.696 ^{***}	OBC	0.791 ^{***}
Place of residence		Marital Status	
Ref Cat: Rural		Ref Cat: Unmarried	
Urban	1.409 ^{***}	Married	1.033
Sig: ***p<.005			