

[ORIGINAL RESEARCH ARTICLE]

Levels, Trends and Differentials of Teenage Childbearing in India

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Abstract

Teenage childbearing occurs in every society worldwide. Teenagers are understudied and a complex age group to reach. It is essential to know the levels and trends of teenage childbearing with its socio-economic and demographic differentials. Therefore, the overall purpose of the present study is to explore the levels, trends, and differentials of teenage childbearing in India. The required data were obtained from National Family Health Survey (NFHS). The analysis is based on the samples of 24,811 women aged 15-19 in 2005-06 (NFHS-3), 1,21,552 in 2015-16 (NFHS-4) and 1,22,544 in 2019-20 (NFHS-5). Descriptive statistics and binary logistic regression analysis have been carried out by using SPSS-23. In NFHS-5, the proportion of teenage childbearing is 6.8 per cent, which showed a decline from 16.0 per cent in NFHS-3. Tripura (21.9%) has the highest teenage childbearing percentage, whereas Ladakh had zero teenage childbearing. Among the districts in India, Dhalai district (28.2%) in Tripura has the highest percentage of teenage childbearing. The percentage of teenage childbearing is significantly higher in rural areas than in urban areas, except in Goa and Himachal Pradesh. Higher educational attainment and a rich household wealth index are associated with a lower incidence of teenage childbearing. Except for the NFHS-3, teenage childbearing is comparatively higher among Muslims than among other religions. Exposure to media helps in reducing teenage childbearing. Teenage childbearing

is higher among the Scheduled Tribe (S.T) than in other castes. Despite some progress, more has to be done to minimise teenage childbearing in India.

Keywords: teenagers, adolescent, early marriage, pregnancy, childbearing

INTRODUCTION

Teenage childbearing is a teenage girl between 13-19 years becoming pregnant. For this paper, teenagers refer to the age group 15-19 as the data is conveniently available for this age group. The teenage years are a vital transition from childhood to maturity. During this period, they undergo physical, psychological, and biological changes (Bingenheimer & Stobenau, 2016; Erulkar, 2013; Kothari et al., 2012; Patra, 2016; Sahoo, 2011). The transition from childhood to teenage may cause unstable emotions in some teenagers, and this may cause complex psychology breaks on teenagers. Teenage childbearing is considered extremely risky because teenage girls are physically and psychologically not mature enough to bear a child. There is a need to curb teenage childbearing as it has many adverse effects on women, children, families, and society. Unlike developed countries, where most teenage pregnancy occurs in unmarried girls, in India, most teenage childbearing occurs because of early marriages.

The government of India has taken various steps to prevent early marriage and childbearing. The government introduced various programmes such as Rashtriya Kishor Sathya Karyakram (RKSK), Balika Samridhi Yojana (BSY), Beti Bachao, Beti Padhao etc., to address the needs of teenage girls. Moreover, various NGOs like 'Save The Children', 'Young Lives', Development Initiative Supporting Healthy Adolescents (DISHA) etc., work to empower teenage girls. Hopefully, these efforts will lead to a decline in teenage childbearing in India. Therefore, it is interesting to know the levels and trends of teenage childbearing in India. Teenage childbearing has become a growing concern due to its various implications. Therefore, understanding the various causes of teenage childbearing has become crucial. Against this backdrop, the present study will provide India's levels, trends, and differentials of teenage childbearing.

The incidence of teenage childbearing

Teenage childbearing is common in all countries; however, the prevalence of teenage childbearing varies by country (Singh & Darroch, 2000). The figures for the incidence of childbearing vary across countries and worldwide. Globally in 2021, an estimated 14 per cent of adolescent girls and young women will give birth before 18. 'Save the Children' found that annually, 13 million children are born to women aged under 20 worldwide, more than 90 per cent in developing countries. Teenage childbearing rates range from 143 per 1,000 in some sub-Saharan African countries to 2.9 per cent per 1,000 in South Korea (Roy & Debnath, 2018). There is a significant variation in teenage childbearing in developing countries. Childbearing among women under 20 ranges from one-third to 50 per cent in developing countries (Raj et al., 2010). Around 95 per cent of the world's teenage births are found in low and middle-income nations (Ghose

& John, 2017). In 2017, an estimated 11.8 million teenage pregnancies occurred in India (Aguayo & Paintal, 2017).

Factors causing teenage childbearing

Teenage childbearing is driven by multiple factors, including cultural norms and expectations of adolescent girls' disadvantaged status, acute poverty and ill-being, and weaknesses in legal and policy actions. These drivers manifest at an individual, interpersonal, community and societal levels. One of the primary essential factors in the rate of teenage childbearing is early marriage and traditional gender roles. Lack of contraception is the most crucial factor, and it could be due to lack of education, due to which adolescents do not know how to avoid becoming pregnant and cannot obtain contraceptives even where they are widely available. Teenage girls in relationships with older boys, particularly with adult men, are more likely to become pregnant than teenage girls in relationships with boys of their own age. Poverty, pornography, mass media and peer influence have all been identified as factors contributing to teenage childbearing (Madume & Dibia, 2021). The probability of having children during teenage is higher for those women with lower levels of education. In addition, the probability of having a child before 20 is lower for those who lived with both biological parents at age 14 than those with other living arrangements. At the community level, teens with mentors and more connected to their communities are less likely to engage in sexual activity (Maddow-Zimet & Kost, 2021). On the other hand, those who live in communities with higher rates of substance abuse, violence and hunger are more likely to start sex early and to have a child (Firdaus & Mishra, 2020).

Teenage childbearing is considered extremely risky because teenage girls are physically and psychologically not maturing enough to bear a child. Pregnancy complications are more common in women who are young mothers (Moore et al., 1997). Pregnancy-related mortality rates among women aged 15-19 are twice as high as those for pregnant women in their twenties (Sayem & Nury, 2011). Childbearing during the teenage increases the risk of social and economic disadvantage (Joanna, 2017). Childbearing at an immature age might harm a girl's future by causing her to abandon her education. The teenage mother may lack the necessary job skills, decreasing employment chances (Haveman et al., 1997).

There are multiple societal implications of teenage childbearing. Women who have children as teenagers are more likely to face long-term economic struggles than women who start families in their twenties (Joanna, 2017). Being a young mother can have an impact on one's schooling and even work opportunities. Mothers with children at a young age are more likely to abandon their education than women who delay having children (Haveman et al., 1997). Statistics from the United States and Canada reveal that teenage mothers are more likely to have lower educational attainment and a higher school dropout rate (Tipper, 1997). Women's lifetime wages and contribution to economic growth are diminished due to female school dropouts and lower educational attainment (WHO, 2011). Childbearing at an early age can also harm a girl's future by preventing her from completing her education, increasing her risk of an unhappy

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marriage and a career with low salary. The teen mother's ability to find and keep a job may be hindered by her lack of work experience and education.

There is plenty of research on maternal and child health but extremely limited on teenagers. While there is a rising recognition of the importance of promoting reproductive health, much of what is currently being done in this area is fragmented. Although preventing unwanted teenage pregnancy is the primary goal of modern society, many teens continue to become pregnant. In this background, as no study about teenage childbearing was done in this area, a study to know the levels and socio-economic factors associated with teenage childbearing was taken up. The paper aims to study the levels and trends of teenage childbearing in India; with its socio-economic and demographic differentials by using the National Family Health Survey (NFHS) data.

DATA AND METHODS

This study uses data from the National Family Health Survey (NFHS). The NFHS is an important demographic and health data source in India. A stratified, multistage cluster sampling approach was used to construct a nationally representative household-based sample in NFHS. Women aged 15-49 were interviewed verbally by a trained interviewer in either English or the regional language of each state, depending on the respondents' desire, to reduce potential literacy hurdles. Before each interview, informed consent was taken from the participants. The study protocols were reviewed and approved by the International Institute for Population Sciences (IIPS) Ethical Review Board in India and the ORC Macro Institutional Review Board in the United States. The National Family Health Survey collects data on various social and health concerns at the national, state and district levels.

In this study, 'teenage childbearing' refers to the percentage of women who have begun childbearing at the age of 15-19. Women in this age group who have already given birth or are currently pregnant with their first child are included. The analysis is based on the samples of 24,811 women aged 15-19 in NFHS-3 (2005-06), 121,552 in NFHS-4 (2015-16) and 1,22,544 in NFHS-5 (2019-20). The interstate and inter-district variations in teenage childbearing are portrayed in the results. The background characteristics that influence the likelihood of motherhood during teenage include the economic status and the social setup in which the women live. Among the socio-economic factors, residence, education, religion, caste, and wealth index were considered. Descriptive statistics and binary logistic regression analyses have been carried out by using SPSS-23. Tables, maps, and figures were used to illustrate the findings.

RESULTS AND DISCUSSION

Levels and trends of teenage childbearing in India

Map 1 shows the percentage of teenage childbearing based on NFHS-5 (2019-20) data. Teenage childbearing is 6.8 per cent at the national level. The data says that in India, nearly seven per cent of women aged 15-19 have begun childbearing. Ten states have a higher percentage of teenage childbearing than the

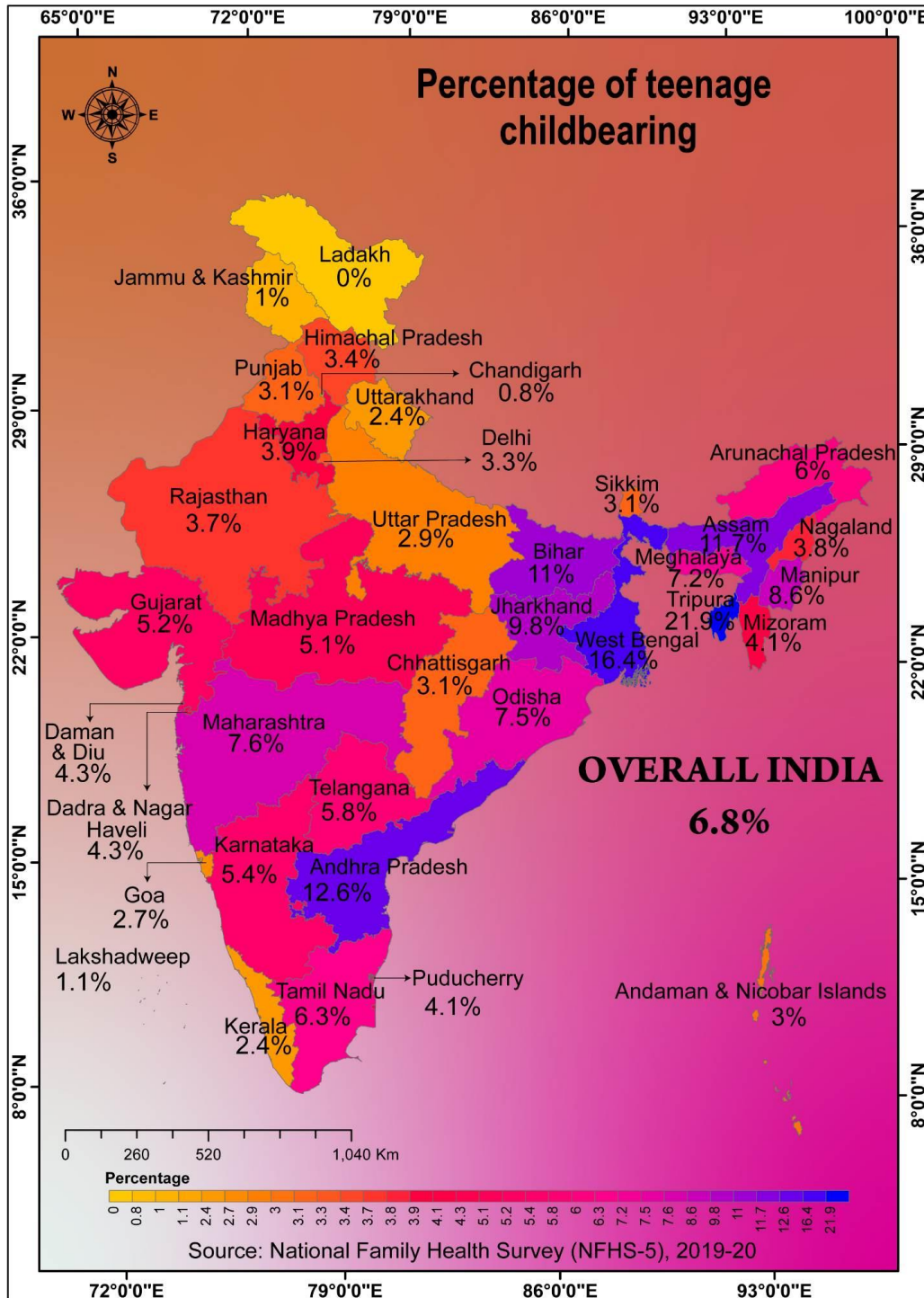
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national level. States that topped the chart in teenage childbearing during NFHS-5 were Tripura (21.9%), West Bengal (16.4%), Andhra Pradesh (12.6%), Assam (11.7%), Bihar (11%), Jharkhand (9.8%), Manipur (8.6%), Maharashtra (7.6%), Odisha (7.5%) and Meghalaya (7.2%). According to the National Family Health Survey-5 (2019-20), Ladakh and Chandigarh are the only Union Territories with less than one per cent of teenage childbearing. Interestingly, Ladakh had zero teenage childbearing, and it was as low as 0.8 per cent in Chandigarh. The states/Union Territories with low teenage childbearing are Kashmir (1.0%), Lakshadweep (1.1%), Kerala (2.4%), Uttarakhand (2.4%), Goa (2.7%) and Uttar Pradesh (2.9%).

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Map 1

Percentage Of Teenage Childbearing in India, 2019-20



Source: national family health survey, 2019-20

Note. Teenage childbearing includes women aged 15-19 who have had a live birth and who are pregnant with their first child

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Figure 1 shows the prevalence of teenage childbearing from NFHS-3 (2005-06) to NFHS-5 (2019-20). Between NFHS-3 and NFHS-4 (2015-16), teenage childbearing declined substantially from 16.0 per cent to 7.9 per cent. During 2005-06, teenage childbearing stood at 16.0 per cent at the national level. That means that one in every six women aged 15-19 has already started having children. The pattern of teenage childbearing differs across states during 2005-06. Jharkhand has the highest incidence of teenage childbearing in India (27.5%). Eight states have a higher incidence of teenage childbearing than the national average of 16.0 per cent. States that topped the chart in teenage childbearing during 2005-06 were Jharkhand (27.5%), West Bengal (25.3%), Bihar (25.0%), Tripura (18.5%), Andhra Pradesh (18.1%), Karnataka (17.0%), Assam (16.4%), and Rajasthan (16.0%). On the other hand, Himachal Pradesh has the lowest incidence of teenage childbearing (3.1%), followed by Goa (3.6%), Jammu & Kashmir (4.2%), and Delhi (5%). Manipur, Tripura, and Meghalaya showed a declining trend from 2005-06 to 2015-16. The remaining states showed a declining trend during the same period. The most significant reduction has been recorded in Jharkhand, where teenage childbearing has declined by 15.6 percentage points. Bihar (12.8 points) and Uttar Pradesh (10.5 points) also showed a positive reduction.

Between 2015-16 and 2019-20, teenage childbearing slightly declined from 7.9 per cent to 6.8 per cent. During 2015-16, teenage childbearing stood at 7.9 per cent at the national level. Eleven states/Union Territories have a higher percentage of teenage childbearing than the national level. Although a small state, Tripura has the highest percentage of teenage childbearing in India (18.8%). West Bengal (18.3%) among the major states is the forerunner in this regard, followed by Assam (13.6%), Bihar (12.2%), Jharkhand (11.9%), Andhra Pradesh (11.8%), Arunachal Pradesh (10.5%), Telangana (10.5%), Meghalaya (8.6%) and Maharashtra (8.3%). During 2015-16, Lakshadweep had zero teenage childbearing. The percentage of teenage childbearing is comparatively low in Delhi (2.1%), Punjab (2.6%), Himachal Pradesh (2.6%), Sikkim (2.8%), Uttarakhand (2.8%), Goa (2.9%) and Jammu and Kashmir (2.9%). Himachal Pradesh, Punjab, Delhi, Sikkim, Manipur, and Tripura showed an increasing trend from 2015-16 to 2019-20. The rest of the states showed a declining trend during the same period.

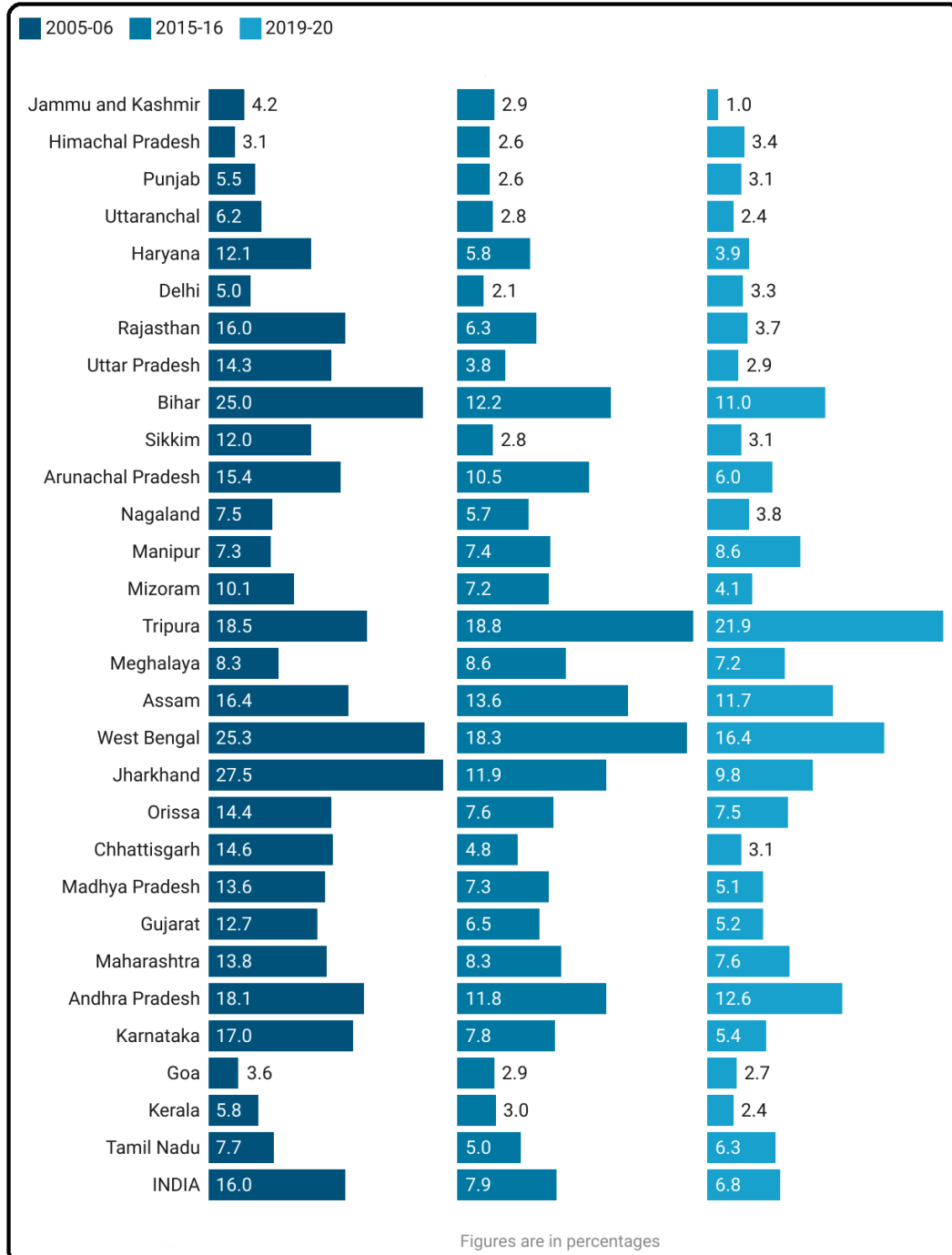
Between 2005-06 and 2019-20, the percentage of teenage childbearing increased in Himachal Pradesh, Manipur, and Tripura. The remaining states showed a declining trend of teenage childbearing from 2005-06 to 2019-20. At 3.4 percentage points, Tripura shows the highest rise between 2005-06 and 2019-20. Manipur showed a rate increase of 1.3 percentage points from 2005-06 to 2019-20. Himachal Pradesh showed an increase in teenage childbearing by 0.3 percentage points during the same period. Overall, teenage childbearing in India fell by 9.2 percentage points from 2005-06 to 2019-20. The highest reduction is recorded in Jharkhand, where teenage childbearing reduced by 17.7 percentage points between 2005-06 and 2019-20. Other states with a remarkable reduction in teenage childbearing are Bihar (14 points), Rajasthan (12.3 points), Karnataka (11.6 points), Chhatisgarh (11.5 points), and Uttar Pradesh (11.4 points). In Goa,

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teenage childbearing is reduced only by 0.9 percentage points from 2005-06 to 2019-20.

Figure 1

Percentage Of Women Who Have Begun Childbearing At 15-19 Years in Selected States of India



Source: national family health survey, 2005-06, 2015-16 & 2019-20

Note. States which were covered in NFHS-3 are shown in the figure

District-level analysis of teenage childbearing

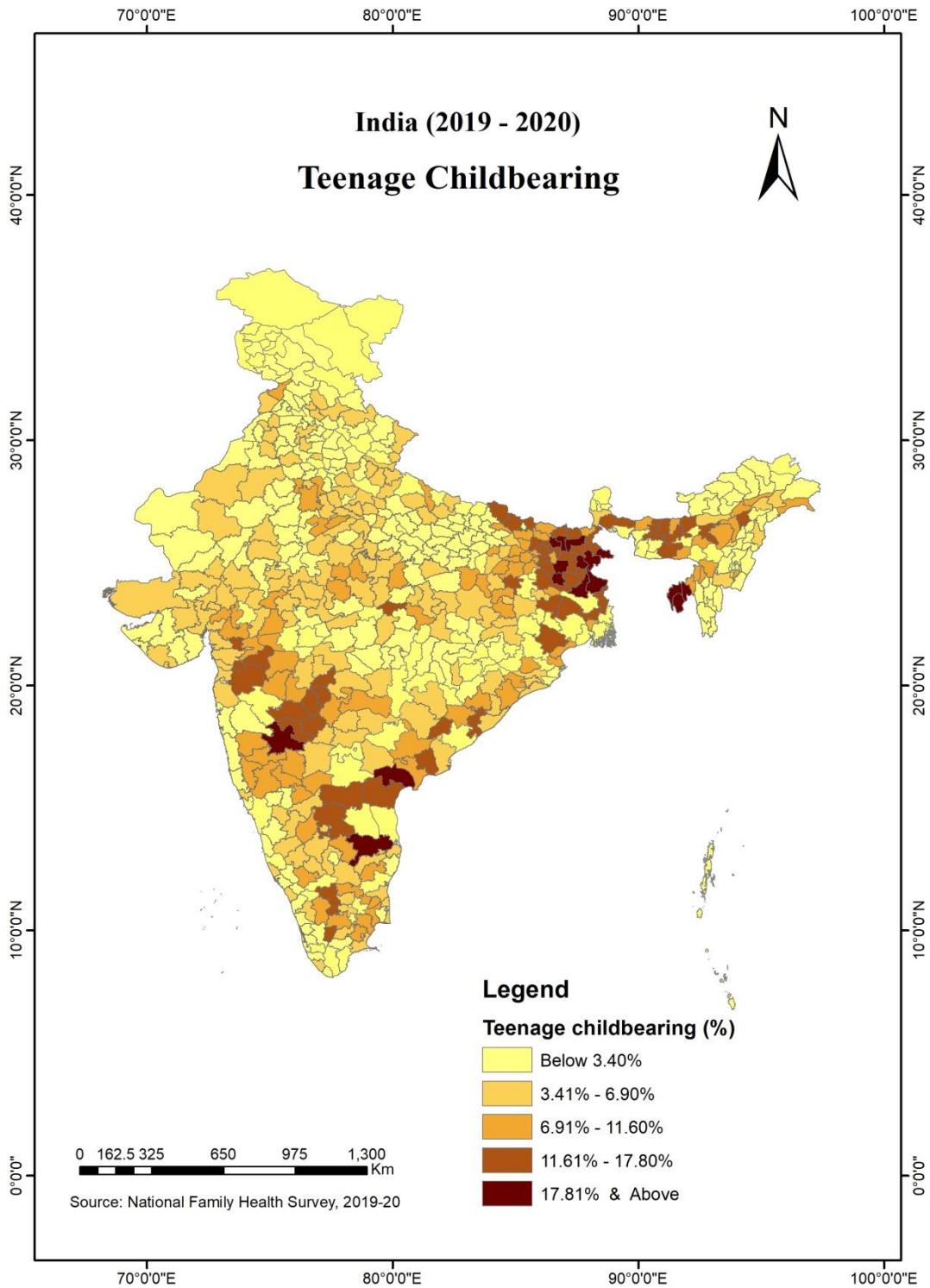
The district-level analysis using NFHS-5 (2019-20) data reveals a wide variation of teenage childbearing across districts. Among all the districts in India, the Dhalai district in Tripura shows the highest prevalence of teenage childbearing (28.2%), followed by Koch Bihar (27.3%), Gomati (25.8%), Sepahijala (25.6%), Khowai (25.4%), Paschim Medinipur (25%), Birbhum (24.9%), South Tripura (23.7%), Saharsa (23.6%), and Dhubri (23.3%) districts. The analysis of the top fifty (50) districts based on the high prevalence of teenage childbearing reveals that eleven (11) states have these high prevalence districts. West Bengal has the maximum number of districts with high prevalence (12 districts), followed by Bihar (8), Tripura (7), Assam (6), Jharkhand (4), Maharashtra (4), Andhra Pradesh (3), Telangana (3), Odisha (1), Meghalaya (1) and Tamil Nadu (1).

On the other hand, the incidence of teenage childbearing is extremely low in the districts of Azamgarh (0.29%), Mau (0.35%), Kota (0.47%), and Jalandhar (0.56%). There are 88 districts in which there is no incidence of teenage childbearing. Some districts are West Garo Hills, East Garo Hills, Balod, West Siang, Longding, Lohit, Kurung Kumey, Kra Daadi, East Siang etc. Map 2 gives an idea of the prevalence of teenage childbearing in various parts of India.

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Map 2

Percentage Of Women Who Have Begun Childbearing At 15-19 Years in The Districts of India, 2019-20



Source: national family health survey, 2019-20

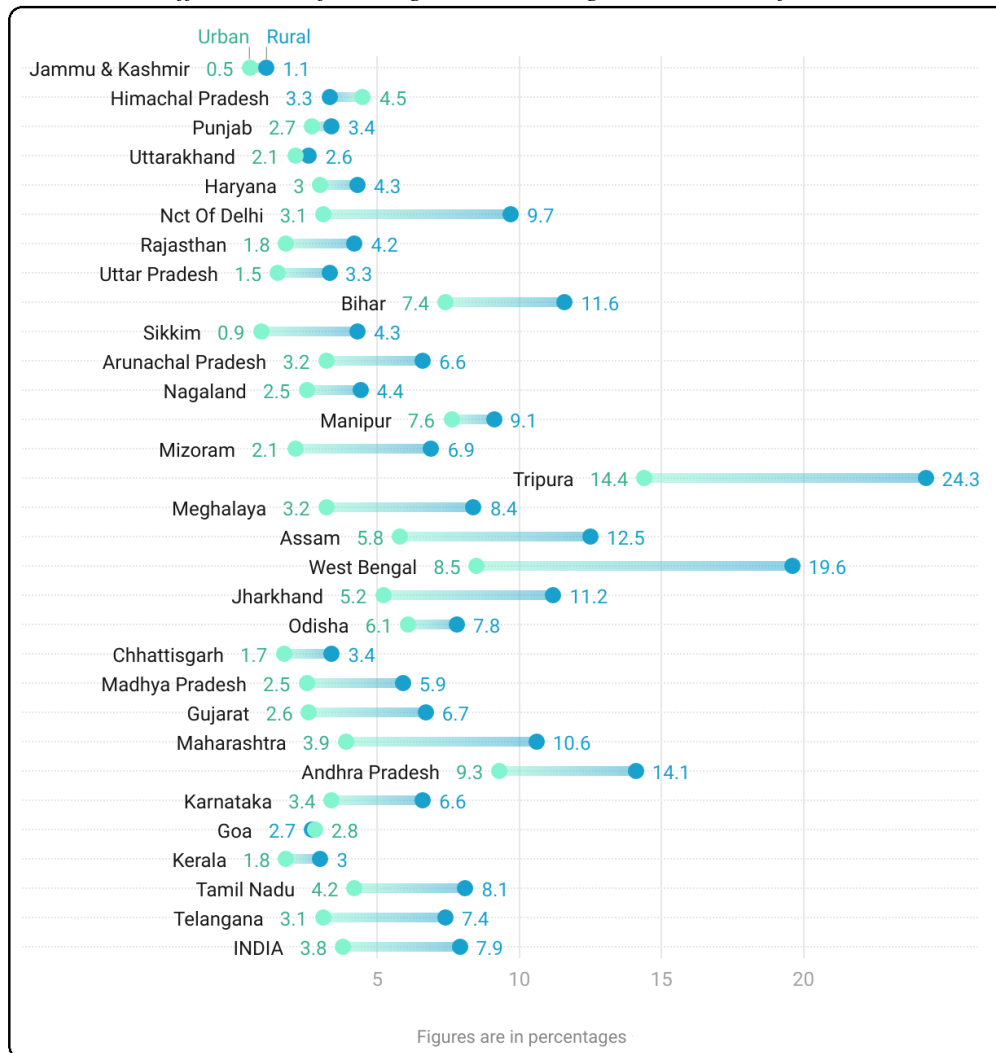
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Rural-Urban differentials in teenage childbearing

Figure 2 depicts the prevalence of teenage childbearing by place of residence using NFHS-5 (2019-20) data. It shows that teenage childbearing is relatively high in rural areas. In rural areas, 7.9 per cent of women in rural areas in the age group 15-19 have begun childbearing. Teenage childbearing is high in rural areas except in Goa and Himachal Pradesh. Teenage childbearing in the rural areas of Tripura, West Bengal, Andhra Pradesh, Assam, Bihar, Jharkhand, and Maharashtra is quite substantial. The rural-urban gap is highest in West Bengal (11.1 percentage points), followed by Tripura (9.9), Assam (6.7), Maharashtra (6.7), NCT of Delhi (6.6), and Jharkhand (6.0). Rural areas characteristically have high rates of poverty, low education levels, high unemployment and poor health status compared with urban areas. For these reasons, teenage girls marry early and give birth early in rural areas.

Figure 2

Rural-Urban Differentials of Teenage Childbearing in The States of India



Source: national family health survey, 2019-20

Socio-economic differentials in teenage childbearing

Table 1 shows the level of teenage childbearing with selected background characteristics. The prevalence of teenage childbearing is higher in rural areas compared to urban areas in all three National Family Health Surveys rounds. The level of teenage childbearing decreases with an increasing level of education. During 2019-20, 17.7 per cent of women aged 15-19 with no education have already begun childbearing, compared to only 2.5 per cent of women who had a higher level of education. The level of teenage childbearing among women with primary education is more than seven times higher than among women with higher education.

Except for NFHS-3, teenage childbearing is higher among Muslim women than the other religious groups. Exposure to media helps in reducing teenage childbearing. The level of teenage childbearing is much lower among women who are exposed to mass media. The National Family Health Survey data suggested that childbearing among women aged 15-19 decreases with wealth. In 2019-20, only 3.8 per cent of rich households begun childbearing, compared with 9.0 per cent of teenage women in the poor wealth quintile. Teenage childbearing is more prevalent in poor households than in middle-class and rich households. Teenage childbearing is more common among non-working women compared to workers. Teenage childbearing is more common among Scheduled Tribe women aged 15-19 years than among other castes/tribe groups.

Table 1

Percentage Of Women Who Have Begun Childbearing At 15-19 Years by Background Characteristics in India

Characteristics		2005-06	2015-16	2019-20
Residence	Rural	19.1	9.2	7.9
	Urban	8.7	5.0	3.8
Education	No education	32.6	20.2	17.7
	Primary	21.6	14.5	12.6
	Secondary	9.2	6.8	6.2
	Higher	2.1	2.2	2.5
Religion	Hindu	16.4	7.8	6.5
	Muslim	16.0	9.0	8.4
	Christian	4.9	6.4	6.8
	Sikh	8.6	2.7	2.8
	Buddhists/Neo-Buddhist	14.3	7.5	3.8
	Other religions	2.4	1.3	0.9
Media exposure	No	29.6	12.9	10.9
	Yes	13.0	7.0	5.8
Wealth index	Poor	23.5	10.6	9.0
	Middle Class	16.3	8.3	6.9
	Rich	8.6	4.4	3.8
Currently working	No	17.2	8.1	6.9
	Yes	12.7	5.4	5.5

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Caste	Scheduled tribe	21.1	10.5	8.7
	Scheduled caste	19.8	8.8	7.3
	Other Backward Class	16.0	7.0	5.8
	None of them	10.8	6.6	5.5
	Total women	24,811	1,21,552	1,22,544

Source: national family health survey, 2005-06, 2015-16 & 2019-20

Socio-economic correlates of teenage childbearing

Table 2 shows that rural women are more likely than urban women to have children between the ages of 15 and 19 (OR=2.156; 95% C.I: 2.030-2.289; p .000). Education reduces the chances of bearing a child during teenage. Women with primary (OR=.120; 95% C.I: .104-.140; p.000), secondary (OR=.180; 95% C.I: .155-.209; p.000) and higher (OR=.392; 95% C.I: .342-.448; p.000) education are less likely to bear a child during teenage compared to illiterate women. Compared to women who do not have media exposure, the odds of teenage childbearing are lower among women exposed to media (OR=.500; 95% C.I: .475-.524; p.000). Poor households are more likely to bear children during their teenage than rich households. Teenage childbearing is significantly lower among women who belonged to the middle class (OR=.398; 95% C.I: .375-.422; p.000) and rich (OR=.533; 95% C.I: .497-.572; p.000) compared with women from the poor wealth index. Compared to non-working women, workers are less likely to bear a child during their teenage (OR=.792; 95% C.I: .649-.967; p.000).

Table 2

Binary Logistic Regression Analysis for Assessing the Socio-Economic Correlates of Teenage Childbearing in India

Characteristics	Exp (β)	95% C.I		P-Value
		Lower	Upper	
Residence				
Rural ®				
Urban	2.156	2.030	2.289	.000
Education				
No education ®				
Primary	.120	.104	.140	.000
Secondary	.180	.155	.209	.000
Higher	.392	.342	.448	.000
Religion				
Hindu ®				
Muslim	1.795	1.330	2.422	.000
Christian	1.357	1.002	1.837	.048
Sikh	1.713	1.223	2.400	.002
Buddhist/Neo-Buddhist	4.320	2.829	6.597	.000
Other religions	3.255	1.939	5.465	.000
Media exposure				
No ®				

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Yes	.500	.476	.524	.000
Wealth Index				
Poor ®				
Middle Class	.398	.375	.422	.000
Rich	.533	.497	.572	.000
Currently working				
No ®				
Yes	.792	.649	.967	.022
Caste				
Scheduled tribe ®				
Scheduled caste	2.085	1.706	2.548	.000
Other Backward Class	2.525	2.077	3.070	.000
None of them	3.253	2.680	3.947	.000

Source: national family health survey, 2019-20

Note. ® =reference category

CONCLUSION AND RECOMMENDATIONS

This study examines teenage childbearing from 2005-06 to 2019-20. There is tremendous progress in reducing the prevalence of teenage childbearing in India. Teenage childbearing declined in India between 2005-06 and 2019-20. Overall, in India, 6.8 per cent of women aged 15-19 years have begun childbearing during 2019-20, which is a decline from 16.0 per cent during 2005-06. Even though there is a progressive reduction in teenage childbearing, ten states in India show a higher prevalence of teenage childbearing. Tripura, West Bengal, Andhra Pradesh, Assam, and Bihar still witness this social evil. Seventeen districts in India report a remarkably high incidence of teenage childbearing. Teenage childbearing is a rural phenomenon in India. Even though overall teenage childbearing has dropped in India, the urban-rural divide is still high. Various socio-economic factors such as place of residence, education, caste, religion, mass media exposure and wealth index significantly influenced the incidence of teenage childbearing.

Despite some progress, more has to be done to minimise teenage childbearing in India. There is a need to curb teenage childbearing as it has many adverse effects on women, children, families, and society. The present study shows that education plays a significant role in ending teenage childbearing. While the right to education enables a sharp increase in the enrolment ratio, the Act provides coverage for children up to 14 years. This results in a spike dropout rate after attaining elementary education. School dropout girls are married off at an early age. In India, the majority of teenage childbearing occurs within married life. To keep girls in school, a robust support system is needed. Making secondary education a fundamental right will prevent early marriages.

One of the reasons for high teenage childbearing is low contraceptive use. For instance, the unmet need for contraception is 17.3 per cent in the South Tripura district (IIPS & ICF, 2021); the district has a high prevalence of teenage childbearing. Making contraceptives more accessible at a broader scale for young

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women by giving special attention to rural areas is strongly recommended. Teenage childbearing has been reported to mostly occur among the marginalised Scheduled Tribe (S.T) community. Most of the tribals belong to poor households. Poor households are more likely to arrange the early marriage of their daughters. So, poverty is the primary driver of teenage childbearing among minority tribals. Special attention must be given to providing social protection to poor tribal households. The study showed that media exposure plays an essential role in reducing teenage childbearing. In addition to Newspapers, Radio, and Television; Films and Documentaries should also be used to spread awareness.

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