

## Effect of age at marriage and effective marital period on natural fertility: A study among the Ladiya of Sagar, Madhya Pradesh

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### ABSTRACT

*The effect of age at marriage and effective marital period have been examined on natural fertility in a sample of 58 ever married post-menopausal women of the Ladiya of Sagar district, Madhya Pradesh. Study reveals no relationship between fertility and age at marriage as well as fertility and effective marital period.*

**KEY WORDS:** Age at marriage, Marital span, Fertility, Ladiya, Madhya Pradesh

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### INTRODUCTION

Though human fertility is largely biologically controlled, it is greatly influenced by several social, economic, occupational, educational and religious factors (Pearl, 1939; Lorimer et al, 1954; UN, 1973; Nag, 1962; Bogue, 1969; Khongsdier, 1993 and many others). Age at marriage has been recognized as one of the major parameters that brings about differentials in fertility among various sections of a community (Sinha, 1987; Choudhury, 1984; Wyon and Gordon, 1971 and others). The effective marital period i.e. period between age at menarche or marriage and age at menopause or age at widowhood (in the absence of widow remarriage and contraception) is also another important parameter which is to be taken into consideration in this regard (Chatterjee, 1995).

Barring a few studies, the possible relationship of age at marriage and effective marital period on fertility have not been fully explored in Indian context, especially in the central part of India. Present study deals on impact of age at marriage and effective marital period on natural fertility among the Ladiya of Sagar, Madhya Pradesh.

## MATERIAL AND METHODS

To explore the possible demographic factors relating to fertility, a door to door survey was conducted, using structured schedule, during March 2006. Information was collected from 188 ever-married women belonging to the Ladiya population group residing in Pathariya Jat village of Sagar district, Madhya Pradesh. The Ladiya are an offshoot of the Chamar community (Singh, 1998).

Of the 188 Ladiya women, 66 had already crossed the reproductive period. Out of these 66 women in post-reproductive period, there are 58 women whose husbands never adopted any family planning method at any point of time. These 58 married women were taken into consideration for the sake of present study. The village Pathariya Jat lies between 23<sup>0</sup>47' north latitude and 78<sup>0</sup>47' east longitude. The effective marital period has been calculated as the period between the age at marriage or menarche (whichever is later) and age at menopause.

## RESULTS AND DISCUSSION

Table 1: Mean values of age at marriage and effective marital period (no. of mother = 58)

Bio-events	Mean±SE (in years)
Age at marriage	16.57±0.39
Effective marital period	28.59±0.38

Mean age at marriage and effective marital period of the 58 ever-married Ladiya women are furnished in Table 1. Mean age at marriage is found to be 16.57±0.39 years, while the mean of effective marital period is 28.59±0.38 years among them. Average reproductive performance of the studied women has been shown in Table 2 by the age at marriage. Mean number of pregnancies and live births by and large decrease as the age at marriage increase. When the value

of co-efficient of correlation is calculated it is found that there is no relationship between age at marriage and number of pregnancies ( $r=-0.0147\pm 0.1313$ ). This finding is in contrary to the findings of Chatterjee (1995) among the Paschatya Vaidik Brahman women of West Bengal. It is further seen from Table 2 that mean of reproductive wastage (both still births and abortions) is recorded to be highest in the mothers whose age at marriage is above 23 years.

Table 2: Age at marriage and fertility

Age at marriage (in years)	FERTILITY				
	No. of married women	Mean pregnancy	Mean live birth	Mean still birth	Mean abortion
<14	18	7.778	7.556	0.111	0.111
15-16	17	8.118	7.882	0.118	0.118
17-18	9	8.667	8.444	0.222	0
19-20	7	7.714	7.714	0	0
21-22	3	7.667	7.667	0	0
23 & above	4	6.000	5.500	0.250	0.250
Total	58	7.879	7.672	0.121	0.086

Mean of pregnancies as well as the mean live births recorded to be highest among the mothers of 27-28 years effective marital period. Both pregnancies and live births increase by and large with increase in the effective marital period (Table 3). Like age at marriage is this case also no relationship is found between effective marital period and fertility ( $r=-0.0756\pm 0.1306$ ). This finding is also in contrary to the findings of Chatterjee (1995) among the Paschatya Vaidik Brahman women of West Bengal. Unlike the age at marriage, in this case, the mean of still births and abortions decrease as the effective marital period increase. However, among the women of below 23 years the higher mean value of still births and abortions is recorded.

Co-efficient of correlation between age at marriage and number of pregnancies ( $r=-0.0147\pm 0.1313$ ) however, is not statistically significant indicating no relationship of age at

marriage and number of pregnancies. Similarly, the co-efficient of correlation between effective marital period and fertility ( $r=-0.0756\pm 0.1306$ ) is also non-significant statistically, thereby reflecting that effective marital period has no consequence on the fertility of women among the Ladiya population group. However, further study is needed to confirm the findings of the present study.

Table 3: Effective marital period and fertility

Effective marital period (in years)	FERTILITY				
	No. of married women	Mean pregnancy	Mean live birth	Mean still birth	Mean abortion
<22	4	6.000	5.500	0.250	0.500
23-24	3	7.667	7.667	0	0
25-26	7	7.714	7.714	0	0
27-28	9	8.667	8.444	0.222	0
29-30	17	8.118	7.882	0.118	0.118
31 & above	18	7.778	7.556	0.111	0.111
Total	58	7.879	7.672	0.121	0.086

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