



## Impact of educational level on reproductive health among scheduled tribe women of Kashmir

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### Abstract

A cross sectional study was conducted among scheduled tribe women of Kashmir to access impact of education level on their reproductive health. A total of 410 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. Educational level of respondents was significantly ( $p < .000$ ) found to be associated with their reproductive health in terms of menstrual practices, fertility status, utilization of ANC and INC, adoption of family planning techniques and awareness regarding various aspects which play vital role in maintaining reproductive health.

**Keywords:** scheduled tribe, reproductive health, menstrual practices, family planning

### 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 14,93299 (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. Education acts as an important ingredient in the overall development of individuals by developing greater awareness, better comprehension of their social as well as cultural context and also helps in the improvement of their socio-economic conditions. These persevere in the case of the Scheduled Tribes also. Literacy rate has shown increase by 11.86 percentage points from 2001 to 2011 for Scheduled tribes and 8.15 percentage points for total population during the same period. Literacy has however, all along been lower both for males and females STs as compared to Total Population. Literacy Rate for scheduled tribes has increased from 37.5 percent in 2001 to 50.6 percent in 2011 but it is less than national average. Male and female literacy rates among

scheduled tribes of Jammu and Kashmir has been recorded as 60.6 and 39.6 percent (Census 2011) [3]. Women's education is expected to influence reproductive health of respondents and assumingly it will be better among those with higher levels of education.

### Materials and methods

The present study was carried out in four districts of Kashmir i.e. Anantnag, Baramulla, Gandarbal and Srinagar. The total number of 410 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 pertaining to Socio-medical Characteristics, Reproductive health, Utilization of reproductive health services and awareness level among the respondents.. 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, 10.2 percent were between 18-25 years, 23.41 percent within 25-30 years and 66.34 percent were 30 and above years of age. About 52.6 percent of the respondents were literate, among which majority i.e. 77.7 percent were observed to study up to the primary level, (20.83%) above primary level, 1.3 percent with of education above higher secondary level and 47.3 percent were illiterate. In terms of family income about 36.3 percent of respondents have income up to rupees 10000 per month, 38.7 percent belonged to income group of

10000-15000 per month, 23.3 percent belonged to income group of 15000-20000 and Only 1.2 percent of respondents were having income level above 20000 per month. It has been observed that mean age at marriage was 17.18±3.24 years 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) [8].

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

Variables	Number	Percentage
<b>Age in yrs.</b>		
18-25	42	10.2
25-30	96	23.41
30 and above	272	66.34
<b>Educational Status of women</b>		
Literate	216	52.6
Up to primary level	168	77.7
Above primary level	45	20.83
Above higher secondary level	3	1.3
Illiterate	194	47.3
<b>Total income of family(rupees/month)</b>		
Up to 10000	149	36.3
10000-15000	159	38.7
15000-20000	97	23.6
>20000	5	1.2
<b>Mean age at marriage</b>	17.18±3.24	

**Impact of education on reproductive health**

**a) Menstrual practices**

Respondents with education level up to primary level showed unhygienic menstrual practices in terms of use and frequency of changing absorbent, the percentage of women using old used cloth piece as absorbent was very high i. e 74.4 percent while none among them was found to be using sanitary pads and large number of respondents were found to be changing absorbent material after 24 hours. Similar findings were observed by Dhingra *et al.* (2009) [5] who showed poor and

improper management of menstruation among 96.9 percent of respondents and reuse of used cloth for absorption of menstrual blood was found among majority (87.5%) of Gujjar adolescent girls. However as the level of education improved (i.e. respondents with education above primary level), menstrual hygiene also improved as was evident from the fact more and more women i.e. 31.0 percent were significantly (p. <0001) using clean and fresh cloth as absorbent and frequency of changing absorbent also improved.

**Table 2:** Impact of educational level on menstrual practices

Educational Level	Menstrual practices					
	Use of absorbent			Frequency of changing		
	Sanitary pads	Clean/fresh Cloth piece	Old Used Cloth piece	Once	Twice	After 24 hours
Up to primary level (1 <sup>st</sup> - 5 <sup>th</sup> standard)	0 (0.0)	43 (25.5)	125 (74.4)	16 (9.5)	0 (0.0)	152 (90.4)
Above primary (6 <sup>th</sup> - 10 <sup>th</sup> standard)	2 (4.4)	14 (31.1)	29 (64.4)	14 (31.1)	2 (4.4)	29 (64.4)
Above higher secondary level	3 (100)	0 (0.0)	0 (0.0)	0 (0.0)	3 (100)	0 (0.0)
<i>Chi-square</i>	132.31			146.19		
<i>p-value</i>	≤0.0001			≤0.0001		

**b) Fertility status**

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 Madhya Pradesh has also found similar results where majority of population is illiterate (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) [7],

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 3:** Impact of educational level on fertility

Educational level	No. of Parity			
	1	2	3	>3
Up to primary level (1 <sup>st</sup> - 5 <sup>th</sup> standard)	0 (0.0)	29 (17.4)	31 (18.6)	106 (63.85)
Above primary (6 <sup>th</sup> - 10 <sup>th</sup> 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)

**c) Adoption of family planning techniques**

Although very small percentage (3.4%) of women adopted family planning methods in the present study, yet variation in adoption of FP methods/techniques among these respondents was clearly seen. Significant difference ( $p < .0001$ ) in percentages among women with education up to primary level was observed as relatively less women have used

contraceptives (1.1%) compared to women with higher level of education (8.8%). Education is a key factor influencing contraceptive use (NFHS- 1). The tribal population especially their women have a very low rate of education, which makes them vulnerable to low contraceptive usage and high unmet need than other social groups (Laya, 2012)<sup>[9]</sup>.

**Table 4:** Impact of educational level on adoption of family planning techniques

Educational level	Adoption of Family planning techniques	
	Yes	No
Up to primary level (1 <sup>st</sup> - 5 <sup>th</sup> standard)	2 (1.1)	166 (98.8)
Above primary (6 <sup>th</sup> - 10 <sup>th</sup> standard)	4 (8.8)	41 (91.11)
Above higher secondary level	3 (100)	0(0.0)

**d) Utilization of antenatal care (ANC)**

Educational level of respondents significant effected ( $p < .001$ ) utilization of ANC, it was found that 86.6 percent of respondents among those with education above primary level had received TT injection and 51.1 percent had consumed IFA tablets whereas cent percent of respondents with education above higher secondary level have received both TT injections

and IFA tablets during their last pregnancy. These findings are in conformity with those of Negi *et al.* (2010)<sup>[11]</sup> who reported increase in utilization of antenatal care services with increase in education among tribal's of Chhattisgarh and Jharkhand. Strong association between literacy status of mother and utilization of antenatal services has also been reported by (Javali *et al.*, 2014 and Chaterjee & Saha, 2000)<sup>[6, 4]</sup>.

**Table 5:** Impact of educational level on utilization of antenatal care services

Educational Level	Place of Antenatal Care		Consumption of TT injections		Consumption of IFA tablets	
	Home	Govt/Municipal hospital	Yes	No	Yes	No
Up to primary level (1 <sup>st</sup> - 5 <sup>th</sup> standard)	104 (62.6)	62 (37.3)	85 (51.2)	81 (48.7)	65 (39.1)	101 (60.84)
Above primary (6 <sup>th</sup> - 10 <sup>th</sup> standard)	24 (53.3)	21 (46.6)	39 (86.6)	6 (13.3)	23 (51.1)	22 (48.8)
Above higher secondary level	0 (0.0)	3 (100)	3 (100)	0 (0.0)	3 (100)	0(0.0)
<i>Chi-square</i>	5.80		20.53		6.18	
<i>p-value</i>	$\leq 0.055$		$\leq 0.0001$		$< 0.045$	

**e) Level of awareness regarding Family planning techniques and STI/STD infections.**

Awareness regarding healthy reproductive practices was being significantly influenced ( $p < .0001$ ) by educational level of respondents. The awareness scores regarding healthy menstrual practices, conception and pregnancy as well as HIV

AIDS considerably increased with increase in level of education showing better awareness levels regarding such reproductive health practices. Similar findings have been reported by other studies by Mwamwenda (2014)<sup>[10]</sup>, Beekle & McCabe (2006)<sup>[11]</sup> and Tuladhar & Marahatta (Khanal) (2008)<sup>[17]</sup>.

**Table 6(a):** Impact of educational level on awareness level

Awareness Regarding	Educational Level			Chi square	p-value
	Up to primary level (1 <sup>st</sup> - 5 <sup>th</sup> standard)	Above primary (6 <sup>th</sup> - 10 <sup>th</sup> standard)	Above higher secondary level		
<b>Menstrual Hygiene</b>					
Poor	152 (90.4)	29 (64.4)	0 (0.0)	233.55	$\leq 0.0001$
Average	16 (9.5)	14 (31.1)	0 (0.0)		
Good	0 (0.0)	2 (4.4)	3 (100)		
<b>Conception and Pregnancy Care</b>					
Poor	44 (26.1)	4 (8.8)	0 (0.0)	28.72	$\leq 0.0001$
Average	60 (35.7)	18 (40)	0 (0.0)		
Good	64 (38.09)	23 (46.6)	3 (100)		
<b>HIV/AIDS</b>					
Poor	166 (98.8)	43 (95.5)	0 (0.0)	:417.59	$\leq 0.0001$
Average	2 (1.1)	2 (4.4)	0 (0.0)		
Good	0 (0.0)	0 (0.0)	3 (100)		

**Table 6(b):** Impact of educational level on awareness

Educational Level	Awareness regarding			
	Family planning Techniques		Sexually transmitted Disease	
	YES	NO	YES	NO
Up to primary level (1 <sup>st</sup> - 5 <sup>th</sup> standard)	51 (30.3)	117 (69.6)	24 (14.2)	144 (85.7)
Above primary level (6 <sup>th</sup> - 10 <sup>th</sup> standard)	21 (46.6)	24 (53.3)	17 (37.7)	28 (62.2)
Above higher secondary level	3 (100)	0 (0.0)	3 (100)	0 (0.0)
<i>Chi-square</i>	10.81		52.48	
<i>p-value</i>	≤0.013		≤0.0001	

Women's education has great influence on the reproductive health of women as it enhances the overall knowledge about health, improves attitude and practices of the mother concerning fertility status and utilization of ANC (antenatal care), enhances family planning practices, besides creating awareness on menstrual hygiene practices. In the present study respondents (scheduled tribe women) with higher levels of education showed comparatively better reproductive health status as adjudged by fertility status, adoption of family planning techniques, menstrual hygiene practices, utilization of ANC (antenatal care) and awareness regarding healthy reproductive services as against scheduled tribe women with illiteracy or low educational status.

### Conclusion

The findings of the study reveal strong association between education level and reproductive health of respondents. With increase in educational level, decline in fertility status and improvement in menstrual practices, utilization of antenatal care (ANC), adoption of family planning techniques and level of awareness regarding Family planning techniques and STI/STD infections has been observed. The study suggests implementation of various schemes for universalization of education especially for tribal population.

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