

A cross-sectional study of sociodemographic determinants of child marriage in an urban slum of Mumbai city: The challenge persists

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ABSTRACT


Background: Child marriage and early confinement is a long-established custom in India. The report of National Commission for Protection of Child Rights also mentioned the rising incidence of child marriage in urban girls as compared to rural girls. **Objectives:** The objective of this study was to assess the burden and determinants of child marriage and teenage pregnancy in urban slum area among women in the age group of 15–45 years. **Materials and Methods:** It was a cross-sectional center-based study carried out on 382 women in the age group of 15–45 years over a period of 6 months in an urban field practice area of a tertiary medical college. Participants were interviewed by face-to-face interview method. Data were analyzed by SPSS software. **Results:** Nearly 83.50% of the respondents belonged to Muslim religion, 29.32% had crossed their secondary education, and 83.50% were married. The mean age of marriage and first pregnancy was 16.99 ± 2.78 standard deviation (SD) and 18.81 ± 2.64 SD years, respectively. The mean age at marriage and at first child birth was less in Muslims and in those who studied <7th standard ($P = 0.00$). Similarly, home deliveries were noted more in Muslim women (35.50%) and in women who studied <7th standard (98.24%) ($P = 0.00$). **Conclusion:** The study noted higher number of child marriages, especially among Muslim religion and understudied women. Women of urban areas are still delivering children in their adolescent age group. A community awareness program should be conducted for parents regarding the importance of girls' education, age of marriage, and law.

KEY WORDS: Child Marriage; Teenage Pregnancy; Education; Urban Area

INTRODUCTION

Reproductive health status of women has a long-term influence on the quality of health status of the entire family. Women play a pivotal role in the overall progress of a country as they constitute half of the human resources of a nation.

Throughout the world, marriage is regarded as a moment of celebration and a milestone in an adult's life. Unfortunately, the practice of early marriage gives no such cause for celebration. Child marriage is defined by the UNICEF as marriage prior to the age of 18 years. Early marriage, followed by early pregnancy, is a serious public health concern due to its potential implications on maternal and child health.^[1-7] Early marriage in India has been practiced for centuries, with children married off before their physical and mental maturity. The problem of child marriage in India remains rooted in a complex matrix of religious traditions, social practices, economic factors, and deeply rooted prejudices. India has the highest number of child brides in the world. It is estimated that 18% girls in India get married by age 15 and 47% by their 18th birthday.^[8] In India, 8% of women in the

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age range of 15–19 years have begun childbearing; among them, 5% of women have had a live birth and 3% of women are pregnant with their first child.^[9]

Child marriage and early confinement is a long-established custom in India, with poverty and ignorance magnifying the problem.^[10] Child marriage almost always cuts girls' education short, trapping them and their children in poverty. It often leads to early pregnancy and childbirth, putting girls' lives and health at risk. Neither physically nor emotionally ready to become wives and mothers, these girls are at far greater risk of experiencing dangerous complications in pregnancy and childbirth, becoming infected with HIV/AIDS and suffering domestic violence. With little access to education and economic opportunities, they and their families are more likely to live in poverty.

“Marriage should be entered into only with the free and full consent of the intending spouses.”^[11]

Young girls are robbed of their youth and required to take on roles for which they are not psychologically or physically prepared. Many have no choice about the timing of marriage or their partner. Some are coerced into marriage, while others are too young to make an informed decision. Premature marriage deprives them of the opportunity for personal development as well as their rights to full reproductive health and well-being, education, and participation in civic life.

In Maharashtra, 16 districts figure in a national ranking of top 20 districts reporting a rise in underage marriages over a decade to 2011, according to the study by the National Commission for Protection of Child Rights (NCPCR).^[12] The report of NCPCR also mentioned the rising incidence of child marriage in urban girls as compared to rural girls. The rationale of this study was to get an insight of actual figure of child marriages in urban slum area, with a specific objective to study the existing sociodemographic determinant of child marriage and teenage pregnancy among women in the age group of 15–45 years.

MATERIALS AND METHODS

It was a cross-sectional center-based study carried out over a period of 6 months in an urban field practice area of a tertiary medical college. A total of 382 study participants were enrolled in the study by using the following formula: Sample size (n) = $[\text{DEFF} * Np(1-p)] / [(d^2/Z_{1-\alpha/2}^2 * (N-1) + p * (1-p)]$.

where, N: Population size (women in the age group 15–45 years): 51750.

p: Hypothesized percentage frequency of outcome factor in the population: 50% ± 5.

d: Confidence limits as percentage of 100 (absolute ± %): 5%.

DEFF (Design effect for cluster surveys): 1.

Universal sampling method was used for selection of the study participants who had visited the urban health center. All women between the age group of 15 and 45 years were included irrespective of marital status. Institutional ethical clearance was taken prior to the commencement of the study.

Study participants were selected from general outpatient department of urban health center. Data collection was done on Monday, Wednesday, and Friday for 6 months, the next working day was selected in case of holiday. Five individuals were selected daily and each participant was interviewed by face-to-face interview method after explaining the study procedure and obtaining verbal consent of participation. Due confidentiality was maintained and the data were collected with the help of a structured questionnaire. In case of minor (<18 years), consent of parents was taken.

Data entry was done by an investigator and then further analysed online using OpenEpi: Open Source Epidemiologic Statistics for Public Health, Version 3.01. Sociodemographic factors were elaborated by descriptive statistics and association between different variables was tested using Chi-square test and *t*-test wherever applicable.

RESULTS

A total of 382 women in the age group of 15–45 years were interviewed. The mean age of respondents was 29.54 years with ± 8.46 standard deviation (SD). As the majority of the population were selected from urban field practice area and the attendees of urban health center were belonging to Muslim religion, 319 (83.50%) respondents were belonging to Muslim religion and the remaining 63 (16.5%) were Hindus by religion in the current study. Totally 112 (29.32%) women were illiterate, 158 (41.36%) had studied up to 7th standard, and only 112 (29.32 %) had crossed their secondary education, but no one had studied beyond 10th standard. Majority of the study participants (319 [83.50%]) in the age range of 15–45 years were married [Figure 1].

The mean age of respondents at the time of marriage was found to be 16.99 years with ± 2.78 SD, whereas the mean age at first child was 18.81 years with ± 2.64 SD. The relation between mean age at marriage and mean age at first child with religion was found significant with unpaired *t*-test. It was found that the mean age for marriage and first childbirth was lower in Muslim religion as compared to Hindu religion. The mean age of marriage of 258 study participants who had studied below 7th standard was 16.59 ± 2.62 SD years and of 67 study participants who had studied beyond 7th standard was 18.53 ± 2.63 SD years. The relation between education level and mean age of marriage was highly significant with *t*-test ($P < 0.00$), and it is found that it was more prevalent

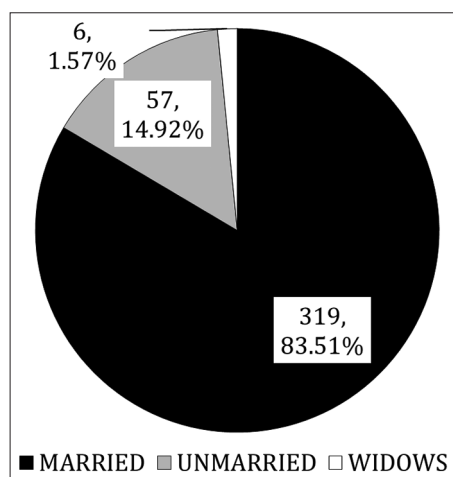


Figure 1: Distribution of women according to marital status

in those who had not studied beyond 7th standard. A total of 181 (55.70%) women in the age group of 15–45 years got married before 18 years of age. It was found that 60% women belonging to Muslim Religion and 64% of women who studied <7th standard married before they turned 18; these findings were found significant with Chi-square test [Table 1].

Out of 306 women who had delivered child, 92 females delivered their first child before 18 years of age and a total of 181 (59.15%) women delivered their first child before turning 20. Among 325 married and widows, 306 women had delivered a total of 1018 children through 1006 deliveries. Among these deliveries, 666 (66.20%) deliveries occurred at hospital and 340 (33.80%) occurred at home. Prevalence of home deliveries was noted more in Muslim women (35.50% [306]) as compared to Hindu women (23.62% [34]), and it is found statistically significant (Chi-square test: $P = 0.005$), similar findings were observed in women who had studied <7th standard compared to women who studied beyond 7th standard (Chi-square Fisher's exact test: $P < 0.000$) [Table 1].

DISCUSSION

The age at marriage and pregnancy varies in different part of India, according to different social customs, ethnic group, and religious group. The mean age of women in the age group of 15–45 years in the current study was found to be 29.54 years. Nearly 83.5% of women in the age group of 15–49 years were currently married and almost every second women had child marriage in the current study. Less than 1/3rd of the women studied beyond 7th standard. The mean age at marriage and first childbirth was <17 and 19 years, respectively. The study revealed that child marriage and teenage pregnancy were significantly more among Muslim religion and who have studied <7th standard; similarly, home deliveries were noted more among these two groups.

Almost 83.5% of women in the age group of 15–49 were currently married, which is higher than the 73% of NFHS-4

report of India.^[9] Child marriages have been practiced in India for thousands of years. Even though its popularity has now decreased due to changes in law, the Census of India 2011 reported a rising trend of child marriage in urban areas.^[13] The findings of child marriage of the current study are in close proximity with the UNICEF Ending Child Marriage: Progress and Prospects report, where India stood in the top ten countries, with the highest rate of child marriage reported to be 58%,^[14] but the study findings are higher than that of the Moore report (45%),^[15] NFHS-4 report (40%),^[9] and the study conducted by Banerjee *et al.* (24.17%).^[16] The mean age at marriage was 16.99 ± 2.78 which was lesser than the study done by Pandya and Bhanderi in rural Gujarat with 18.2 ± 2.4 .^[17] A study reported 59.15% of childbirth before 20 years of age, which is higher than reported by Moore *et al.* (42%),^[15] Pandya and Bhanderi (49%),^[17] and Banerjee *et al.* (24.17%).^[16] Education has been delineated as the single-most important protective factor against early marriage by many researchers. Child marriage is low among women who have had access to higher education and secondary education.^[18] The study findings reported significant relation between less schooling years and child marriage, similar significance was noted by Pandya and Bhanderi.^[17] Corresponding conclusion was also drawn by the UNICEF India in which they reported that a girl with 10 years of education has a six times lower chance of being pushed into marriage before she is 18;^[19] similarly, NFHS-4 reported that the median age at first marriage for women aged 25–49 years increases from 17.2 years for women with no schooling to 22.7 years for women with 12 or more years of schooling. The finding of child marriage with respect to religion in the current study was in contrast with the findings of Raj *et al.*, where they found similar percentage of child marriages in both religions (Muslim: 46.2% and Hindu: 45.6%).^[20]

This study had given insight in the current fertility trends of urban area of a metropolitan city. Education was found to be an important determinant for child marriage which is being noted from various researchers since long back. Although it is a center-based study and the majority of the population of urban field practice area and the attendees of urban health center were belonging to the Muslim religion, a field cluster survey may give a clear picture of child marriage.

CONCLUSION

Child marriage in India has grave implications for population control as adolescent brides are likely to have high fertility and a number of unwanted pregnancies. This study conducted on reproductive age group women of an urban slum of a metropolitan city noted a high number of child marriages, especially among Muslim religion and understudied women. Females still delivering the children's during adolescent period which may hamper their physical as well as psychological growth. A community awareness program

Table 1: Sociodemographic determinants for child marriage (age group: 15–49 years)

Determinants	Religion		Education		Total
	Muslim	Hindu	Studied <7 th standard	Studied beyond 7 th standard	
Married women	274 (85.89%) (n=319)	51 (80.95%) (n=63)	258 (95.56%) (n=270)	67 (59.82%) (n=112)	325 (85.07%) (n=382)
Women married before 18 years	167 (60.94%) (n=274)	14 (27.45%) (n=51)	167 (64.73%) (n=258)	14 (20.9%) (n=67)	181 (55.70%) (n=325)
	Chi-square: $P < 0.00$		Chi-square: $P < 0.00$		
Mean age at marriage	16.67±2.62 SD (n=274)	18.66±2.60 SD (n=51)	16.59±2.62 SD (n=258)	18.53±2.63 SD (n=67)	16.99±2.78 SD (n=325)
	Unpaired <i>t</i> -test: $P = 0.00$		Unpaired <i>t</i> -test: $P = 0.00$		
Mean age at first child birth	18.43±2.42 SD (n=255)	20.70±2.39 SD (n=51)	18.43±2.42 SD (n=246)	20.42±2.42 SD (n=60)	18.81±2.64 SD (n=306)
	Unpaired <i>t</i> -test: $P = 0.00$		Unpaired <i>t</i> -test: $P = 0.00$		
Home deliveries	306 (35.50%) (n=862)	34 (23.62%) (n=144)	334 (98.24%) (n=877)	06 (1.76%) (n=129)	340 (33.80%) (n=1006)
	Chi-square: $P = 0.00$		Chi-square: $P = 0.00$		

SD: Standard deviation

should be conducted for parents regarding the importance of girl's education, age of marriage, and law.

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