

Factors Associated with Male Involvement in Family Planning Utilization in a Tharu Community

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ABSTRACT

Background: Male involvement in family planning not only enhances the couple's uptake but also provides continuity through spousal coordination to meet the family planning need. The study aims to assess the factors associated with male involvement in family planning utilization.

Methods: A descriptive cross-sectional study design was used in Madhyabindu Municipality from 14th August to 10th September 2022. After proportionately selecting from each ward, the data was collected through a systematic random sampling technique among Tharu married males who were living together with reproductive age group wives. Data was analysed by using SPSS version-16. Descriptive and inferential statistics were used for the data analysis.

Results: Of the 151 males, almost half (49.7%) of the male had completed secondary level education. The majority (80.1%) had decided together by husband and wife about the contraceptive use. The majority (67.5%) of the male had active involvement in family planning utilization, while half (51.7%) of them visited family planning clinic and users of modern family planning methods were 40.4%. Most of (95.4%) them had easy access to temporary FP services and majority (74.2%) had easy access to permanent FP services. Education ($p = 0.001$), prior use of contraception ($p = 0.001$), and easy access to permanent family planning methods ($p = 0.012$) were statistically significant with male involvement in family planning utilization.

Conclusions: Two-fifth of the males were users of family planning methods. Education, prior use of contraception and easy access to family planning services were the significant factors associated with male involvement in family planning utilization.

Keywords: Contraception; ethnic group; men participation.

INTRODUCTION

The globe including Nepal is demanding male involvement in family planning (FP).¹ Male involvement in family planning can be as a client or an encouraging and supporting partner in contraception.² Even though there are geographical variation in family planning users, male's cooperation has been unsatisfactory since two decades.³ Male who approved contraceptives, higher education, large number of children, duration of marriage, or spousal communication were tend to support use of modern family planning methods.^{4,7}

FP is taken as women's issue hence, ignoring the men's roles.⁸ Yet decision-makers on contraception are male but family planning services mostly focused on women.⁹ The Tharu community is the largest, and marginalized ethnic groups of Terai valleys of Nepal whose overall

health indicators are low.¹⁰ Hence, this study was conducted to assess the associated factors with male involvement in family planning method utilization in a Tharu community.

METHODS

A cross-sectional descriptive research design was adopted. The study was conducted in the Tharu community of Madhyabindu municipality, Nawalpur. Among 15 wards, ward numbers three and four were selected because these wards had the highest Tharu population residing at 65.5% and 57.4% as per the Madhyabindu ward profile, respectively. The target population of the study was the married males of Tharu community of Madyabindu municipality who were living together with their wife of reproductive age group (15-49 years). Male whose spouse was pregnant or had a

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hysterectomy done were excluded from the study. The sample size was 151, calculated by using the standard formula¹¹ with the prevalence 11%.⁹ The proportionate sampling was done from ward number three and four i. e 78 samples from 605 and 73 samples from 568 Tharu married male, respectively. A systematic random sampling technique was used from the list of 387 and 406 Tharu households, assuming every household had married male males. But, if the selected household had not the eligible male, the next household was included in the study.

The interviewer- administered structured questionnaire was used which was divided into three parts: part I consisted of questions related to predisposing factors which included 12 questions regarding the socio-demographic information, five questions regarding enabling factors, 18 true false knowledge questions, including 10 positive statements and five negative statements. Each true answer was given one mark, and each false answer was given 0 for positive statements. Each true answer was given 0 and a false answer was given one mark for negative statements. Median was taken as cut off point to categorize the knowledge level as good and poor. Five points Likert scale (strongly agree, agree, undecided, disagree, and strongly disagree) was used to assess perceived need of family planning. It was categorized as a high perceived need for \geq median score and a low perceived need for $<$ median score. Part II: Environmental factors consisted of six structured questions related to the health care system, including the availability and accessibility of family planning services. Part III consisted of six dichotomous questions related to male involvement in family planning utilization. One point was given for each "yes" response and zero points for each "no" response. Based on the summative score of the questions, a 0-3 score was ranged as low involvement, and 4-6 score was ranged as high involvement.

The instrument's validity was determined through consultation with advisors, subject experts, nursing research faculty, and peers. A language expert's opinion on the comprehensibility and simplicity of language was obtained during translation. The instrument, which was written in English based on literature, was translated into Nepali by the researcher herself, revised by a Nepali language expert, and then translated back into English with the assistance of an English expert. Then compared the original version with back-to-back translation versions of the tool to ensure that the meaning provided by the English and Nepali versions were consistent. The reliability of the research tool was

maintained by pretesting 10% (15) of the total sample size among the Tharu married male of Madhyabindu municipality ward number two. The Cronbach's alpha score for the knowledge questionnaire was 0.724, for the perceived need questionnaire was 0.712, and for male involvement 0.708.

The study was carried out after approval letter was obtained from the Institutional Review Committee of Tribhuvan University, Institute of Medicine for ethical clearance (reference number 554(6-11) E2). Written permission was obtained from the ward office of Madhyabindu Municipality, ward number two for pre-testing and ward number three and four for data collection. Informed written consent was obtained from each participant. The respondents were not forced to participate. The respondents were given full authority to withdraw their participation without any clarification during any period of the investigation if they were not interested in participation. Confidentiality was maintained by keeping all the collected information confidential and only using it for study purposes.

Door to door survey was done for data collection by the researcher herself. The first household was selected by spinning the bottle when standing at the centre of the village and the bottle pointing to the house was selected as the first sample and every 5th household was selected via a systematic random sampling technique. The process was continued till the required sample size was obtained. If the eligible male was not available in the selected household next household was taken. If two or more eligible males were present in one household lottery method was done to select one male. Each interview took 20-30 minutes. The data collection period was from August 14th, 2022 to September 10th, 2022. Also, due to the COVID-19 pandemic situation, the researcher used a face mask at all times during the data collection period, and frequent hand washing or sanitization with alcohol-based hand rub was done. A physical distance of at least one meter was maintained.

The obtained data was checked for completeness and accuracy, edited, coded, and entered into the computer using the software Epi-data version 3.1 and transferred into (SPSS-16 version) for further analysis. Descriptive statistics (frequency, percentage, mean and standard deviation) were used to describe the predisposing factors, enabling factors, perceived need, environmental factors, and the male involvement in family planning utilization, the inferential statistics (chi-square and Fisher Exact Test) was used to find out the association between selected independent variables

and the male involvement in family planning utilization. The level of significance was considered at 5% with a P value < 0.05 and a 95% confidence interval.

RESULTS

Regarding personal characteristics; among 151 male, sixty-one (40.4%) and 66 (43.7%) of the respondents and their spouses belong to 30-39 years, respectively. While four (2.7%) of the respondents and five (3.3%) of their spouses completed higher education. Ninety-seven (64.2%) of them had ≤ 15-year duration of marriage. Majority 134 (88.7%) of the respondents had children; among them 19 (14.2%) had more than two children. More than one fourth 38 (28.4%) of the respondents had birth spacing less than or equals to two years. Majority 105 (69.5%) had received health services from health post. Most of 137 (91%) them reach health facility within 30 minutes by walk and about 105 (69.5%) had said family planning services were available on free of cost. Most of 144 (95.4%) and almost two-third 112 (74%) of the respondents reported that the temporary and permanent family planning methods accessibility, respectively.

Among 151 male, two-third 105 (67.5%) had high involvement in family planning utilization (table 1). More than half 88 (58.3%) had good knowledge and almost same 86 (57%) had high level of perceived need of family planning (table 2). There was statistically significant association between educational level ($p = 0.001\#$), prior use of any contraceptive methods ($p = 0.001$), and easy access of permanent family planning methods ($p = .012$) and male involvement in family planning utilization (table 3-5).

Table 1. Male Involvement in Family Planning Utilization n=151

Male Involvement	Number	Percent
High involvement (4-6 score)	102	67.5
Low involvement (0-3 score)	49	32.5

Table 2. Knowledge and Perceived Need of Family Planning of the Respondents n=151

Variables	Number	Percent
Level of knowledge (Median Score=15)		
Good	88	58.3
Poor	63	41.7
Level of perceived need (Median Score = 41)		
High	86	57.0
Low	65	43.0

Table 3. Association between Predisposing Factors and Male Involvement in Family Planning Utilization n=151

Variables	Male Involvement		x2 Value	P- value
	High No. (%)	Low No. (%)		
Age in years				
< 35	57 (70.4)	24 (29.6)	0.634	0.426
≥ 35	45 (64.3)	25 (35.7)		
Education				
Up to secondary education	76 (61.8)	47 (38.2)	0.001#	
Higher education	26 (92.9)	2 (7.1)		
Duration of marriage in years				
≤ 15	43 (67.2)	21 (32.8)	0.007	0.935
>15	59 (67.8)	28 (32.2)		
Number of children				
≤ 2	43 (67.2)	21 (32.8)	0.007	0.935
>2	59 (67.8)	28 (32.2)		
Sex of children				
Son or daughter	52 (71.2)	21 (28.8)	0.599	0.739
Both	40 (65.6)	21 (34.4)		
Birth spacing of child in years				
≤ 2	27 (71.1)	11 (28.9)	0.141	0.707
>2	65 (67.7)	31 (32.3)		
Desire of children				
Yes	77 (69.4)	34 (30.6)	0.426	0.273
No	25 (62.5)	15 (37.5)		

* P- value significant at < 0.05, x2 Pearson Chi-square Test, # Fisher Exact Test

Table 4. Association between Enabling Factors and Male Involvement in Family Planning Utilization n=151

Variables	Male Involvement		x2 Value	P- value
	High No. (%)	Low No. (%)		
Prior use of any FP methods				
Yes	57 (81.4)	13 (18.6)	11.467	0.001*
No	45 (55.6)	36 (44.4)		
Side effects of FP				
Yes	9 (75.0)	3 (25.0)	0.752#	
No	93 (66.9)	46 (33.1)		
Decision maker about FP				
Husband or wife	16 (53.3)	14 (46.7)	3.452	0.063
Both	86 (71.1)	35 (28.9)		

* P- value significant at < .05, x2 Pearson Chi-square Test, # Fisher Exact Test

Table 5. Association between Health Care Services Availability, Accessibility, Perceived Need of Family Planning and Male Involvement in Family Planning Utilization n=151

Variables	Male Involvement		x2 Value	P- value
	High No. (%)	Low No. (%)		
Time to reach near health facility (By walk)				
≤ 30 min	92 (67.2)	45 (32.8)		0.502#
> 30 min	10 (71.4)	4 (28.6)		
Free cost of FP services				
Yes	68 (64.8)	37 (35.2)	1.222	0.180
No	34 (73.9)	12 (26.1)		
Easy access of permanent FP methods				
Yes	82 (73.2)	30 (26.8)	6.348	0.012*
No	20 (51.3)	19 (48.7)		
Easy access of temporary FP methods				
Yes	97 (67.4)	47 (32.6)		0.591#
No	5 (71.4)	2 (28.6)		

* P- value significant at < .05, x2 Pearson Chi-square Test, # Fisher Exact Test

DISCUSSION

The study found that, among 151 male, 67.5 percent were actively involved in family planning utilization, which was higher than the study findings by Ghana at 56 percent¹², Nigeria at 55.1 percent¹³ Kenya at 52 percent¹⁴, Ethiopia at 59.3 percent.¹⁵ This might be due to variations in settings. This finding contrasts with a study done in India, where only 10.9 percent of male had good involvement in family planning.⁹ The difference might be due to the different operational definition used.

The study revealed that 86.1 percent of male had given approval to their spouses to use family planning methods, 51.7 percent visit a family planning clinic, and 80.1 percent have decided together on family planning methods. This result was similar to the study conducted in Nigeria, which showed 81 percent have approved, 66.4 percent had visited a family planning clinic, and 82.9 percent had made a decision with both partners.¹⁶ Similarly, in Tharus of Nepal; more than two-thirds (75%) had couple discussion on family planning.¹⁷ However, in the recent study 40.4% used contraception, similarly in Myanmar (40.7%),¹⁸ India, Dang, and Eastern Nepal found that 36.4 percent, 34.9 percent, and 33.9 percent, respectively.^{17,19,20} In contrast, a study of Mangalore showed two-third (71.2%) of male were contraception users.¹⁵ Tanzania revealed 17.5% male are family planning users,²¹ which was lower than the

current study, difference is might be due dissimilarities in settings.

The study found that education, ever using any contraception, and easy access to a permanent family planning methods were associated with male involvement in family planning utilization. This finding was supported by studies conducted in Nepal,¹⁹ India,²⁰ Bangladesh,²² Indonesia,²³ Ghana,²⁴ and Northwest Ethiopia,²⁵ which showed a statistically significant association between education and male involvement in family planning utilization.

The study stated that male who used contraception previously had active involvement in family planning utilization; which was supported by the studies conducted in Ethiopia,^{2,15,26} which showed a statistically significant association between male prior use of contraception and male involvement in family planning. In this study, easy access to permanent family planning methods increases active male involvement in family planning utilization. This confirmed by Nigeria and Kenya, which shows the availability of family planning services is significantly associated with male involvement in family planning.^{14,16} The study found that more than half (58.3%) of the male have good knowledge, almost similar pattern (55.8%) observed at West Bengal.²⁰

The strength of the study was that Anderson's

Behavioural Model helped to identify various factors that influenced male involvement in family planning utilization. Composite index was used which contained combination of six different characteristic indicators of male involvement. Most studies focused on women but this study shaded light on male's perspective on family planning. The limitation of the study was that there might be sampling bias because, in the systematic sampling technique, the researcher used total Tharu households as a sampling frame. Further research with qualitative methods can be done to gain more depth knowledge. Similar studies can be conducted in more settings so that the findings might be more generalized.

CONCLUSIONS

Although almost two-third of the Tharu married male have high involvement in family planning, direct users of modern family planning methods are still below half. A decision about family planning was made together by most couples. Education, prior use of contraception and easy access to permanent FP methods were the significant factors associated with male involvement in FP utilization.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

REFERENCES

1. United Nations Population Fund [UNFPA]. Family planning takes global stage, showing both major gains and gaps [Internet]. 2022. Available from: <https://reliefweb.int/report/world/family-planning-takes-global-stage-showing-both-major-gains-and-gaps>
2. Demissie TW, Tegegne EM, Nigatu AM. Involvement in family planning service utilization and associated factors among married men at Debre Tabor town Northwest, Ethiopia, 2017. *Pan Afr Med J* [Internet]. 2021 [cited 2022 Nov 14];38.[Article]
3. Ross J, Hardee K. Use of male methods of contraception worldwide. *J Biosoc Sci*. 2017;49:648-63. doi: 10.1017/S0021932016000560.
4. Bifato B. Assessment of male involvement in family planning use in Loka Abaya District, Southern Ethiopia: cross-sectional study by Berhanu Bifato. *Global Journals Inc. (USA)*, 2016;16(4). https://globaljournals.org/GJHSS_Volume16/1-Assessment-of-Male-Involvement.pdf
5. Ling J, Tong SF. The roles of men in family planning - a study of married men at the UKM primary care clinic. *Malays Fam Physician*. 2017;12:2-13.[Article]
6. Wegs C, Creanga AA, Galavotti C, Wamalwa E. Community Dialogue to Shift Social Norms and Enable Family Planning: An Evaluation of the Family Planning Results Initiative in Kenya. Bhattacharya S, editor. *PLoS ONE*. 2016;11:e0153907.doi: <https://doi.org/10.1371/journal.pone.0153907>
7. Wondim G, Degu G, Teka Y, Diress G. Male Involvement in Family Planning Utilization and Associated Factors in Womberma District, Northern Ethiopia: Community-Based Cross-Sectional Study. *OAJC*. 2020;Volume 11:197-207. doi: 10.2147/OAJC.S287159
8. Silwal S, Neupane S. Knowledge and Attitude of Men on Contraceptive Methods. *Journal of Karnali Academy of Health Science* [Internet]. 2018;1. Available from: www.jkas.org.np
9. Parija P, Pal A, Panigrahi S, Thakur P, Pal R. Male involvement in family planning in a rural area of India. *J Family Med Prim Care*. 2022;11:1943. doi: 10.4103/jfmpc.jfmpc_1557_21
10. UNFPA Nepal. Population Situation Analysis of Nepal (With Respect to Sustainable Development) [Internet]. 2017. Available from: <https://nepal.unfpa.org/sites/default/files/pub-pdf/Nepal%20Population%20Situation%20Analysis.pdf>
11. Cochran WG. Sampling techniques. In: Third. New York: John Wiley & Sons; 1977.
12. Appiah SCY, Osei FA, Mensah NK, Adonoo PL, Tanko AG, & Sarpong PO. Males as partners in family planning service uptake in Ghana: a descriptive cross-sectional survey. *Health*, 2019;11(08), 1043-1054. doi: <https://doi.org/10.4236/health.2019.118082>
13. Amuzie CI, Nwamoh UN, Ukegbu A, Umeokonkwo CD, Azuogu BN, Agbo UO, et al. Determinants of Male Involvement in Family Planning Services in

- Abia State, Southeast Nigeria [Internet]. In Review; 2021 Oct [cited 2022 Nov 14]. [Article]
14. Butto D, & Mburu S. Factors associated with male involvement in family planning in West Pokot County, Kenya. *Universal Journal of Public Health*, 2015;3(4), 160-168. doi: <https://doi.org/10.13189/ujph.2015.030404>
 15. Mulatu T, Sintayehu Y, Dessie Y, Dheresa M. Male involvement in family planning use and associated factors among currently married men in rural Eastern Ethiopia. *SAGE Open Medicine*. 2022;10:205031212210941. doi: 10.1177/20503121221094178.
 16. Owoyemi JO, Dangana GO. Male involvement in family planning practices among married men in kabba/bunu local government secretariat, Kogi State, Nigeria. *Gloria O. Dangana - Google Search [Internet]. 2020 [cited 2022 Nov 16].
 17. Thapa N, Giri N, Sharma I. Male Involvement in Contraceptive Use among Tharu People Residing In Dang District of Nepal. *International Journal of Health Sciences and Research* [Internet]. 2015; Available from: https://www.ijhsr.org/IJHSR_Vol.5_Issue.9_Sep2015/68.pdf
 18. Myint ZM, Lapvongwatana P, Chansatitporn N. Involvement in practicing family planning among married men in Kyaukpadaung Township, Mandalay Region, Myanmar. 2021;12. <https://he01.tci-thaijo.org/index.php/AIHD-MU/article/view/245609>
 19. Uprety S, Sharma KR, Paudel M, Baral D, Ghimire A. Assessing the knowledge, attitude and practice of family planning among male population in Inaruwa municipality of Eastern Nepal. *JCMC*. 2021;11:95-8. doi:10.54530/jcmc.242
 20. Bag N, Sahu M, Paul B, Das R, Bandyopadhyay L, Bhattacharyya M, & Maity S. Knowledge, attitude and level of involvement of married males in family planning. *Kathmandu Univ Med J*, 2022;20 (2)(78). <http://kumj.com.np/issue/OnlineFirst/128-135.pdf>
 21. Fedrick F, Mkingule L, Mtae H, Kigadye E. Factors influencing male involvement in the utilization of family planning in Chato District, Geita Region Tanzania. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 2020;69(1), 121-139. [Article]
 22. Zakaria M, Bhuiyan MM. Determinants of male involvement in women's reproductive health: a multilevel study in Bangladesh. 2016;16:10. [Download PDF]
 23. Idris H, & Syafriyanti W. Trends and determinants of family planning utilization among men in Indonesia. *Makara Journal of Health Research*, 2021;25(3). doi: <https://doi.org/10.7454/msk.v25i3.1271>
 24. Kwawukume SAK, Laar AS, Abdulai T. Assessment of men involvement in family planning services use and associated factors in rural Ghana. *Arch Public Health*. 2022;80:63. doi: <https://doi.org/10.1186/s13690-022-00822-5>
 25. Degu AA, Yenealem BF, Getnet KB, & Nibret MG. Men's knowledge of vasectomy and its associated factors in Debre Tabor Town, Northwest Ethiopia: a community-based cross-sectional study. *Open Access Journal of Contraception*. 2021;12:27-34. doi: <https://doi.org/10.2147/OAJC.S296798>
 26. Chekole MK, Kaysay ZH, Medhanyie AA, Gebreslassie MA, Bezabh AM. Husbands' involvement in family planning use and its associated factors in pastoralist communities of Afar, Ethiopia. *Reprod Health*. 2019;16:33. doi: <https://doi.org/10.1186/s12978-019-0697-6>