DETERMINANTS OF CONTRACEPTIVES USAGES AMONG MARRIED WOMEN OF REPRODUCTIVE AGE GROUP IN CHEPANG COMMUNITY

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ABSTRACT

Universal access to family planning is a human right, center to gender equality and women's empowerment, and key factor for reducing poverty. The objective of the study is to find out the determinants of contraceptives usages among the married women of reproductive age in Chepang community. A descriptive cross- sectional study design was carried out among 420 married women of reproductive age (15-49) in Korak Village Development Committee of Chitwan District, in which semi-structured interview based questionnaire was used. Data were statistically analyzed by using descriptive statistics. Data analysis was done by using SPSS (Statistical Package of Social Science) version 23 by using descriptive and inferential statistics (bivariate analysis, multivariate analysis). The study findings revealed that the current contraceptives prevalence rate was 50.2 percent. The education status of both respondent and husband, types of family, family income, age at marriage, age at first pregnancy, number of pregnancy, number of living child, next desire of pregnancy, awareness of contraceptives methods, problem faced during receiving services, inter-spousal communication and autonomy were statistically significantly associated with the contraceptives usages. Multivariate binary logistic regression in the study concluded that education status of the respondent (Adusted Odd Ratio [AOR]=0.3, 95% CI: 0.174-0.72), next desire of pregnancy (AOR=0.09, 95% CI:0.40-0.217), awareness level (AOR=2.3, 95% CI: 1.17-4.66), inter-spousal communication(AOR= 3.2, 95% CI: 1.52-6.82) were the key determinants in the contraceptives usages.

KEYWORDS: Chepang, prevalence, contraceptives, Nepal.

1. INTRODUCTION

Contraceptives use is increasing throughout the world. Contraceptive prevalence rate is the proportion of women of reproductive age who are using (or whose partner is using) a contraceptive method at a given point in time.[10]

Family planning is critical for the health of women and their families, and it can accelerate a country's progress toward reducing poverty and achieving development goals. Family Planning program must serve to provide couples and sexually active women and men with correct information, quality services and timely access to affordable, safe, effective modern contraceptives with the provision of their method. The revolution in contraceptive behavior has been by a desire to reduce family size, as social and economic changes have increased the cost of rearing children and reduced the benefits associated with having services.[9]

According to the 2011 census, the indigenous nationalities (Adivasi Janajati) of Nepal comprise 35.8 percent of the total population and Chepang comprise 0.2 percent of total population of Nepal. The Chepang constitute a significant proportion of the population, throughout the history of Nepal and have been marginalized in terms of language, culture, and political and economic opportunities.[3]

An increasing number of Chepang women are using contraceptives, indicating a rise in health awareness in the community,8 to 10 women goes to the health facility for contraceptives, including injection Depoprovera, Implant, Cupper 'T' and birth controls pills ,every week.[2]

According to Bhatta (as cited by Sean People 2014) Along with female community health volunteers, trained peer educators worked closely with government health clinics to fill the gaps both in distance and knowledge of Chepang women in the health concerns and including family planning. The result was a remarkable improvement in contraceptive prevalence rate of 19 percent in 2007 and 54 percent in 2012. There was not only an increase in the contraceptive prevalence rate, but also a decline in the unintended pregnancy rate, the child mortality rate, and the infant mortality rate.[11]

Women wishing to use contraceptives services faces the risk of gossip among community member. One Chepang women can conceive more than 25 times in their life time because of lack of family planning awareness, education, early marriage and inaccessibility of family planning services. Women they are unaware due to their cultural beliefs and of family members This was a particular fear among women in Chepang areas, as a result of the closer proximity of houses in villages, strict social control and gender discrimination, higher levels of Gender Based Voilence (GBV), and lower levels of women's participation in decision making and the women are afraid of side effect of contraceptives method {Ministry of Health and Population.[7]

MATERIALS AND METHOD

Probability**,** proportionate stratified random sampling was obtained for selecting the respondents. Firstly, Korak VDC was selected purposively. The total married women of reproductive age group of Chepang in Chepang community were 1481. The calculated the sample size was 420. Then to make it proportionate, total sample size was divided by total married reproductive age group of Chepang in Chepang

community: 420/ 1481 x 100% = 28 percent. Then the researcher took twenty eight percent of respondents from total population of each ward. The researcher took every ward as a strata and took only married reproductive group of Chepang living with husband as another strata. So, every respondents were taken by lottery method on the basis of house number. Married women of reproductive age group who met the eligible criteria, was interview from randomly selected house. If more than one women meeting eligible criteria resided in the same household than one was selected by using lottery method. In case of the houses were closed or the women do not present at the time of data collection, three revisit were made and if not present then nearest neighboring household was substituted.

Approval from Maharajgunj Nursing Campus and ethical clearance from Institutional Review Board, Institute of Medicine. Pre-tested self-administered semi-structured interview based questionnaire was used to collect datafrom each respondent. Data were analyzed by using SPSS (Statistical Package of Social Science) version 23. Descriptive and inferential statistics (bivariate analysis, multivariate analysis) was used for data analysis.

Table 1: Socio-demographic characteristics of Respondents.

Usages of Contraceptives	Number	Percentage
Used Contraceptives(n=420)		
Used Family Planning	211	50.2
Not Used family planning	209	49.8
95% CI= 45.28-55.12%		
Contraceptives User (n=211)		
Respondent self	185	87.7
Husband	26	12.3
Contraceptives Method Used (n=211)		
Injection Depo-Provera	100	47.4
Norplant	44	20.9
Tab pills	33	15.6
Vasectomy	20	9.5
Cupper 'T'	8	3.8
Condom	6	2.8
Service Used From (n=211)		
Primary Health Care Centre	97	45.8
Health Post	96	45.5
Private Clinic	8	3.9
FCHV	8	3.9
Friends	2	0.9
Time Period of Contraceptives Used(n=211)		
0-1 year	71	33.7
2-3 years	87	41.2
4-5years	37	17.5
More than 5 years	16	7.6
Experienced Side Effect(n=211)		
Did not feel side effect	164	77.7
felt side effect	47	22.3
Types of Side Effects (n=47)		
Headache	10	21.3
Backache	4	8.5

Dizziness	9	19.2
Nausea	6	12.7
Weakness	6	12.7
Weight Loss	4	8.5
Irregular menses	8	17.1

Table 1 shows the uses of contraceptives that the half of respondent (50.2%) are using modern contraceptives. Among different contraceptives methods Injection Depo-Provera was used by 47.4 percent, 45.8 percent had taken the services from Primary Health Care Center (PHCC), where majority of respondents (87%) were using from 2-3 years. About the side-effects, most of respondents (77.73%) did not experienced any side effects and while less than half (47%) of respondent have felt side effects. Among those who felt side-effects, 21.27 percent complain about headache and 17.02 percent of respondents had irregular menses.

Table 2: Association between Usages of Contraceptives and Socio- demographic characteristics n=420.

	Used of Contraceptives				
Characteristics	**Used**	**Not used**	***p* value**	**Unadjusted**	
	No. (%)	**No. (%)**		**O R (95% CI)**	
Age completed					
Up to 30 years	127(51.8)	118(48.2)	0.438	1	(0.79-1.72)
More than 30 years	84(48.0)	91(52.0)			1
Education status of respondent					
Illiterate	51(34.3)	98(65.7)	**0.00**	0.3	(0.23-0.54)
Literate	160(59.0)	111(41.0)			1
Education status of husband					
Illiterate	32(33.7)	63(66.13)	**0.00**	0.4	(0.25-0.66)
Literate	179(55.1)	146(44.9)			1
Religion					
Hinduism	127(50.4)	125(49.6)	0.936	1	(0.68-1.50)
Non -Hinduism	84(50.0)	84(50.0)			1

p-value significant at <0.05   1: reference

The table shows that, the socio-demographic characteristics and use of contraceptives is statistically significance with education status of respondent (***p=0.00,*** OR= 0.3, 95% CI=0.23-0.54), and with education status of husband (***p=0.00,*** OR= 0.5 95% CI= 0.25 – 0.66).

Table 3: Association between Usages of Contraceptives and Socio-Demographic Characteristic of the Respondent n=420.

	Usages of Contraceptives		***p***	**Unadjusted OR**
Predisposing Variables	**Used**	**Not Used No. (%)**	**value**	**(95% CI)**
	No. (%)			
Occupation of Respondent				
Agriculture	89(47.0)	100(53.0)	0.243	1(0.541-1.169)
Non-Agriculture	122(57.8)	109(47.2)		1
Husband Occupation				
Agriculture	114(47.0)	129(53.0)	0.11	0.7(0.494-1.075)
Non-agriculture	97(54.9)	80(45.1)		1
Type of Family				
Nuclear Family	87(58.0)	63(42.0)	**0.018**	1.6(1.08-2.43)
Joint family	124(46.0)	146(54.0)		1
Family Income				
Sufficient for 1 year	99(64.3)	55(35.7)	**0.000**	2.4(0.494-1.075)
Not-Sufficient for 1 year	112(42.1)	154(57.9)		1

p-value significant at <0.05, 1: reference

Table: 3, shows that the use of contraceptives among married women of reproductive age group were statistically significant with the respondent staying with nuclear family (*p*-value=*0.018*), and with family income (*p*-value=*0.000*).

Table 4: Association between Usages of Contraceptives and Socio-demographic Characteristics.

Predisposing Variables	Usages of Contraceptives		*p* value	Unadjusted OR(95% CI)
	Used	**Not Used**		
	No. (%)	**No. (%)**		
Age at Marriage(n=420)				
<= 19.0 years	168(47.7)	184(52.3)	**0.019**	0.5(0.31- 0.90)
> 20 years	43(63.3)	25(36.7)		1
Age at First Pregnancy (n=420)				
<= 19.0 years	111(44.2)	140(55.8)	**0.00**	0.5(0.36-0.81)
> 20 years	100(59.2)	69(40.8)		1
Number of Pregnancy(n=420)				
1-5 times	188(54.5)	157(45.5)	**0.00**	2.7(1.58-4.62)
6-10 times	23(30.6)	52(69.4)		1
Number of living Child(n=420)				
1—5 child	198(53.4)	173(46.6)	**0.00**	3.1(1.62-6.17)
6-10 child	13(26.6)	36(73.4)		1
Number of Male Child (n= 351)				
1- 3 child	173(51.8)	161(48.2)	**0.023**	3.4(1.116-10.9)
4 - 6 child	4(23.5)	13(76.5)		1
Female Child(n= 347)				
1- 3 child	162(51.9)	150(48.1)	**0.048**	2(0.99-4.31)
4- 6 child	12(34.3)	23(65.7)		1
Next Desire of Pregnancy(n=420)				
Desired of pregnancy	63(40.3)	93(59.7)	**0.002**	1.8(1.26 -2.81)
Not desire of pregnancy	148(56.0)	116(45.0)		1

p-value significant at <0.05   1: reference

Table 4, shows that all the socio-demographic characteristics that includes: Age at marriage, Age at first pregnancy, Number of Pregnancy, Number of living Child, Number of Male Child, Female Child, Next Desire of Pregnancy are statistically significant with contraceptives usages.

Table 5: Association between Usages of Contraceptives and Socio-demographic Characteristics.

Enabling Variables	Usages of Contraceptives		*p-*value	Odd Ratio
	Used	**Not Used**		
	No. (%)	**No. (%)**		
Awareness Level (n=383)				
Sufficient	113(65.3)	60(34.7)	**0.000**	2.19 (1.45-3.32)
Insufficient	97(46.1)	113(53.9)		1
Accessibility and Availability of Contraceptives Services(n=420)				
Within 30 minutes	54(51.4)	51 (48.6)	0.778	1.1(0.68 -1.65)
More than 30 minutes	157(49.85)	158(50.2)		1
Problem face during Receiving Contraceptives Services(n=420)				
Favorable Services	121(60.0)	81(40.0)	**0.000**	2.5(1.44-3.13)
Non- Favorable Services	90(41.3)	128(58.7)		1
Inter Spousal Communication (n= 420)				
Discuss	181(62.2)	110(37.8)	**0.000**	5.4 (3.38-8.70)
Not discuss	30 (23.3)	99(76.7)		1
Reason for no Discussion(n=129)				
Lack of Knowledge	16(29.0)	39(71.0)	0.246	1.6 (0.71-3.7)
Fear of Side effect	15(20.3)	59(79.7)		1
Autonomy value				
Key Person to Discuss				
Involvement of respondent	145(58.7)	102(41.3)	**0.000**	2.5(1.56-3.43)
Non-involvement of respondent	66(38.2)	107(61.8)		1
Regular access to Family Income				
Yes	114(56.7)	87(43.3)	**0.011**	1.6(1.12-2.424)
No	97(44.0)	122(55.7)		1

p –value significant at <0.05 1: reference

Table 5: shows that use of contraceptives among married women of reproductive age was significantly associated with the awareness (*p*- value=0.000), problem face during receiving contraceptives services (*p*- value=0.000), intra spousal communication with their husband *(p*- value= 0.000), decision on seeking contraceptives (*p*-value= 0.000), regular access to family income *(p*–value=0.011).

Table 6: Multivariate Analysis of Determinants of Contraceptives Usages among Married Women of Reproductive Age.

Characteristics	*p-value*	Un Adjusted OR(95% CI)	*p-value*	Adjusted OR(95% CI)
Education status of respondent				
Illiterate	0.00*	0.3(0.54-0.238)	**0.04**	0.3(0.174-0.72)
Literate		1		1
Education status of husband				
Illiterate	0.00*	0.5(0.25-0.66)	0.65	1.2(0.59-2.31)
Literate		1		1
Types of Family				
Nuclear	0.018*	1.6(1.08-2.43)	0.06	1.8(0.95-3.70)
Joint		1		1
Family income				
Sufficient for one years	0.00*	2.4(0.49-1.075)	0.18	0.6(0.30-1.260)
Not sufficient for one years		1		1
Age at first pregnancy				
Less or equal to 19	0.00*	0.50.81-0.36)	0.86	1.06(0.51-2.2)
More than 20		1		1
Age at Marriage				
Less or equal to 19	0.019*	0.5(0.31-0.90)	0.43	0.6(0.17-2.1)
More than 20		1		1
Numbers of pregnancy				
One to five times	0.00*	2.7(1.58-4.62)	0.38	1.6(0.55-4.7)
Six to ten times		1		1

*p- value significant at <0.05

Table: 6 shows those women who were illiterate were statistically significant with use contraceptives than literate women (*p* = 0.04).

Table 7: Multivariate Analysis of Determinants of Contraceptives Usages among Married Women of Reproductive Age.

Characteristics	*p-value*	Un Adjusted OR(95% CI)	*p-value*	Adjusted OR(95% CI)
Number of Living Child				
One to five times	0.00*	3.1(1.62-6.17)	0.99	1.01(0.19-5.23)
Six to ten times				1
Numbers of male child				
One to five times	0.023*	3.4(1.11-10.9)	0.96	0.9(0.14-6.2)
Six to ten times				1
Numbers of Female Child				
One to five times	0.048*	2(0.99-4.31)	0.67	1.3(0.33-5.55)
Six to ten times				1
Next Desire of Pregnancy				
Desired	0.002*	1.8 (1.26 -2.81)	**0.000**	0.1(0.03-0.31)
Not Desire				1
Awareness level				
Sufficient	0.000*	2.1(1.45-3.32)	**0.01**	2.3 (1.17-4.6)
Insufficient				1
Problem Faced during contraceptives service				
Favorable Service	0.000*	2.5(1.44-3.13)	0.9	1.0(0.53-2.12)

Non favorable Service				1
Discussed with spouse				
Discuss	0.000*	5.4(3.38-8.70)	**0.002**	3.2(1.52-6.82)
Not –discussed				1
Key Person to Decide				
Involvement of Respondent	0.000*	2.5(1.56-3.43)	0.55	0.8(0.62-1.31)
Not involvement of Respondent				1
Regular access to Income				
Yes	0.01*	1.6(1.12-2.42)	0.9	0.9(0.50-1.96)
No				1

Table 7, depicts the determining factors in the usages of contraceptives. It was found that the next desire of pregnancy (*p*-value=0.000) and who discussed with their spouse (OR=3.2, 95% CI: 1.52-6.82, *p*-value= 0.02) are statistically significant.

DISCUSSION

This study revealed that 50.2% of married women of reproductive age in Chepang community used modern contraception which is consistent to the finding of Wilson Center, which revealed that 54% of Chepang of Naubise and Jogimara are using contraceptives methods.[11]

Multivariate binary logistic regression revealed the determinants of contraceptives.

Regarding the education status of the respondent, education status of the respondent was significantly associated in multivariate logistic regression (*p*-value=0.04). This is supported by the study done by in Ghana that increased the level of education increases in using contraceptives (OR=0.57, 95% CI=0.37-0.87).[4] This is also supported by the study done in Tanazia that shows education status of the respondent is significantly associated with the contraceptives usages(*p*- value =0.004).[1] This also supported by the study done in Uganda that education is determinants of contraceptives usages (OR=2.73; 95% CI=1.88-3.97).[8]

Regarding the next desire of pregnancy, the next desire of pregnancy is significantly associated with contraceptives usages (*p*- value0.00). This shows that those respondent who were desired of next pregnancy were 0.09 times less likely to use contraceptives than who didn't desire of next pregnancy (OR= 0.09, 95% CI: 0.40-0.21).This is consistent with a study done in Urban Kenya showed that those couples who have desire to another child were 0.5 times less likely using contraceptives than those couples who wanted no more children.[5]

Regarding the awareness level, it is significantly associated with contraceptives usages (*p*- value= 0.01). This revealed that those respondent who have sufficient level of awareness were 2.3 times more likely using contraceptives method than those who have not sufficient awareness level (OR= 2.3, 95% CI: 1.17-4.66). It is supported by the study done in Ghana showed that respondent were 90 percent aware that influence on the contraceptives usages and who are aware about contraceptives are more likely using contraceptives than unaware (AOR=0.06, 95% CI: 0.01-0.47).[4] This is also consistent with the study done in Chepang that 89.2 percent were aware that influences on the contraceptives.[6]

Regarding the interspousal communication is significantly associated with the use of contraceptives (*p*-value= 0.002). This reveals that those respondent who discussed with spouse were 3.2 times more likely using contraceptives than those who didn't discussed with spouse (OR= 3.2, 95% CI: 1.52-6.82). It is consistent with the study done in Ghana showed that those respondent who discussed with their spouse about contraceptives were 4.6 times more likely using contraceptives than those who don't discuss with their spouse (OR=4.6, 95% CI: 2.88-7.58).[4] It is This is also supported by the study done in Chepang that inter-spousal communication exit by two third that influence on contraceptives usages.[6]

CONCLUSION

Based on the findings of the study, contraceptives prevalence among married women of reproductive age among Chepang women is above half. The education status of the respondent, education status of husband, types of family, family income, age of marriage, number of pregnancy, next desire of pregnancy, heard of contraceptives, meaning of contraceptives, advantages of contraceptives, problem faced during contraceptives services, inter-spousal communication were significantly associated with contraceptives usages. Education status of respondent, next desire of pregnancy, awareness of contraceptives and the discussion with spouse are the strong determinants of contraceptives usages among the respondents.

REFERENCES

2. Anasel, G. M., & Milinga, U. Determinants of contraceptive use among married women in Tanzania: Policy implication. *African population studies,* 2014; *28*(2): 978-988. Retrieved from http://aps.journal.ac.za.
3. Bista, P. (January 2nd).Contraceptives uses among Chepang. *The Kathmandu Post,* 2015.

4. Central Bureau of Statistics, National Planning Commision Secreterate, Government of Nepal. *Nepal Living Standered Survey 2010/2011.* Retrieved from http://cbs.gov.np/np/nada/index.php/catalog/37, 2012.

5. Eliason, S., Awoonor-Williams, J. K., Eliason, C., Novignon, J., Nonvignon, J., & Aikins, M. Determinants of modern family planning use among women of reproductive age in the Nkwanta district of Ghana: a case–control study. *Reproductive health,* 2014; *11*(1): 65. Retrieved from http://www.reproductive-health-journal.com/content/11/1/65.

6. Irani, L, Speizer, L.S., & Fosto, J.C. Relationship characteristics and contraceptives among couples in urban Kenya. *International Perspectives on Sexual and Reproductive,* 2014; *40*(1): 11-20. doi:10.1363/400114.

7. Lama, L D., Bharati, M., & Bharati, L. Comparative Study on knowledge and practice of family planning among married Chepang and Bhramin Chhetri men in Korak VDC of Chitwan district. *Journal of Chitwan Medical College,* 2015; *5(14): 39-48.*

8. Ministry of Health and Population (MOHP), New ERA., & ICF International *Nepal Demographic and Health Survey 2011.* Ministry of Health and population, New ERA, and ICF International: Kathmandu, Nepal, and Calverton, Maryland, USA, 2012.

9. Rutaremwa, G., Kabagehyi, A., Wanderaa, O. S., Jhamba, T., Akiror, E., & Naviril, H. L. Predictotrs of Modern Contraceptives Use during the Post Partum among Women in Uganda: a population-based cross sectional study. *Journal of Public Health,* 2015; 15: 262. 1-9. Retrieved from doi: 10.1186/s 12889-015-1611.y.

10. Shrestha, D.R., *Reproductive Health: National and International Perspectives*: Sigma General Offset Press, Sanepa, Lalitpur, 2012.

11. World Health Organization. *Sexual and reproductive health Report, 2015.*

12. Wilson Center *In Nepal, integrating forest and family health is improving lives* .page 1-8, by Sean Peoples , Retrieved from https://www.newsecuritybeat.org/2014/03/nepal-integrating-forest, 2014.