Analysing Female Nuptiality Pattern at Micro Level: A Case of Uttar Pradesh

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Introduction

The study of female age at marriage in any population is of immense importance due to its strong association with social, economic and demographic change in the population. In India marriages are not only universal but take place at early ages (Nirupama 1981, Pandey 1984, Singh 1986). This is basically a resent of the combination of belief and practices like, parents should marry off their daughters once they reach menarche and also they settle for more dowry if a girl is married late and so on. Because traditional marriage systems are usually organised to protect women's sexuality and maximize their reproductive value, parental and social interest are best served by marrying daughters close to puberty. Additionally, in the absence of alternative opportunities such as schooling and employment, marriage may be the only socially legitimate option for an adult woman (Caldwell, 1982; McDonald, 1985). Though there are legislation's to check the practice of early marriages in India, a lot of marriages do take place below the marriageable ages (Pathak 1980). Thus, the problem of early age at marriage in India is very complex in nature. Its complexity lies in historical moorings, traditional and socio-cultural practices and other social problems. Contrary to this, the modernization argument stresses that with urbanization, westernization and the accompanying changes in the economy and society, marriage becomes a more individualized process to be entered into for love making or self fulfillment rather than for traditional family concerns. Within urbanized, market oriented, and modern context, the younger generation has fewer reasons to be obligated to or dependents on parents. Education and employment serves as an important mean for this independence, especially in terms of better options for women. Thus, schooling and work not only offer socially legitimate alternatives to marriage for women, but also may be breaking the connection between puberty and entry into marriage. They are also instrumental in motivating young women to emulate western conceptualization of marriage in terms of self selection of spouse and more nuclear, conjugal and egalitarian marital relationships (Hirschman, 1985; Smith 1980; Thornton et al., 1984). Hence, it becomes very

important in the current context to analyze the data at an individual level, rather than at the aggregate level which was the system till now

Across India the differences in the mean age at marriage were sub-stantial among different states. The states situated in south, northwest, and east have relatively higher mean age at marriage for females, then the rest of the states. So the states like Assam, West Bengal, Tamil Nadu, Kerala and Karnataka have significantly higher mean age at marriage than the national average whereas, the states like Jammu and Kashmir, Punjab, Orissa, Gujarat, Maharashtra, have mean age at marriage close to national average. The state like Madhya Pradesh, Bihar, Rajasthan and Uttar Pradesh have substantially lower age at marriage. So there is need to have a detailed picture of the age patterns of marriage in these states. Among these, Uttar Pradesh being the most populous and having almost lowest level of the mean age at marriage in the country, received increasing attention to know what is happening to the age at marriage especially among females at the individual level. It may be mentioned that the nuptiality analysis at the individual level in the past involved only those females who were already married at the time of survey. Females, who were not married at the time of survey but marrying subsequently, are likely to improve the age at marriage in the population. Hence, while analysing the nuptiality pattern in a population, we should consider both females, i.e. married as well as those who are not married further, despite so much dynamism involved in the nuptiality due to its multi facial implications, efforts to analyze the variation in age at marriage has been either limited to case studies by sociologists or social-anthropologists or to aggregate level census data analysis by demographers (Sureender, 1992; Sinha, 1996). In the present paper an attempt has been made to study the differentials in the female age at marriage considering all females, married as well as not married, in the state of Uttar Pradesh.

Data

The data for the study come from the National Family Health Survey conducted in the state of Uttar Pradesh during 1992-93. In all, there were three schedules namely (i) household schedule, (ii) individual schedule, (iii) village schedule, through which information was gathered. The household section contained information about each and every member of the household. The detailed information about married women aged 13-49 was collected in the separate schedule, the individual schedule. So for those women who were not married at the time of the survey but may be marrying subsequently, information on their age and other characteristics were collected in the household schedule. In order to incorporate married and unmarried females in a common forum to study the

propensity of their marriage, we joined the two schedules together. In fact, women who didn't experience the event due to the occurrence of survey constitute censored sample of observation whereas; women who were married form the completed observation. The dependent study variable is thus constructed by taking both the censored as well as the completed observations, contrary to the previous analysis undertaken by considering only the completed observations.

Methodology

While studying the nuptiality of a population based on census data, we generally try to analyze either the proportion married until a certain age or singulate mean age at marriage (SMAM) of the population from the proportion of singles. Apparently, the indicator has period perspectives of estimating nuptiality. On the other hand, in specific surveys, we analyze the actual age at which men and women are married by deriving the average age at marriage, which has a cohort perspective of data analysis. It may, however, be mentioned that the averages so derived do not include those who are yet to be married (termed above as censored observations) despite their frill exposure in a particular age group. Such situations were earlier analysed in fertility and mortality studies as the combination of cases which experienced the event and the other which were censored. Similarly, we can study the pattern and propensity of marriage in a population by studying both married and unmarried males and females within a certain marriageable age. As in the present case, we shall be dealing only with the nuptiality of females in Uttar Pradesh. The technique of life table can therefore be applied to analyses the situation described above. The simple life table (survival analysis) approaches which offers simple computation of transition probabilities from unmarried state to married state and also the median age at marriage in the study population. The major steps involved in the methodology for the calculation of the median age at marriage are as follows.

Let, n' be number of individuals exposed at the beginning of the interval (X_i , X_{i+1}), where, X_i be the lowest age after which a female could be married and X_{i+1} the upper age limit after which no marriage takes place. Further, let d_i be the number of individuals experiencing marriage in the same interval, and c be the number of women who are single in the interval (X_i , X_{i+1}), then the conditional probability of marriage in the above interval, say q_i is given by $q_i = d_i/n$, and n = n'* (c/2.)

It is then customary to define proportion surviving, i.e. not getting married at the start of each interval. By definition $S_0 = 1$, and the proportion surviving (not getting married) to next interval is estimated as: $S_{j+1} = S_j * (1 - q_i)$, or $S_{j+1} = S_j * P_j$

In general, the proportion surviving (not getting married) from the beginning of the interval (X_0) to the j-th interval is given by,

$$S_j = {}^j\tilde{O}_{i=0} P_i$$

and the median age at marriage is given by the following expression:

$$\text{Median} = X_j + S_j - (1/2) / S_j - S_{j+1} \; w,$$

where, w is the width of the j-th class interval (X_j, X_{j+1}) and "j" is chosen such that $S_j > 0.5$ and $S_{j+1} < 0.5$. For further details, one can see the mechanics of life table discussed by Namboodire and Suchindran (1987).

Selection of Variables: The Analytical Framework

As discussed above the study variable is the female's age at marriage in tile state of Uttar Pradesh which is measured by combining the age of women who were married as well as those who were due to be married subsequently after a certain age. In order to study variation in females age at marriage in Uttar Pradesh, variables like place of residence, caste, religion, educational attainment, employment experience and the women's year of birth are considered. Description of these variables may be noted from that to follow.

Place of Residence

Place of residence, whether rural or urban, can be considered to see the opportunity cost of marriage. The surrounding atmosphere in which one lives plays an important role in building ones attitude towards decision making. For females residing in rural areas, access to education may be quiet difficult due to various cultural norms prevailing in the rural set up. There may be poor infrastructural facilities to support the ones, who wish to be educated, contrary to the urban set up where women have greater choice and liberty due to modernization and development.

Religion

Religion may be an important factor to show variation in nuptialty form the cultural viewpoint. Although almost all religions including Hinduism, Islam, Christianity and others have encouraged universality of marriage, but the perception for the age at which daughters are to be married off may vary from one religion to another. In Dharmasutras and Smritis of Hindu religion, it was postulated that the girl should be married before she attains puberty. Among Muslims no age limit was fixed for marriage though quiet young girls may be legally married with the consent of their parents. A girl was usually sent to the house of husband only after she attained menarche. Since different religions do not have same views of marriage, one can expect significant differences in the age at marriage among different religious groups.

Caste

Since marriage is a social institution, it is expected to be related to the traditions, customs and taboos that prevails in a particular society. Since a large number of people in the state belong to a rural set up where people are more traditional, caste may play an important role in deciding the marriageable age in the sense that the sanction and customs which regulate age at marriage, differ from caste to caste. In the study population castes are categorised into three groups as Schedule Caste (SC), Schedule Tribe (ST), and others (consisting of all non SC/ST population).

Education

There are several arguments available in the demographic literature, which explains the mechanism through which this variable shows its impact on the dependent variable. Broadly speaking there are three major mechanisms through which education effects timing of marriage. First, there is direct impact through time spent in school. Quiet distinct from what is learned at school or the credentials obtained, school attendance should delay marriage for women because being in school, it is seen in most societies as a preparatory life course stage that precludes social adulthood and responsibility, thus directly conflicting with marriage (Caldwell, 1982; Marini, 1978). The significance of school attendance should be more normative for urban women due to their more wide spread and better access to education. Urban women, in particular, should be affected by the prevalence of school attendance as a socially accepted alternative to marriage in their post puberty years. Secondly, the context of schooling or the

amount of education acquired can delay marriage through ideational change by exposing young people to new attitudes, aspirations and wider view of the world (Caldwell, 1982; Thoronton & LIn 1994). Thirdly, the standard human capital argument is that education may affect marriage timing by increasing employability through the additional skills or training it provides. However, the positive association between education and employment is often lacking for women in developing societies due to the gap between training and opportunities in the labour market, particularly in a shortage of white-collar jobs. Given the nature of economic development in India, this is a distinct possibility. More so in the state of Uttar Pradesh where there is evidence of a negative or U-shaped relationship between education and employment. Thus, education could delay female marriage by instilling modem expectations and ideologies.

Occupation

Employment opportunities should delay women's marriage. Given the economic roles of women in Uttar Pradesh, however, this scenario may not accurately represent the relationship between work and marriage specially in rural settings. It is because women may be involved in a wider variety of productive activities including household duties, family and farm work. Under such a situation, we may expect no relationship between the marriage timing of women and their employment status.

Analysis of Findings

About the sample, three-fourths women are married by the survey and rests are yet to go in for marriage. Table 1 presents the profile of the females surveyed under the National Family Health Survey (NFHS) during 1992-93 and are used for the present analysis. It is evident that most of women hail from the rural part of the state. Scheduled Caste & Scheduled Tribe women constitute about one fourth of the total women in the sample whereas, seventy five percent women are from other caste category. In the sample the percentage of Hindu women is as high as about 82 percent followed by Muslims who are about 17 percent of the total sample, and rest are from other religions viz., Sikh, Christians etc. As is well known that the literacy level especially among females is quite low in the state, the same is in the sample which constitutes a large proportion of females as illiterate (more than, 68.3 per cent), a small proportion educated upto middle school level (about 20 per cent) and only 11 per cent of women are with high school and above educational qualifications. Four birth cohorts have been considered to study the nuptiality transition in the state of Uttar Pradesh. While

category 1 consists of those females who were born between 1943-49, category II contains those who were born between 1950-59, category III is for those who were born between 1960=69 and category IV embodies those females who were born on or after 1970. In natural sequence, the latter category is for young females. Distribution of females by occupational status authenticates that in the state of Uttar Pradesh, 84 percent of women are engaged in agriculture related activities, and 8.2 per cent women are engaged in household work. Women engaged in other categories of occupation like professionals, clerical etc., are small in proportion.

Table 1: Percentage Distribution of all females (married as well as not married) aged 13-49 by socio-economic characteristics, Uttar Pradesh 1992-93.

Variables	Percentage	No. of Cases
Place of Residence	22.8	3456
Urban	77.2	11680
Rural		
Caste	15.6	2356
Schedule Caste	1.1	161
Schedule Tribe	83.4	12619
Others		
Religion	81.7	12365
Hindu	17.1	2581
Muslim	1.3	190
Others		
Education	68.3	10340
Illiterate	12.9	1957
Lit., < middle complete	7.7	1171
Middle school complete	11.0	1668
High school and above		
Cohort (Year of birth)	9.4	1418
1943-49	19.6	2965
1950-59	27.0	4205
1960-70	43.3	6548
1970+		

MARITAL STATUS	73.3	11102
Currently Married	0.5	70
Separated	2.2	327
Widowed	0.1	18
Divorced	23.9	3619
Not Married		
Occupation	0.6	96
Professionals	2.5	379
Clerical	4.3	646
Agriculture	83.7	12669
Household duties	8.2	1241
Students etc	0.7	105
Other category		

Using the life table methodology discussed above, Table 2 persents the median survival age at which females get married. The median age at marriage is obtained by combining the completed (married) as well as the censored (yet to marry) observation by selected socio-economic variables. We have also presented the median age at marriage based on only those who were married at the time of the survey in order to illustrate the probable biases in the average age at marriage if the sample does not incorporate unmarried females.

Table 2: Median age at marriage of women aged 13-49 according to the selected group of variables under two situations (based on completed cases only as well as considering both completed as well as censored cases)

Variables	Median (Based on completed cases) In Years	Median (Based on completed as well as censored cases) In Years
Place of Residence	18.2	19.0
Urban	16.5	17.0
Rural		
Caste	16.2	16.5
Schedule Caste	16.3	16.5
Schedule Tribe	16.9	17.6

Others		
Religion	16.7	17.3
Hindu	17.2	18.1
Muslim	18.9	20.1
Others		
Education	16.4	16.8
Illiterate	16.9	17.8
Lit., < middle complete	17.7	18.4
Middle school complete	19.8	20.9
High school and above		
Cohort (Year of birth)	16.5	16.6
1943-49	16.7	16.8
1950-59	16.9	17.1
1960-70	16.7	18.3
1970+		
Occupation	19.2	21.1
Professionals	16.4	17.7
Clerical	16.2	16.5
Agriculture	16.8	17.2
Household duties	18.1	N.C*
Students etc	15.8	18.8
Other category		
Entire Population	16.8	17.5

Note: * Not calculated due to the heavy censoring in that category.

The median age at marriage in the rural area which has a predominantly agrarian economy and traditional cultural values, is lower than its urban counterpart which has a more complex market economy and greater exposure to modern and western influences. The rural-urban differential in median age at marriage among females is more pronounced if we consider all females i.e., both married as well as not yet married, than what we estimate is median based on only married females. The median age at marriage for the urban females is obtained as 19 years while this is about 17 years for the rural females.

Caste wise marriage timing shows that females from other caste category have higher median age at marriage compared to Schedule Caste/Schedule Tribe females. Marriage timings for SC/ST category is very low which is justified by the fact that sanction and customs prevailing in these castes favour early marriages. Median calculated from all female sample for the SC is was obtained as 16.5, far below the minimum legal age at marriage prescribed by law, in India; so is the case for ST females with median as low as 16.5 years, while it is 17.6 years for other caste category.

Though all religions emphasize the universality of marriage, the marriage timing for the Hindu women lower than that for Muslims, with median value as 17.3 years for Hindus and 18.1 years for Muslims. For the other religion group (consisting of Sikhs, Christians etc.), the median age at marriage is highest with the median value as high as 20.1 years. These median values are based on all females married as well as those who were yet to marry. From the table it can be seen that there exits a significant difference in the medians calculated from two different sample of women, one that consists of only married and the other that combines both who are married and who are yet to be married; the median value for the former case is lower than that of the latter. In the other religious category, the difference in the medians under two set ups is found to be more than one year. The difference in the median values under two different set ups for Hindu as well as for Muslim women is found to be significant, which to some extent reflects the thought that women not married under different religion and caste groups who are exposed to the modern value system, are influenced by and hence delaying their marriages. Hence incorporating them into analysis yields a higher median value than what we would get while analysing only married females.

Findings shows that the educational attainment is a strong factor in delaying marriages, depicting the situation that a general shift in the norms of early marriage to late marriage could be expected with an educational improvement in the population. It is evident from the table that with the increase in educational attainment, there is a pragmatic upward shift in the marriage timings. For women who are illiterate, the median age at marriage is as low as 16.8 years, while on the other side, for women who is educated high school and above, the median age at marriage is 20.9 years. Ofcourse these figures refer to the sample in which both married and unmarried women are considered. Important point to focus is that when only married women are considered, the median values are consistently lower than those that are calculated considering both the married as well as unmarried women in the analysis. This sounds logical as the effect of those who did not get the experience of marriage due to survey in between will definitely do so in the course of time, and hence including them in the analysis is

expected to raise the median value as we can visualise from the difference in the two medians calculated under two different situations. In the illiterate category, there is not a great difference but definitely there is a significant difference in other categories of educational attainment. This difference is as high as one year in the high school & above educated class category.

In order to study the changes in marriage timings over time, different cohorts, as mentioned are constructed based on women s year of birth. As we move from older cohort to younger cohort, a clear-cut picture emerges that the marriage age increases upwards. An important point to focus here is that there is no difference in the median age at marriage calculated while considering two different samples, except for the 1970+ category. This sounds logical because in earlier birth cohorts there may be very few women who might have not experienced marriage by the time of survey and also the fact that marriages are universal in the state and by age 25, maximum women experience marriage. Contrary to what we see in the 1970+ category, the difference in the median age at marriage under two different situations is more than two years. Median age at marriage calculated, considering the married as well as not married women. is more by 2.3 years to that when the same is calculated based on only married women. This reflects the fact that the younger generations have greater opportunity for better educational access and later self-choice for marriage rather than indulging in marriage at an early age.

In the occupational class category, we see that professionals (consisting of women working as professional-technical high levels professional technical low levels administrators executive/managers) have been marrying at a higher age and hence having highest median age at marriage (21 years), followed by others (consisting of retired women, disabled ones etc), clerical professionals, women engaged in household work and lastly the women engaged in agriculture related work. Women engaged in the agricultural class category have the lowest median age at marriage as 16.5 years. The differences are obtained while calculating the median from two different situations i.e., first considering married women only, and in next case both married as well as not married ones. Almost a two-year difference is found in the professional class category when the median is calculated considering both the samples. There was a marginal difference in the agriculture class category. Again, the higher marriage age for the professional class category justifies the argument that greater penetration of market economies, of schooling, infrastructure, job opportunities and the media, gives women a much better chance to spell out their ambitions and careers and order to give marriage a second look. In the student class category since more than 95 percent cases were in the censored category (when analysis is done considering the all women sample), the median was not calculated.

Conclusion

The foregoing study has presented differentials in the median age at marriage among females in Uttar Pradesh using the life table approach based oil all females sample (married as well as not married), avoiding the probable biases which were present in the earlier researches, while analysing the marriage data based on only married female sample. It is evident from the findings, that there are significant differences in the median values across the category considering the two samples i.e., married and unmarried both and only married females. The median age at marriage among females in Uttar Pradesh is found to be higher in all the socio-economic categories as compared to that when the median is calculated using only the married females. This presents the extent of underestimation in the median age at marriage using only married females.

Our results indicate that there have been changes in the median age at marriage among females across birth cohorts. We observe that the median age at marriage is low for the older birth cohort that we considered, as compared to the younger birth cohort showing the improvement in the age at marriage among females in the state over time.

We have found that women residing in the urban areas, relatively more educated and engaged in white collar jobs tend to marry at older ages. Also women who belong to other castes and religious groups have higher median age at marriage compared to their respective counterparts in the category. It may be mentioned that these findings are preliminary in the sense that variation in the median age at marriage could be seen across the state as well as within various socio-economic categories. A multivariate model to analyse the net effect of various socio-economic variables with desired control is expected to throw more light in understanding the magnitude and significance of their effects on marriage patterns, which is in process.

Acknowledgement

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