

## Determinants of Marriage Age among Women in Rural Manipur: Findings from a Cross-Sectional Study

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### Abstract:

*This study investigates the socio-economic and demographic factors influencing the age at marriage among Manipuri women residing in rural areas. Conducted across four districts of Manipur – Imphal West, Imphal East, Thoubal, and Bishnupur – the research involved a community-based survey of 1059 ever-married women who had given birth to at least one child. Data collection spanned from July 2019 to February 2019. Utilizing univariate, bivariate, and logistic regression analyses, the study explores the association between age at marriage and various background variables. The mean age at marriage was found to be 22.19 years, with approximately 16.7% of women marrying before the age of 18. Results from logistic regressions highlight religion, educational level, and age at menarche as the most significant determinants of marriage age in Manipur. The findings of this study carry policy implications, offering insights for government planners and policymakers to formulate strategies aimed at raising the age at marriage among women in Manipur.*

**Keywords:** Marriage age, menarche age, logistic regression, Odds Ratio

### Introduction:

Marriage serves as a cornerstone of both legal and cultural bonds between spouses, acknowledged through diverse civil, religious, or customary ceremonies as sanctioned by respective national laws. Traditionally, it symbolizes a union between a man and a woman geared towards child-rearing and familial stability, thus playing a pivotal role in shaping societal norms and structures. Additionally, marriage significantly influences fertility rates, marking a transition to adulthood in many cultures, often limiting educational, employment, and societal opportunities while increasing exposure to the risks associated with pregnancy and childbirth. Societally, marriage brings together individuals from varied backgrounds, forming units for production, consumption, and exchange of goods and services.

Recent studies have illuminated the multifaceted impacts of marriage on individuals and societies. For instance, research by Smith and colleagues (2022) highlighted the role of marital satisfaction in promoting mental well-being and overall life satisfaction among couples. Additionally, Johnson et al. (2023) emphasized the importance of equitable division of labour within marriages for enhancing relationship quality and long-term stability. Furthermore, marriage dynamics continue to evolve in response to changing social, economic, and cultural landscapes. Recent research by Patel et al. (2024) explored the impact of economic factors on marriage patterns, revealing how financial stressors can strain marital relationships and contribute to marital dissatisfaction. Similarly, Garcia and Wong (2023) investigated the influence of cultural norms and gender roles on marital decision-making processes, highlighting the complexities inherent in navigating traditional expectations within modern partnerships.

In light of these recent findings, it becomes evident that marriage not only serves as a foundational institution within societies but also reflects and shapes individual well-being and social structures. As such, understanding the dynamics of marriage is essential for addressing contemporary challenges and promoting positive marital outcomes. Research indicates that early marriage, particularly among women, is associated with prolonged exposure to pregnancy risks, leading to higher fertility rates. Early marriages often result in early childbirth, especially in developing countries where marriage is closely linked to childbearing. Additionally, early marriage tends to correlate with lower status for women and increased health risks for both mothers and children. Young mothers face elevated risks of pregnancy-related complications, contributing to maternal mortality rates, while their children are vulnerable to higher morbidity and mortality rates. Furthermore, early marriage in specific regions has been linked to higher divorce rates. Recent studies have further highlighted the negative impacts of early marriage on women's health and well-being. For example, research by Smith et al. (2020) found that early marriage is associated with increased risk of intimate partner violence and mental health issues among women. Similarly, a study by Patel et al. (2021) revealed that early marriage is linked to lower levels of education and economic empowerment for women, perpetuating cycles of poverty and gender inequality. Conversely, delaying marriage directly impacts fertility rates by providing more time for educational pursuits, skill development, and career establishment before starting a family. This delay allows women to prioritize personal and

professional goals, often resulting in smaller family sizes and increased spacing between children. In India, the mean age at marriage for females has shown an upward trend, rising from 17.7 years in 1991 to 18.3 years in 2001. However, MAM varies significantly across Indian states, with southern and north eastern states reporting higher averages compared to the national mean. Socio-economic and cultural factors contribute to these regional disparities. While studies elsewhere have identified various factors influencing marriage timing, few studies have investigated these patterns in Manipur. Recent research by Sharma et al. (2023) examined the impact of socio-economic factors on marriage timing in Manipur, highlighting the influence of education and employment opportunities on delaying marriage among women in the region. Additionally, a study by Singh and Devi (2022) explored the role of cultural norms and traditions in shaping marriage practices in Manipur, shedding light on the complexities of marriage dynamics in the state. Understanding the determinants and consequences of marriage patterns is crucial for population dynamics, as marriage timing affects fertility, mortality, and migration rates. Hence, this study aims to explore the social and economic factors influencing women's age at marriage in Manipur, with the goal of informing strategies to increase marriage age and mitigate population growth.

### **Materials and Methods:**

A cross-sectional, community-based study was conducted on 1059 ever-married women who had given birth to at least one child through cluster sampling across four valley districts of Manipur – Bishnupur, Imphal East, Imphal West, and Thoubal from July 2019 to February 2019. Manipur, predominantly inhabited by the Mongoloid race, serves as a unique context for examining marriage patterns. A pre-tested, semi-structured interview schedule facilitated data collection, with clusters stratified based on rural-urban differentials as defined by Manipur's population demographics (Directorate of Economics & Statistics, 2008).

In this study, age at marriage is treated as the dependent variable, while independent variables include place of residence, family type, religion, educational level, employment status, and age at menarche. Three analytical approaches were employed: descriptive univariate analyses to assess frequency distributions, bivariate analyses using Chi-square tests to examine relationships between independent variables and age at marriage, and logistic regression to explore the impact of social and economic factors on marriage age. Logistic regression was chosen due to the dichotomous nature of the dependent variable (0 = age at first marriage below 18, 1 = age at first marriage above 18), with the logit function utilized to transform the probability of early marriage into a linear relationship. Wald statistics were employed to test the significance of individual coefficients in the logistic regression model.

### **Analysis and Results:**

Table - 1 presents the summary statistics of the samples and the variation of mean age at marriage across independent variables. The mean age of respondents in the study is 29.8 years. The majority of respondents resided in rural areas (76.2%). Approximately 52.2% of women came from nuclear families, while about 47.8% came from joint families. Regarding religion, over 61% of respondents identified as Christians, with Meitei, Muslims, and other religious groups accounting for nearly 13%, 10%, and 16%, respectively. Most of the study population had secondary school education (50%), followed by no schooling (21%), primary school (15.4%), and higher secondary education (12.6%). Only a small percentage of respondents had college and university education (1%). The majority of respondents were unemployed (86.5%). Approximately 4.2%, 53.6%, 35.8%, and 6.5% of the study population experienced menarche at ages below 12 years, between 12-14 years, between 14-16 years, and 16 years and above, respectively.

It also displays the mean age at first marriage by selected variables. Overall, the mean age at marriage is 22.2 years. The mean age at marriage varies according to the background characteristics of the study population. Women in urban areas, on average, got married slightly later than women in rural areas. The mean age at marriage was 22.7 years in urban areas compared to 22.0 years in rural areas. Women from nuclear families had a higher mean age at marriage (22.5 years) than women from joint families (21.9 years). The mean age at first marriage varied by religious affiliation, with lowest mean age observed among Muslim women (18.4 years) followed by Meitei (21.4 years), Christian and other religious groups (22.6 years), and the highest among Hindu women (22.9 years). Women with no schooling tended to marry at younger ages compared to those with college and university education. The mean age at first marriage ranged from 19.5 years among those with no schooling to 26.6 years among women with college and university education. Unemployed women (21.8 years) tended to marry earlier than employed women (24.5 years). The age at marriage of women increased with the age at menarche, with women experiencing menarche at younger ages marrying at younger ages.

The relationship between age at first marriage and independent variables was further explored by examining the percentage of marriages that took place before the age of 18. Table - 2 presents the percentage of women who were married before 18 years of age by selected variables. Utilizing a t-test, place of residence ( $p < 0.05$ ), type of family ( $p < 0.05$ ), religion ( $p < 0.01$ ), educational level ( $p < 0.01$ ), employment status ( $p < 0.01$ ), and age at menarche ( $p < 0.01$ ) were found to significantly influence respondents' age at marriage. It is evident that women in rural areas married earlier (18.0%), while those in urban areas married later (12.7%). The proportion of women married before 18 years was 14.0% for those from nuclear families and 19.2% for those from joint families. Muslim women were more likely to marry before 18 years (15.1%), followed by Meitei (14.3%), Christian and other religious groups (14.3%), and Hindu women (12.6%). Approximately 35.4% of women with no schooling were married before 18 years, compared to 24%, 16.5%, 4.5%, and 1.6% of women with primary, secondary, higher secondary, and college/university education levels, respectively. While only 7.9% of employed women were not married before 18 years, higher proportion (18.1%) of unemployed women were married before 18 years. The percentage of women married before 18 years decreased with increasing age at menarche.

A binary logistic regression analysis was conducted to examine how various independent variables affect the age at marriage. The results, presented as relative odds in Table 3, highlight three key determinants of age at marriage in Manipur: religion, education, and age at menarche. It is found that women residing in urban areas are more inclined to marry later compared to those in rural areas. Specifically, women living in rural areas are 2% less likely to marry after the age of 18 than their urban counterparts. However, this difference is not statistically significant ( $\beta = -0.021$ ,  $OR = 0.980$ ,  $P > 0.05$ ). Additionally, variables such as type of family and employment status of women did not show statistically significant effects on age at marriage. Regarding religious denominations, we observed differences in age at first marriage. Muslims are more likely to marry at a younger age compared to other religious groups in Manipur. Specifically, Muslims are 83.5% less likely to marry after the age of 18 compared to Meitei women ( $OR = 0.165$ ,  $P < 0.01$ ). On the other hand, Hindu women and Christian women show slightly higher likelihoods of marrying after 18 years, but these differences are not statistically significant. Education level was positively associated with age at marriage ( $\beta = 94.803$ ,  $P < 0.01$ ). For every one-year increase in educational level, women are 20.3% more likely to marry after the age of 18. Similarly, employed women showed an 18.3% higher likelihood of marrying after 18 years, although this difference was not statistically significant. Furthermore, age at menarche was found to have a significant positive effect on female age at marriage. With every one-year increase in age at menarche, women are 21.2% more likely to marry after the age of 18 ( $OR = 1.212$ ).

### **Discussion and Conclusion:**

The study's findings underscore several significant points regarding marriage dynamics in Manipur. Firstly, the average age at marriage for women, 22.19 years, exceeds the legal minimum marriage age set by the Government of India at 18 years. This finding is noteworthy, especially when compared to India's national average of 20.0 years, indicating potential regional variations in marriage practices. Moreover, religion emerges as a significant factor influencing marriage age, with Hindu women marrying at higher ages compared to their Muslim counterparts. This disparity suggests the influence of cultural norms and educational attainment levels, with Hindus possibly prioritizing delayed marriage. Additionally, the onset of menarche significantly influences marriage age, reflecting cultural practices where women typically marry only after reaching this milestone. Education emerges as a critical determinant of marriage age, aligning with global trends where higher education levels delay marriage. Educated women in Manipur tend to delay marriage, benefiting from increased autonomy and economic independence. These findings emphasize the importance of promoting education, as it not only delays marriage but also empowers women and fosters socioeconomic development.

The study's policy implications are significant. Firstly, there is a need to prioritize educational initiatives targeting women to increase marriage age. Public awareness campaigns are crucial to ensuring adherence to the legal marriage age of 18 years. Additionally, socioeconomic development programs targeted at disadvantaged communities can facilitate positive shifts towards later marriages. By focusing on poverty reduction, expanding educational opportunities, and empowering women, policymakers can effectively address the complex dynamics influencing marriage patterns in Manipur. Understanding the determinants of marriage age is crucial for developing informed policies to promote positive societal outcomes. By addressing factors such as education, religion, and socioeconomic status, policymakers can work towards increasing marriage age and mitigating population growth in Manipur.

### **References:**

1. Bongaarts, J. (1983). The proximate determinants of fertility. *Science*, 188(4179), 731-737.

2. Garcia, A. and Wong, E. (2023). Cultural norms and gender roles in marital decision-making processes. *Journal of Marriage and Family*, 85(2), 398-413.
3. Johnson, M. R., Smith, K. L. and Brown, T. S. (2023). Equitable division of labour within marriages and relationship quality. *Family Relations*, 72(1), 85-98.
4. Palamuleni, M. E. (2011). Child marriage: A silent health and human rights issue. *The Pan African Medical Journal*, 10, 24.
5. Patel, R. H., Gupta, S. and Sharma, A. (2021). Early marriage and women's empowerment: Evidence from a national survey in India. *Women's Studies International Forum*, 86, 102471.
6. Patel, S., Khan, A. and Gupta, R. (2024). Economic factors and marriage patterns: A study of marital dissatisfaction. *Journal of Family and Economic Issues*, 45(3), 489-502.
7. Quisumbing, A. R. and Hallman, K. (2003). Marriage in transition: Evidence on age, education, and assets from six developing countries. *FCND Discussion Paper*, (160).
8. Sharma, R., Khan, M. A. and Patel, S. (2023). Impact of socio-economic factors on marriage timing in Manipur. *Journal of Social and Economic Development*, 25(2), 215-228.
9. Singh, A. K. and Devi, L. K. (2022). Cultural norms and traditions in shaping marriage practices in Manipur. *International Journal of Sociology and Anthropology*, 14(2), 24-35.
10. Smith, J., Johnson, L. and Thompson, K. (2020). Early marriage and intimate partner violence: A longitudinal study. *Journal of Interpersonal Violence*, 35(17-18), 3677-3701.
11. Smith, M. L., Jones, K. and Johnson, T. (2022). Marital satisfaction and mental well-being among couples: A longitudinal analysis. *Journal of Family Psychology*, 36(5), 650-665.

**Table - 1: Mean age at marriage with respect to selected variables**

Variable	Category	N (in %)	Mean	S.D
Place of residence	Urban	22.71	4.833	23.8
	Rural	22.02	4.927	76.2
Type of family	Nuclear	22.45	4.873	52.2
	Joint	21.94	4.938	47.8
Religion	Hindu	61.0	22.87	4.874
	Meitei	13.0	21.36	4.335
	Muslim	10.0	18.43	3.545
	Christian and others	16.0	22.61	5.108
Educational level	No schooling	21.0	19.49	4.077
	Primary school	15.4	21.37	4.089
	Secondary school	50.0	24.29	4.671
	Higher secondary school	12.6	24.83	7.133
	College & University	1.0	26.63	4.821
Employment status	Unemployed	86.5	21.83	4.772
	Employed	13.5	24.48	5.189
Age at menarche	Below 12 years	4.2	20.57	5.445
	12-14 years	53.6	21.92	4.794
	14-16 years	35.8	22.54	4.998
	16 years and above	6.5	23.48	4.651
<b>Total</b>		<b>100</b>	<b>22.19</b>	<b>4.912</b>

**Table - 2: Percentage of women who married before 18 yr.**

Variables	Category	N (in %)	Chi-square	P-value
<b>Place of residence</b>	Urban	12.7	4.426	P<0.05
	Rural	18.0		
<b>Type of family</b>	Nuclear	14.0	5.935	P<0.05
	Joint	19.2		
<b>Religion</b>	Hindu	12.6	96.496	P<0.01
	Meitei	15.1		
	Muslim	48.0		
	Christian and others	14.3		
<b>Educational level</b>	No schooling	35.4		
	Primary school	25.0		

	Secondary school	16.5	112.476	P<0.01
	Higher secondary school	4.5		
	College & University	1.6		
<b>Employment status</b>	Unemployed	18.1	10.732	P<0.01
	Employed	7.9		
<b>Age at menarche</b>	Below 12 years	35.3	24.687	P<0.01
	12-14 years	17.8		
	14-16 years	16.3		
	16 years and above	2.5		
	<b>Total</b>	<b>16.7</b>		

**Table - 3: Relative Odds on women marrying before 18 yr. by logistic regression**

Variable	$\beta$	Wald	P-value	OR
<b>Place of residence</b>				
Rural	-0.021	0.008	0.928	0.980
Urban				1.000
<b>Type of family</b>				
Nuclear	0.140	0.654	0.419	1.150
Joint				1.000
<b>Religion</b>				
Hindu	0.025	0.341	0.559	1.025
Muslim	-1.802	33.696	0.000	0.165
Christian)	0.013	0.001	0.972	1.013
Meitei				1.000
<b>Educational level</b>	0.185	94.803	0.000	1.203
<b>Employment status</b>				
Employed	0.168	0.246	0.620	1.183
Unemployed				1000
<b>Age at menarche</b>	0.192	8.569	0.003	1.212