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Original Research Article

Knowledge and attitude towards contraceptive use among Juang men: a particularly vulnerable tribal group in Odisha, India

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ABSTRACT

Background: Empirical evidence on knowledge and attitude toward contraception among particularly vulnerable tribal groups is rare in India. This study unearths the knowledge and attitude towards contraceptive methods among the Juang men, a PVTG in Odisha, India.

Methods: Data for the present study comes from a cross-sectional mixed-method study conducted in 2020-21, following a three-stage sampling design. The present analysis is based on the quantitative data of 100 men and the qualitative interviews (12 Focus group discussions and 12 Key informant interviews). The quantitative data were analyzed using Stata (V16), and we used NVivo (V12) to analyze the qualitative data. We calculated an attitude scale categorized into favorable, neutral, and unfavorable.

Results: Knowledge of contraceptive methods was found inadequate- 43% knew any modern spacing methods & 65% knew any modern limiting methods. About two-fifths (44%) of the men had a less favourable attitude towards contraception, 32% had a moderately favourable attitude, and 24% had a highly favourable attitude towards family planning. A higher percentage of educated men, exposed to mass media, do not consume alcohol and tobacco, and married after 18 years had a favourable attitude towards contraception. Qualitative data reveal that contraception was never perceived as an essential issue, and male involvement in family planning is culturally discouraging.

Conclusions: Contraceptive method knowledge is not universal among Juang men, and many have a negative attitude toward using family planning methods. Results indicate inadequate program outreach and suggest customized intervention for contraceptive knowledge and its benefits among Juang men.

Keywords: Knowledge, Attitude, Contraception, Juang, PVTG

INTRODUCTION

Research on contraception is essential since using contraceptive techniques reduces population growth while enhancing mother and child health, women's empowerment, and socioeconomic development. In India, 56% of women use any modern contraceptive method, albeit with wide socioeconomic variation.¹ Women's age, education, occupation, number of surviving sons, healthcare autonomy, household structure, economic condition, social group, religion, place of residence, fertility preference of in-laws, husband's education, and

inter-spousal communication on family planning are proven determinants of contraceptive knowledge and practices in India.²⁻⁷ However, men's attitudinal norms dominate women's empowerment regarding family planning choices in the country.⁸ Scheduled tribes (STs) often have the lowest performance across various health measures in India.⁹⁻¹¹ Literature reveals that awareness and use of contraceptives are poor among the tribes.¹² Tribal men further lag behind their spouses in contraceptive knowledge and use.¹³ A past study in Maharashtra revealed that only two-thirds of the surveyed tribal men had heard about modern family planning; the primary source of

information for family planning was the multipurpose worker in the village.¹⁴ Another study in Sikkim also revealed that the main source of information on contraceptive methods for men were the government health staff and the mass media.¹⁵ Contraceptive awareness was further low among the tribal men in central India.¹⁶ Moreover, of those rural men aware of contraceptive methods many had inadequate knowledge of their correct use in Maharashtra.¹⁷ In the absence of empirical studies, knowledge and attitude towards contraceptive methods use are perceived to be worse among the particularly vulnerable tribal groups (PVTGs). Juang is one of the 75 tribal groups identified as PVTGs by the Government of India¹⁸. As per the Census of India 2001, there are only 47,095 Juang, a vast majority of which reside in rural areas of Odisha, eastern India. The Juang tribe belongs to the Munda ethnic group and speaks the Juang language, which is accepted as a branch of the more exceptional Austroasiatic language family. A low level of education, stagnant population growth and a primitive economy characterizes them. However, there needs to be more scientific evidence on the reproductive health of Juang in general and Juang men's knowledge and attitude towards contraceptive methods use in particular. The present study aims to unearth the Juang men's knowledge, and attitude toward contraceptive methods use.

METHODS

The current study uses data from a cross-sectional mixed-method study conducted among the Juang tribe in Odisha's Keonjhar district. The larger study (comprising Juang women) adopted a three-stage sampling design to choose respondents i.e., married women aged 15-49 years. Although the aim was to interview one-third of the husbands of the chosen women (n=360), the study could only gather data from 100 men. Moreover, 12 Key-informant interviews (KII) and 12 focus group discussions (FGD) were conducted to understand their lifestyle, gender norms towards reproductive health issues, and male participation in family planning. Only those who voluntarily consented were interviewed in the study. The data was collected between 2020-2021, with an in-between pause due to the COVID-19-induced lockdown. The present analysis is based on the quantitative data of 100 men and the qualitative interviews.

Variables

The outcome variables used in the study are; Knowledge about contraceptive methods and attitude towards contraceptive method use. In the study, the modern spacing method include pills and condoms; modern limiting methods include male or female sterilization; and traditional method include withdrawal and periodic abstinence. An attitude scale based on ten questions through Principal component analysis was calculated. The scale was categorized into favorable, neutral, and unfavorable attitudes. The predictor variables used in the study were current age (below 21, 21+), education

(illiterate, literate), age at marriage (below 18, 18+), employment status (self-employed, daily wage labor, daily forest product collection), usage of tobacco (no, yes), consumption of alcohol (no, yes), media exposure (no, any), attend gram sabha (always/sometimes, rarely/never), healthcare decision (respondent, wife), discuss family planning with wife (always/sometimes, rarely/never), and children ever born (below 3, 3+).

Statistical analysis

The descriptive analysis presents the socioeconomic and demographic profile of the Juang men. Bivariate analysis was used to understand the individual relationships between predictors and outcome variables. The quantitative data were analyzed using Stata (V16), and we used NVivo (V12) to analyze the qualitative data.

RESULTS

Socioeconomic and demographic profile of the surveyed men

The socioeconomic and demographic profile of the Juang men interviewed in the study. The average age of the men interviewed was 21 years. Of them, 56% were aged below 21 years, and the rest were 21 and above. The average age at marriage was 17.1 years. Only 31% of Juang men were literate, and 69% were illiterate. Of the surveyed sample, 37% worked as daily wage laborers, 31% collected forest products daily, and the remaining were self-employed.

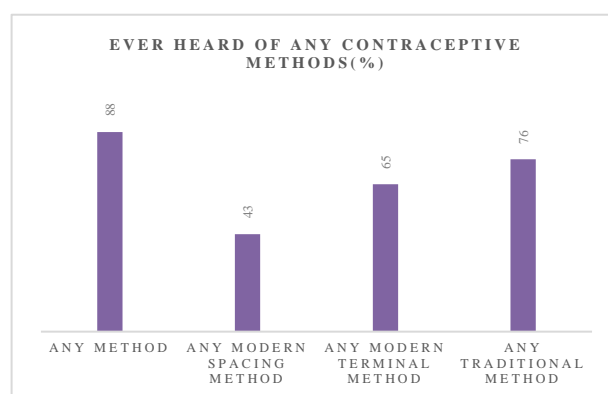


Figure 1: Percentage of men ever heard of any contraceptive method.

Alcohol drinking was common among Juang men; 63% regularly consume alcohol. Again 54% of the men use smokeless tobacco, and 56% smoke bidi/cigarette. Forty-five percent of the Juang men were exposed to any mass media. Thirty-nine percent attended gram sabha always/sometimes, and 61% rarely/never attended any gram sabha. Seventy-three percent of the men usually make independent decisions for their healthcare, while 27% said that wife takes care of their healthcare. Two-thirds of the women never discussed family planning

matters with their spouse, and 34% did it rarely. Fifty-six percent of the men had three and more children.

Knowledge of family planning methods

Figure 1 presents the knowledge of family planning methods among Juang men. Of the total men, a majority (88%) knew about any method of family planning. Method-wise, 43% of the men knew any modern spacing methods, 65% knew any modern limiting methods, and 76% knew any traditional method of contraception.

Table 1: Socioeconomic and demographic profile of Juang men, Odisha, India.

Background characteristics	Total (n=100)	
	%	N
Age group (years)		
Below 21	56.0	56
21+	44.0	44
Mean age	21.0	
Education		
Illiterate	69.0	69
Literate	31.0	31
Age at marriage		
Before 18	59.0	59
18+	41.0	41
Mean age at marriage	17.1	
Current occupation		
Self-employed	32.0	32
Daily wage labour	37.0	37
Daily forest product collection	31.0	31
Usage of tobacco		
Yes	54.0	54
No	46.0	46
Consume alcohol		
Yes	63.0	63
No	37.0	37
Smoke bidi/cigarette		
Yes	56.0	56
No	44.0	44
Media exposure		
No exposure	55.0	55
Any exposure	45.0	45
Attend gram sabha		
Always/sometimes	39.0	39
Rarely/never	61.0	61
Health care decision		
Respondent (Men)	42.0	42
Wife	27.0	27
Both	31.0	31
Inter-spousal discussion on contraception		
Always/sometimes	34.0	34
Rarely/never	66.0	66
Child ever born		
Below 3	44.0	44
3+	56.0	56
Total	100	100

Attitude towards family planning method use

The men's attitude towards specific aspects of family planning methods used is shown in (Table 2). Fifty-eight percent of the men agreed that taking contraceptive precautions is the responsibility of women. Almost equal numbers viewed that they would prefer their wife to use a contraceptive method; and agreed that, if a woman uses contraception, it decreases her husband's love for her. Sixty-three percent of men agreed that contraception decreases sexual desire. Only 14% of men agreed that spacing births is good for the children's health, and 61% agreed that spacing between births is not related to the children's health.

Only 15% of men agreed that contraception helps improve the mother's health, and they approve of using contraceptives to space births. Qualitative data also found that Juang men did not perceive family planning issues as pertinent and primarily women matter. To quote a FGD participant: "We do not bother about family planning, and it is not all of us to discuss the family planning matters. Our responsibility to earn and care about the children and family" (FGD-1: 27 years old father of four children). Inter-spousal communication on family planning was again inadequate, and men often do not feel the need for it. A FGD participant said, "We do not discuss family planning matters with the spouse. Whatever will happen, it will happen, why to control." (FGD-6: 28 years old father of four children) Male participation in family planning was further found to be culturally discouraging. Men supportive of contraception are subjected to humiliation. In the words of a FGD participant, "In our community, if a male/husband is involved in family planning choice or helps his wife on this topic, he may be humiliated by peers or villagers." (FGD-3: Illiterate, 30 years old father of three children). A KII also viewed that "Though men are dominant in the family, they are not ready to choose any family planning method. Most men think it is not their responsibility"-(KII-1, healthcare provider).

Socioeconomic and demographic differentials in attitude towards family planning method use

The men's attitudes toward family planning methods use by socioeconomic and demographic characteristics is shown in (Table 3). Forty-four percent of the men had a less favorable attitude towards contraception, 32% had a moderately favorable attitude, and 24% had a highly favorable attitude towards family planning method use. Nine percent of men aged below 21 and 43% of those 21 and older had a more favorable attitude towards family planning method use. Of those literates, 61% had a more favorable attitude towards family planning method use than 7% of their non-literate counterparts. Forty-six percent of those married after 18 and above had a more favorable attitude towards family planning method use than 8% of those married below 18.

Table 2: Men's attitude towards specific aspects of family planning methods used.

Attitude towards contraception	% agree	% partially agree	% disagree
It is primarily the women's responsibility to take contraceptive precautions	58.00	24.00	18.00
You approve of using contraception to postpone having the first child.	15.00	23.00	62.00
You would prefer the wife to use a contraceptive method?	57.00	23.00	20.00
The most important thing about contraception is that it makes sex worry-free and enjoyable.	15.00	21.00	64.00
If a woman uses contraception, it decreases her husband's love for her	58.00	19.00	23.00
You approve of using contraceptives to space births?	15.00	24.00	61.00
Your wife approves of using contraception to space births	47.00	29.00	24.00
Contraception helps to improve the health of the mother	15.00	25.00	60.00
Contraception decreases sexual desire	63.00	18.00	19.00
Spacing births is good for the health of the children	14.00	29.00	57.00
Spacing between births is not related to the health of the children	61.00	20.00	19.00

Table 3: Men's attitude towards family planning methods used by background characteristics.

Background characteristics	Attitude towards contraceptive method use				Chi-square, p value
	Low	Medium	High	N	
Current age					
Below 21	46.43	44.64	8.93	56	<0.001
21+	40.91	15.91	43.18	44	
Education					
Illiterate	47.83	44.93	7.25	69	<0.001
Literate	35.48	3.23	61.29	31	
Age at marriage					
Before 18	49.15	42.37	8.47	59	<0.001
18+	36.59	17.07	46.34	41	
Current occupation					
Self-employed	43.75	3.13	53.13	32	<0.001
Daily wage labour	40.54	51.35	8.11	37	
Daily forest collected	48.39	38.71	12.9	31	
Consume tobacco					
Yes	50.00	44.44	5.56	54	<0.001
No	36.96	17.39	45.65	46	
Consume alcohol					
Yes	49.21	41.27	9.52	63	<0.001
No	35.14	16.22	48.65	37	
Smoke bidi/cigarette					
Yes	46.43	46.43	7.14	56	<0.001
No	40.91	13.64	45.45	44	
Media exposure					
No exposure	54.55	38.18	7.27	55	<0.001
Any exposure	31.11	24.44	44.44	45	
Attended gram Sabha					
Always/Sometimes	35.90	20.51	43.59	39	<0.001
Rarely/Never	49.18	39.34	11.48	61	

Continued.

Background characteristics	Attitude towards contraceptive method use				Chi-square, p value
	Low	Medium	High	N	
Decision-making on health					
Respondent (men)	52.38	40.48	7.14	42	<0.001
Wife	37.04	44.44	18.52	27	
Both	38.71	9.68	51.61	31	
Inter-spousal discussion on contraception					
Always/Sometimes	41.18	23.53	35.29	34	<1.136
Rarely/Never	45.45	36.36	18.18	66	
Child ever born					
Below 3	40.91	31.82	27.27	44	<0.770
3+	46.43	32.14	21.43	56	
Total	44.00	32.00	24.00	100	

Forty-four percent of the women with mass media exposure had a higher favorable attitude towards family planning compared to 7% of the men without mass media exposure. Of those men who make healthcare decisions jointly with wife, 52% had a higher favorable attitude towards family planning method use compared to 7% of men whose healthcare decisions are made by themselves. Of those self-employed men, 53% had a higher favorable attitude towards family planning method use than 8% of those daily-wage workers. A higher percentage of the men with less than three children had a more favorable attitude towards contraceptive use (27%) than those with at least three children (21%). Again, higher percentages of men who do not consume tobacco or alcohol had a highly favorable attitude towards family planning method use (44-46%) than those who consume it (6-7%). Of those attending gram sabha always/sometimes, 40% had a more favorable attitude towards family planning method use than their counterparts who rarely/never attend it (9%). Of those who discuss family planning with their wife sometimes/always, 35% had a higher favorable attitude towards family planning method use compared to 18% of those who rarely/never discuss it with their spouse. Qualitative data revealed that existing gender norms discourage men from involvement in women's reproductive health issues, including family planning use. Inadequate education and exposure to mass media, besides the inability to understand the importance of contraceptive use, also influenced the attitude toward contraceptive methods. To quote a key informant, "We visited some Juang village to discuss the family planning methods. But they are not openly talking about this subject because they are shy, and some of the couples are illiterate, thus failed to understand its importance"-(KII-2, NGO staff). Perceived decrease in sexual pleasure was also reported as a reason for having a less favorable attitude towards modern methods of contraception. This further leads to no use of modern methods and acceptance of traditional methods if needed. In the words of a FGD participant, "Men do not use condoms because they would not get sexual pleasure if they use a condom. It is just a rubber, not to increase the pleasure" (FGD-7: 25 years old father of two children). A KII viewed that "if they do not want a

child, they use Neem oil in their private parts to avoid pregnancy"-(KII- 7, 45 years old village quack).

DISCUSSION

The study found that the Juang men had limited knowledge of family methods, particularly modern spacing methods. A sizable proportion of them had a less favorable attitude toward the use of contraceptive methods. Attitude toward the use of contraception varies by socioeconomic and demographic characteristics of this PVTG. Our study found that the awareness of family planning methods is not universal among Juang men. The result conforms to many earlier studies among different tribes in India.¹³⁻¹⁶ Inadequate knowledge decreases the chance of contraceptive acceptance, thus increasing the risk of adverse reproductive health outcomes. Many Juang men have a less favorable attitude toward contraceptive methods. An earlier study among the Lohpeeta tribe in Central India also found that besides poor knowledge, they possess a negative attitude toward contraceptives.¹⁷⁻¹⁹ Juang men's unfavorable attitude towards contraception decreases the chances of contraceptive method use, putting their spouses at higher risk of unintended pregnancies, obstetric morbidities, and reproductive tract infections. An earlier study also revealed that apprehension of side effects and spouse disapproval were the two common reasons for never using contraceptive methods among tribal women in West Bengal.²⁰ However, lack of male participation in reproductive health services affects the mother's reproductive health and children's health.^{17,21,22} The study found that existing gender norms on family planning negatively influence attitudes towards contraception and discourage contraceptive use among Juang men. A past study among tribes in Odisha also revealed that the most common barriers to accepting permanent family planning methods were their cultural practice of prohibiting woman acceptors from worshipping God, as well as their fear of being unable to provide sexual satisfaction to their partner, which may result in the remarriage of their spouse.²³ An earlier study found that a lack of knowledge and misinformation about male sexual health issues, existing gender inequality, and lack of male-oriented reproductive health services all discourage tribal men from sharing responsibility in reproductive health matters of their

spouses.¹⁶ This reemphasizes the need for contraceptive programs to engage men and address gender-equitable attitudes. A past study also revealed that peer outreach (interpersonal communication) and mass media are effective ways to enhance favorable attitudes toward contraception among men.²⁴ Additionally, contraceptive counseling by male health workers has also been found to improve men's engagement in contraceptive practices.²⁵ Another study suggests that educating tribal men about the proper use and benefits of modern contraceptives is vital to solving the problem of the high unmet need for family planning among tribal women.¹³ The beneficial role of education in the contraceptive behavior of the tribal has also been highlighted in another study.²⁴ The study's strengths are that this is the first study to our knowledge that uses a robust sampling design and a mixed-method approach to investigate knowledge and attitude towards contraceptive method use among Juang men; a PVTG. Thus, the results fill the knowledge gap on attitudes towards and determinants of family planning method use among the Juang tribe. However, social desirability response bias cannot be annulled.

CONCLUSION

Contraceptive method knowledge is not universal among Juang men, and many have a negative attitude toward using family planning methods. There further exists wide variation in attitude towards contraceptive method use by socioeconomic and demographic profile. Gender norms regarding family planning are barriers to favorable attitudes toward contraceptive use. The negative attitude toward contraception indicates insufficient program outreach; thus, customized programs and policies addressing this PVTG are suggested. A targeted intervention by grass-roots health workers to promote awareness and informed contraceptive method use will reduce negative attitudes toward contraception. Furthermore, efforts to improve contraception education and inter-spousal communication appear relevant to promote a favorable attitude toward contraception and contraceptive use, ensuring better reproductive health among the Juang.

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