



Effect of socio-medical parameters on fertility status of scheduled tribe women in Kashmir

¹ Dr. Tanzila Hamid, ² Dr. Naheed Vaida

¹ Institute of Home Science, University of Kashmir, Hazratbal, Srinagar, J&K, India

² Professor, Institute of Home Science, University of Kashmir, Hazratbal, Srinagar, J&K, India

Abstract

The study was undertaken to access effect of socio-medical factors on fertility status among Scheduled tribe women of Kashmir. The total number of 408 Scheduled Tribe women (Gujjar and Bakkerwal) in the reproductive age (18-45 years) from four districts of Kashmir i.e. Anantnag, Baramulla, Gandarbal and Srinagar were covered. Standard reproductive health status interview schedule as framed by NFHS-3 (National Family Health Survey) volume II 2005-2006 with selective modification as per requirement was used to collect data. The results revealed significant effect ($P < 0.05$) of Socio-medical factors like educational level, age at marriage, income and husband's educational level on fertility status of respondents. Thus the study recommends improvement in literacy and socioeconomic status of the tribal people through implementation of various national level schemes.

Keywords: scheduled tribe women, socio-medical parameters

Introduction

The word 'Tribe' is generally used for a "socially cohesive unit, associated with a territory, the members of which regard them as politically autonomous". Tribals constitute 8.6 percent of total population of our country as total population of 104,281,034 tribals are found in India. In Jammu and Kashmir, eight communities vide constitution (Jammu & Kashmir) Scheduled Tribes Order, 1989 and four communities namely Gujjar, Bakarwal Gaddi and Sippi were notified as Scheduled Tribes vide the constitution (Scheduled Tribes) order (Amendment) Act, 1991. All the twelve Scheduled Tribes (STs) were enumerated officially for the first time during 2001 census recording a population of 1,105,976. Increase in scheduled tribe population from 11,05,979 to 14,932,999 (census 2001-census-2011) has been observed in the state. Reproductive health (RH) status among Tribal populations is unique as it relates to a specially, vulnerable group of population and is associated with a wide range of issues including fertility as high fertility is sign of poor reproductive health, its consequences are not only reflected in maternal and child health but high birth cohorts have detrimental effect on family, society and community. Though the fertility continues to decline in India from 2.9 children per woman at the time of NFHS-2 but current total fertility rate (TFR) is still well above the replacement level of just over two children per woman. In urban areas, the TFR has reached replacement levels (2.1), but in rural areas the TFR is 3.0. The greatest differences in fertility are by education and household wealth. At current fertility rates, women in the poorest households will have two more children than women in the richest households. The TFR is 3.1 for the scheduled tribes, 2.9 for the scheduled castes and 2.8 for the other backward classes (NFHS 3). High fertility is strongly associated with short birth intervals which depletes maternal nutrition and is found to be key factors affecting mortality levels for births

(Mahy, 2003) ^[11]. Anaemia is a common medical problem in pregnancy especially among multiparous women (Zama, 2014 and Noronha *et al.*, 2008) ^[21, 14] and is associated with low birth weight of the baby due to increased rate of preterm delivery, eventually, leading to an increase in the rate of fetal mortality (Kalaivani, 2009) ^[8].

Methodology

Giving due weight age to the inhabitation of Tribal population, the present study was carried out in four districts of Kashmir i. e Anantnag, Baramulla, Gandarbal and Srinagar. The total number of 408 Scheduled Tribe women (Gujjar and bakerwal) in the age group of 18-45 years from above mentioned districts of Kashmir valley were covered, sample size was derived from target population(15,1019 Scheduled Tribe Women in Kashmir) at 5% error level with confidence level of 95%. A standard reproductive health status interview schedule as framed by NFHS-3 (National Family Health Survey) volume II 2005-2006 with selective modification as per requirement was used to collect data. The data thus collected was tabled, analyzed and interpreted as per the needs of the study.

Results and Discussion

Socio-Medical Characteristics

All the respondents were in reproductive age range of 18-45 years, 10.29 percent were between 18-25 years, 23.52 percent within 25-30 years and 66.17 percent were 30 and above years of age. About 52.94 percent of the respondents were literate, among which majority i. e 77.20 percent were observed to study up to the primary level, (20.93%) above primary level, 0.7 percent above higher secondary level and 47.3 percent were illiterate. In terms of family income about 36.02 percent of respondents had income up to rupees 10000 per month, 38.97 percent belonged to income group of 10000-15000 per

month, 24.26 percent belonged to income group of 15000-20000 and Only 0.7 percent of respondents were having income level above 20000 per month. Only 37.99 percent of respondent's husband were found to be literate, among which 58.06 percent were found to study up to primary level, 36.16 percent above primary level, and remaining 36.16 percent above higher secondary level. Age at marriage was less than 18 years for 51.71 percent of respondents and 17.18±3.24 years was found to be mean age at marriage among respondents. The age at marriage is lower than the age at marriage of the Gaddis, Kinnauras and Bhots of Himachal Pradesh who marries mostly between the age of 19-21 years (Pathania *et al.*, 2008) [16] but is higher than tribes of Andhra Pradesh 13-15 years (Ial, 2006) [10]. Tufail, 2014 [20] found that early marriages are preferred by Gujjars and bakkarwals of J&K due to mass illiteracy, orthodoxy, outcaste threat and prevailing insecurity caused by militancy and allied factors. In terms of fertility status, majority of respondents i.e 282 (69.11%) were seen to be having parity of more than three, 16.17 percent having parity of two, 13.97 percent with parity of three and only 0.73 percent of respondents were found to be having parity of one. It has been observed that mean number of children born per ever ST women was 3.53±1.02 years which is almost similar to that of national level i.e 4 (Census, 2001) [4].

Table 1: Distribution of respondents as per socio-medical characteristics

Variables	Frequency	Percentage
Age in yrs.		
18-25	42	10.29
25-30	96	23.52
30 and above	270	66.17
Educational Status of women		
Literate	215	52.94
Up to primary level	166	77.20
Above primary level	45	20.93
Above higher secondary level	3	0.7
Illiterate	193	47.3
Total income of family (rupees/month)		
Up to 10000	147	36.02
10000-15000	159	38.97
15000-20000	99	24.26
>20000	3	0.7
Husband's Educational Status		
Literate	155	37.99
Up to primary level	90	58.06
Above primary level	56	36.16
Above higher secondary level	9	2.20
Illiterate	253	62.0
Age at marriage (years)		
< 18 years	211	51.71
> 18 years	197	48.28
Mean age at marriage	17.18±3.24	
Fertility status		
No. of parity		
One	3	0.73
Two	66	16.17
Three	57	13.97
More than three	282	69.11
Average no of children	3.53±1.02	

Analysing some of the above socio-medical determinants a detailed analysis has been attempted to find significant influence of various variables on fertility status.

Education Level

Women's education was expected to influence reproductive health of respondents and assumingly it will be better among those with higher levels of education. Present study revealed that among total respondents with education up to primary level, majority i.e. 106 (63.8%) of women were having a parity of more than 3 while as none among this group had a parity of 1. High fertility among Abujhmaria tribe of Bastar district in Madhaya Pradesh has also found similar results where majority of population is illeterate (Pandey and Goel, 1999) [15]. As the educational status of scheduled tribe women improved, a significant (p<.001) decline in the number of children (parity) was observed. In case of respondents with education level of higher secondary and above it was found that 66.6 percent had parity of 2 while rest 33.3 percent had adopted single parity. As the maternal education improves women tend to bear lesser number of children (NFHS 2, NFHS 3 and Kim, 2016) [9], however whether this is also being observed by scheduled tribe women is not reported separately. This study does show that better literacy among scheduled tribe women also influences their parity and they tend to have less children.

Table 2: Educational level and fertility status

Educational level	No. of Parity			
	1	2	3	>3
Up to primary level (1 st - 5 th standard)	0 (0.0)	29 (17.4)	31 (18.6)	106 (63.85)
Above primary (6 th - 10 th standard)	1 (2.2)	21 (46.6)	11 (24.4)	12 (26.6)
Above higher secondary level	1 (33.3)	2 (66.6)	0 (0.0)	0 (0.0)

Chi-square: 62.46; p-value ≤0.0001. Values within parenthesis are percentages

Age at Marriage

The age at which a girl gets married has strong influence on her reproductive health as it is an important determinant of fertility and may affect outcome of pregnancy also. Early age at marriage exposes women for long reproductive risk and hence high fertility which in turn deteriorates overall health of women. Studies among rural and urban women have shown age related influences on various reproductive health variables. (Santhya, 2011) [18]. The present study looks at age at marriage among the scheduled tribe women influencing reproductive health parameters. Number of children born among respondents was significantly associated with age at marriage. It can be seen from present study results that higher parity was more in those scheduled tribe women whose marriage had taken place in the age below 18 years i.e. out of total 209 respondents parity of more than 3 was found in 180(86%) of respondents. Younger women's baring more children in their reproductive period is a common phenomenon among rural women as practice of early marriages is seen in rural areas (Sivaram *et al*, 1995) [19] and

the high fertility rate is attributed to early marriages (Bhatt, 2005)^[3]. Similar findings in scheduled tribe women have been observed in the present study and findings are in agreement with study from Atsbaha *et al.* (2016)^[2] who also observed that women who got married at the age of less than 18 years were 2.63 times more likely to have higher fertility as compared to those who got married at 18 years or more.

Table 3: Age at marriage and fertility status

Age at marriage	No. of parity			
	1	2	3	>3
<18 years	5 (2.3)	8 (3.7)	16 (7.5)	180 (86.3)
18 -25years	1 (0.5)	57 (28.6)	33 (16.6)	108 (54.3)

Chi-square: 51.89; p-value: ≤0.0001.

Values within parenthesis are percentages.

Income level

The present study reveals significant impact (p<.0001) of income level on fertility status. Higher parity was more among respondents with less income levels, out of total respondents with income level between rupees 5000-10000, majority i.e 117 (79.6%) were seen to have a parity of more than 3 while as only 1(0.7%) among this group had a parity of 1. Decrease in high parity was found with increase in levels of income, percentage lowered to 69.2 percent, 55.6 percent and nil for income level of rupees 10000-15000, rupees 15000-20000 and above rupees 20000 respectively. As the socioeconomic status improves the number of bearing children also drops, (Al-Kandari 2007 and Reddy & Sudha, 2010)^[1, 17]. Low income group families have more children than the high income group family, poor might look for more children because of expecting economic assistance and security at old age from their children (Dana, 2015)^[6].

Table 4: Income and fertility status

Income level (Rupees/month)	No. of parity			
	1	2	3	>3
5000-10000	1 (0.7)	4 (2.7)	26 (17.0)	117 (79.6)
10000-15000	0 (0.0)	24 (15.1)	25 (15.7)	110 (69.2)
15000-20000	2 (2.0)	35 (35.4)	7 (7.1)	55 (55.6)
>20000	0 (0.0)	3 (100)	0 (0.0)	0 (0.0)

Chi-square: 67.6; p-value:≤0.0001

Values within parenthesis are percentages.

Husband’s Education Level

No. of parity among respondents was significantly (p<.0001) influenced by husband’s level of education. Majority of respondents with husband’s educational level up to primary (73.3 percent) were found to be having highest level of parity i. e more than three and it lowered to 11.1 percent for those whose educational level was up to higher secondary. Gebremedhin and Betre (2009)^[7] also found similar strong association between educational status of husband and fertility.

Table 5: Husband’s educational level and Fertility status

Husband’s Educational Level	No. of parity			
	1	2	3	>3
Up to primary level	0 (0.0)	4 (4.4)	20 (22.2)	66 (73.3)
Up to secondary level	1 (1.7)	32 (57.1)	13 (23.2)	10 (17.8)
Up to higher secondary level	2 (22.2)	6 (66.6)	0 (0.0)	1 (11.1)

Chi-square: 88.084; p-value: ≤0.0001.

Conclusion

The present study revealed significant association of various socio-medical determinants like educational level of respondents, family income, age at marriage and husband’s educational level on fertility status of respondents.

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