



FAMILY PLANNING AMONG MARRIED WOMEN IN THE RANGELI MUNICIPALITY OF MORANG DISTRICT, NEPAL

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ABSTRACT

Family planning allows couples to determine and ascertain the desired number of children as well as the spacing of their births. Short birth spacing has negative effects on mothers, children as well as the family. The Objective of this study is to find out the association between knowledge, attitude and practice of family planning among married woman of Rangeli Municipality. The cross-sectional study was conducted among residents of Rangeli Municipality where 400 married women were taken as subjects. Pretested semi-structured questionnaire was administered to the study subjects and face to face interview was conducted. Chi-square test was applied to find out the association between knowledge, attitude and practice of family planning among married woman of Rangeli Municipality. The married women with age group of 35-44 years (46.6%) was seen significantly good knowledge in comparison to other age groups. The study population having educational level SLC and above (50.0%) was seen significantly good knowledge in comparison to below SLC (45.2%) and illiterate (27.5%). The respondents with Hindu by religion (76.9%) was seen significantly good attitude about family planning in comparison to Muslim (62.5%). The participants whose husband having service holder as occupation (80.0%) was seen significantly good attitude about family planning than other occupations. Married women with Hindu by religion (44.2%) and having service holder as occupation (62.5%) was seen good practice about family planning but difference was not significant. We conclude that the study population who had good knowledge and attitude had significantly good practice of family planning.

Keywords: Family Planning, Married women, Rangeli Municipality, Nepal.

Introduction

Family planning (FP) is an important strategy in promoting maternal and child health. It improves health through adequate spacing of birth, avoiding pregnancy at high-risk maternal age and high parity. It is often used as a synonym for birth control, however. It does have a wider view, dealing with birth control, reproductive health, as well as premarital and pre conception counseling (Brutland et al. 1999). Short birth spacing has significant health effects on both mothers and children. Low birth weight, premature birth and small for gestational age are among its consequences to babies (Ramesh et al. 1996). To women, they are more likely to suffer from third trimester bleeding, premature rupture of membrane and anemia (Conde-Agudelo et al. 2000).

The fertility rate in Nepal was above 5 until the early 1990s, above 4 in 2001, before dropping to 2.6 in 2011 (Karki et al. 2006 & NDHS 2011). The societal and cultural values contribute to high fertility with short birth intervals in the past and still persist as a challenge for family planning. Besides societal and cultural norms, various factors also contribute to high fertility and short birth spacing at individual, household, and community levels. These include illiteracy, early marriage, lack of family planning methods, poverty, and fear of side effects (Adhikari et al. 2010).

Despite the fact that contraceptive usage has increased over a period of time, there exists a Knowledge Attitude and Practice-gap regarding contraception. Therefore this study aimed to find out the association between knowledge, attitude and practice of family planning among married woman of Rangeli Municipality.

Methods

A Community based cross-sectional study was conducted from 10th December-23rd December, 2017 in Rangeli Municipality of Morang District of Nepal. Rangeli is located in the eastern geographical region of Nepal. This was a two weeks study to fulfill epidemiological management carried out by students of MBBS 3rd year Batch 2015 of B. P. Koirala Institute of Health Sciences, Dharan, Nepal. There was 14 medical students who helped for this study for two weeks. This research was based on random selection of the study area Rangeli Municipality. This study considered 51.3% of the married women (Sushmita K et al in Nepal, 2016) was using contraception. For sample size estimation, it was calculated as 380 by using the formula, sample size (n) = $4pq/L^2$ [4 x 51.3 x 48.7 / (5.13)²] = 380 as sample based on the prevalence of 51.3%, 95% confidence level and 10% allowable error. Therefore, the required sample size is 400. The data was collected from 400 married women of reproductive age 15-49 years in Rangeli Municipality. There are 9 wards in Rangeli Municipality.

Among 9 wards, 4 wards (ward number 4, 5, 6 and 7) was randomly selected. The list of households of four selected wards was prepared and equal number of households (100) from each ward was selected on the basis of simple random sampling by lottery method. Each subject was selected till the sample size was fulfilled from the four wards of Rangeli Municipality.

The ethical approval was taken from the Institutional Review Committee (IRC) of B. P. Koirala Institute of Health Sciences, Dharan, Nepal. Written permission was taken from concerned authority and each participants of the study. The married women who were willing to participate in the study, those who gave written consent and those individuals who were available after three visits were included in the study. Three visits means the selected study subject who was not present at the time of the first visit to the respective place, she was followed for three attempts so as to include in the study and in the case of unavailability next study subject was taken. Semi-structured questionnaire and an observational checklist were used for data collection and face to face interview was taken. The confidentiality and privacy of the study was maintained; name of the individuals or participating group was not disclose after the study.

All interviewed questionnaires were indexed and kept on file. The collected data was entered in Microsoft Excel and converted into SPSS (Statistical Package for Social Science) software package 17.0 version for statistical analysis. Chi-square test was applied to find out the association between knowledge, attitude and practice of family planning among married woman of Rangeli Municipality.

Results

Table 1: Association between Socio-demographic characteristics and knowledge about family planning of the study population (N=400)

Characteristics	Knowledge		Total	P value
	Good knowledge	Poor knowledge		
Age of female				
15-24 years	17 (41.5%)	24 (58.5%)	41	0.03
25-34 years	70 (33.2%)	141 (66.8%)	211	
35-44 years	62 (46.6%)	71 (53.4%)	133	
45-49 years	3 (20.0%)	12 (80.0%)	15	
Religion				
Hindu	138 (38.3%)	222 (61.7%)	360	0.68
Muslim	14 (35.0%)	26 (65.0%)	40	
Ethnicity				
Brahmin/Chhetri	32 (45.7%)	38 (54.3%)	70	0.32
Kirati	0 (0.0%)	1 (100%)	1	
Janjati	16 (34.0%)	31 (66%)	47	
Dalit	33 (31.7%)	71 (68.3%)	104	
Terai caste	71 (39.9%)	107 (60.1%)	178	
Education of female				
Illiterate	50 (27.5%)	132 (72.5%)	182	< 0.001
Below SLC	66 (45.2%)	80 (54.8%)	146	
Above SLC	36 (50.0%)	36 (50%)	72	

Occupation of female				
Service Holder	5 (62.5%)	3 (37.5%)	8	0.35
Business	10 (35.7%)	18 (64.3%)	28	
Farmer	16 (37.2%)	27 (62.8%)	43	
Laborer	4 (50.0%)	4 (50.0%)	8	
Unemployed	98 (39.8%)	148 (60.2%)	246	
Others (Tailor, Potters, Laundry)	19 (28.4%)	48 (71.6%)	67	
Education of husband				
Illiterate	31 (30.4%)	71 (69.6%)	102	0.015
Below SLC	61 (35.3%)	112 (64.7%)	173	
Above SLC	60 (48.0%)	65 (52.0%)	125	
Occupation of husband				
Service holder	20 (50.0%)	20 (50.0%)	40	0.09
Business	48 (44.0%)	61 (56.0%)	109	
Farmer	25 (32.5%)	52 (67.5%)	77	
Laborer	31 (33.3%)	62 (66.7%)	93	
Unemployed	3 (16.7%)	15 (83.3%)	18	
Others (Abroad, Artist, Rickshaw puller)	25 (39.7%)	38 (60.3%)	63	
Economic condition				
Above poverty line (≥1.9 \$)	64 (40.0%)	96 (60.0%)	160	0.53
Below poverty line (<1.9 \$)	88 (36.7%)	152 (63.3%)	240	
Total	152 (38.0%)	248 (62.0%)	400	

SLC: School Leaving Certificate

Table 1 shows the married women and their husband had studied SLC and above had significantly good knowledge as compared to those below SLC and illiterates. The study population belong to above poverty line had good knowledge in comparison to below poverty line but the difference was not significant.

Table 2: Association between socio-demographic characteristics and attitude about family planning of the study population (N=400)

Characteristics	Attitude		Total	P value
	Good attitude	Poor attitude		
Age of female				
15-24 years	34 (82.9%)	7 (17.1%)	41	<0.001
25-34 years	162 (76.8%)	49 (23.2%)	211	
35-44 years	103 (77.4%)	30 (22.6%)	133	
45-49 years	3 (20.0%)	12 (80.0%)	15	
Religion				
Hindu	277 (76.9%)	83 (23.1%)	360	0.04
Muslim	25 (62.5%)	15 (37.5%)	40	
Ethnicity				
Brahmin/Chhetri	54 (77.1%)	16 (22.9%)	70	0.35
Kirati	1 (100.0%)	0 (0.0%)	1	
Janjati	31 (66.0%)	16 (34.0%)	47	
Dalit	84 (80.8%)	20 (19.2%)	104	
Terai caste	132 (74.2%)	46 (25.8%)	178	

Education of female				
Illiterate	129 (70.9%)	53 (29.1%)	182	0.12
Below SLC	114 (78.1%)	32 (21.9%)	146	
Above SLC	59 (81.9%)	13 (18.1%)	72	
Occupation of female				
Service holder	5 (62.5%)	3 (37.5%)	8	0.05
Business	21 (75.0%)	7 (25.0%)	28	
Farmer	32 (74.4%)	11 (25.6%)	43	
Laborer	4 (50.0%)	4 (50.0%)	8	
Unemployed	197 (80.1%)	49 (19.9%)	246	
Others (Tailor, Potters, Laundry)	43 (64.2%)	24 (35.8%)	67	
Education of husband				
Illiterate	70 (68.6%)	32 (31.4%)	102	0.05
Below SLC	129 (74.6%)	44 (25.4%)	173	
Above SLC	103 (82.4%)	22 (17.6%)	125	
Occupation of husband				
Service Holder	32 (80.0%)	8 (20.0%)	40	0.04
Business	91 (83.5%)	18 (16.5%)	109	
Farmer	61 (79.2%)	16 (20.8%)	77	
Laborer	60 (64.5%)	33 (35.5%)	93	
Unemployed	12 (66.7%)	6 (33.3%)	18	
Others (Abroad, Artist, Rickshaw puller)	46 (73.0%)	17 (27.0%)	63	
Economic condition				
Above poverty line (>1.9 \$)	128 (80.0%)	32 (20.0%)	160	0.08
Below poverty line (<1.9 \$)	174 (72.5%)	66 (27.5%)	240	
Total	302 (75.5%)	98 (24.5%)	400	

SLC: School Leaving Certificate

Table 2 shows the married women belong to Hindu by religion had significantly good attitude as compared to those of other religions. The study population whose husbands had businessmen by occupation also showed significantly good attitude in comparison to their counterparts.

Table 3: Association between socio-demographic characteristics and practice of family planning of the study population (N=400)

Characteristics	Practice		Total	P value
	Good practice	Poor practice		
Age of female				
15-24 years	13 (31.7%)	28 (68.3%)	41	0.40
25-34 years	92 (43.6%)	119 (56.4%)	211	
35-44 years	62 (46.6%)	71 (53.4%)	133	
45-49 years	6 (40.0%)	9 (60.0%)	15	
Religion				
Hindu	159(44.2%)	201 (55.8%)	360	0.27
Muslim	14 (35.0%)	26 (65.0%)	40	
Ethnicity				
Brahmin/Chhetri	25 (35.7%)	45 (64.3%)	70	0.49
Kirati	0 (0.0%)	1 (100.0%)	1	
Janjati	20 (42.6%)	27 (57.4%)	47	
Dalit	50 (48.1%)	54 (51.9%)	104	
Terai caste	78 (43.8%)	100 (56.2%)	178	

Education of female				
Illiterate	82 (45.1%)	100 (54.9%)	182	0.17
Below SLC	67 (45.9%)	79 (54.1%)	146	
Above SLC	24 (33.3%)	48 (66.7%)	72	
Occupation of female				
Service holder	5 (62.5%)	3 (37.5%)	8	0.56
Business	15 (53.6%)	13 (46.4%)	28	
Farmer	15 (34.9%)	28 (65.1%)	43	
Laborer	4 (50.0%)	4 (50.0%)	8	
Unemployed	104(42.3%)	142 (57.7%)	246	
Others (Tailor, Potters, Laundry)	30 (44.8%)	37 (55.2%)	67	
Education of husband				
Illiterate	47 (46.1%)	55 (53.9%)	102	0.41
Below SLC	78 (45.1%)	95 (54.9%)	173	
Above SLC	48 (38.4%)	77 (61.6%)	125	
Occupation of husband				
Service Holder	17 (42.5%)	23 (57.5%)	40	0.79
Business	42 (38.5%)	67 (61.5%)	109	
Farmer	38 (49.4%)	39 (50.6%)	77	
Laborer	41 (44.1%)	52 (55.9%)	93	
Unemployed	7 (38.9%)	11 (61.1%)	18	
Others (Abroad, Artist, Rickshaw puller)	28 (44.4%)	35 (55.6%)	63	
Economic condition				
Above poverty line (>1.9 \$)	62 (38.8%)	98 (61.3%)	160	0.14
Below poverty line (<1.9 \$)	111(46.3%)	129 (53.8%)	240	
Total	173 (43.3%)	227 (56.7%)	400	

SLC: School Leaving Certificate

Table 3 showed the married women belong to Hindu by religion and service holder by occupation had good practice of family planning as compared to those of other religions and occupations but the difference was not significant.

Table 4: Association between knowledge and practice of family planning of the study population (N=400)

Characteristics	Practice		Total	P value
	Good practice	Poor practice		
Knowledge				
Good knowledge	77 (50.7%)	75 (49.3%)	152	0.02
Poor knowledge	96 (38.7%)	152 (61.3%)	248	
Total	173 (43.3%)	227 (56.7%)	400	

Table 4 shows the study population who had good knowledge had significantly good practice of family planning.

Table 5: Association between attitude and practice of family planning of the study population (N=400)

Characteristics	Practice		Total	P value
	Good practice	Poor practice		

Attitude				
Good attitude	150(49.7%)	152(50.3%)	302	<0.001
Poor attitude	23 (23.5%)	75 (61.3%)	98	
Total	173(43.3%)	227(56.7%)	400	

Table 5 shows the study population who had good attitude had strongly significant good practice of family planning.

Discussion

Family planning services in our country are still developing and parallel to this, there are some advances in the health indicators, but the need for family planning which cannot be met still stands out as an important health problem (Sushmita K et al. 2016).

This study showed the married women with age group of 35-44 years (46.6%) was seen significantly good knowledge in comparison to other age groups. A study conducted in Adama, Ethiopia which showed the awareness of family planning significantly higher for the respondent aged 20 years and above compared to their younger age (Jima et al. 2016). This result had similarity with studies done in Mekele, Adama, Haromaya and Asella College female students (Gyohannes et al. 2009; Dejene et al. 2010 & Desta et al. 2011). Age was only significant on the knowledge about benefits for the mother. Younger women were less knowledgeable about the benefits of family planning compared with older women. Generally, older women are more experienced about reproductive health matters than younger women, hence this observation (Mutombo et al. 2014). But a study conducted in Kakani VDC, Nuwakot district, Nepal which showed the association between knowledge and practices with independent variables: more than one third (36%) among age group 23 to 27 had good knowledge and one fourth (25%) of respondents of age group above 42 had average knowledge. However, most of the respondents (86.4%) of age group 38 to 42 years had poor knowledge (Sushmita et al. 2016).

This study showed the married women belong to Hindu by religion (38.3%) had good knowledge of family planning as compared to Muslim (35.0%) but the difference was not significant. Regarding ethnicity the respondents with Brahmin/Chhetri (45.7%) had good knowledge of family planning as compared to other ethnic groups i.e. Terai caste (39.9%), Janjati (34.0%) and Dalit (31.7%) respectively but the difference was not significant. Caste was another factor affecting the preceding interbirth interval. Lower caste women are typically characterized by less education and wealth (Mehata et al. 2014). Moreover, lower caste family tends to have large family size, apparently due to a lack of usage or non-awareness of family planning methods. The higher fertility, coupled with lower contraceptive use among poor and marginalized segments of the society, may be attributed to negligence to control family size or deprivation from family planning methods (Gillespie et al. 2007). Janajati mothers consist of mainly Tibeto-Burman women who have different customs and culture from other castes. In Nepal, total fertility rate

varies between caste and ethnic groups and is highest among Muslims followed by lower caste ((Karki et al. 2006).

This study showed the married women and their husband had studied School Leaving Certificate (SLC) and above had significantly good knowledge as compared to those below SLC and illiterates. Majority (65%) of illiterate respondents had poor knowledge and nearly two third (35%) of illiterate respondents had good knowledge. Similarly majority (66.7%) of respondent who passed the primary level education had poor knowledge and one third (33.3%) of the respondent had good knowledge. Likewise, in lower secondary level only 33.3% of the respondent had poor knowledge, but majority (66.7%) of them had good knowledge. However, in secondary level 22.6% of the respondents had poor knowledge and more than two third (77.4%) had good knowledge. Furthermore, in higher level almost all (94.1%) of the respondent had good knowledge and 5.9% had poor knowledge about family planning ((Sushmita K et al. 2016). Educational status were significantly associated with awareness of family planning in the study i.e. those who had secondary education or above had better awareness than those with no education and primary education (Jima et al. 2016). This is true that as the level of education increases also awareness increases which is shown by other studies too (Gyohannes et al. 2009; Dejene et al. 2010 & Desta et al. 2011). Another study conducted by Aninyei LR in in Abraka communities, Delta State, Nigeria where only 22% of women with no education were using modern methods of contraception as compared to 52% of women with at least some secondary education. This is also supported by other studies which concluded that knowledge and practice of family planning is strongly related to higher level of education ((Ramesh et al. 1996 & Gautam et al. 2001).

This study showed the married women having service holder by occupation (62.5%) had good knowledge of family planning as compared to those of other occupations i.e. Laborer (50%), Unemployed (39.8%), Farmer (37.2%), Business (35.7%) and Others (Tailor, Potters, Laundry) (28.4%) respectively but the difference was not significant. A study conducted in Adama, Ethiopia which showed the age, educational status and occupation had statistically significant association with the awareness of contraception (Jima et al. 2016). Short interbirth interval was found to be associated with maternal age, caste, and sex of newborn. The inverse association between age and shorter birth spacing was consistent with findings from Ethiopian (Yohannes et al. 2011) and Malaysian (Ismail et al. 2008).

This study showed the study population who had good knowledge had significantly good practice of family planning. Nepalese women who gave birth to a female baby appeared to have a shorter birth interval (Karkee et al. 2016), similar to Ethiopian women (Begna et al. 2013), while the ratio of male newborns was higher in this population. Interestingly, knowledge of family planning methods and maternal education might be masked by

other factors influencing the birth interval. In fact, the proper use of family planning methods is crucial to space births (Ismail et al. 2008). A study conducted in Terengganu, Malaysia showed that as far as knowledge towards family planning is concerned, they found that good knowledge category among respondents regarding family planning were only 27.9% and 31.4% among wives and husbands, respectively (Shafei et al. 2012). It was significantly higher among husbands. However, the findings were lower as compared to a study in Malaysia where 53.5% of wives and 57.7% of husbands had good knowledge category on family planning (Alina et al. 2007). This could be due to low education background among the respondents as most of them had undergone up to secondary school only. Therefore, we should provide a better knowledge and information related to family planning so that their practice could be improved and sustained.

This study showed the study population who had good attitude had significantly good practice of family planning. A study conducted in Primary Health Center in Sudan which showed more than two third 72.5% of respondents had a positive attitude towards family planning, but 60% of the women reported having ever used any type of contraception (Handady et al. 2015) Other studies have already described similar findings, i.e. high awareness but low utilization of contraceptives, making this situation a serious challenge in developing countries (Omo-Aghoja et al. 2009 & Beekle et al. 2006). A study showed that knowledge alone did not influence the attitude. They found that husband who had higher percentage of good knowledge did not have a better attitude compared to their wives. Therefore, other factors that influenced the attitude towards family planning should be identified and improved. Those factors include support or barrier from friends, family members, community and health services, beliefs and culture (Shafei et al. 2012). A study conducted in Adama, Ethiopia which showed that 61.3% of the total respondent had positive attitude towards making family planning available to all women who need it and 78.9% have an intention to use family planning in the future when the need arises. Respondents in this study had also better attitude towards contraception (Jima et al. 2016).

The limitations in this study could be the fact that self-reported information is subjected to reporting errors and biases. Since the study touches sensitive issues the possibility of underestimation cannot be excluded even though the survey was anonymous. Second limitation concerns the lack of information on other confounding factors, such as the use of family planning methods, breastfeeding status, maternal physiological status, gender, and survival status of the previous child. Third the interpretation of the findings in this study needs to be done with caution as the study uses cross-sectional survey data. To this end only associations, and not causal relationships between variables and outcomes, can be accounted for. This limitation is accentuated with a lack of qualitative information to complement the findings.

Conclusions

This study shows the study population who had good knowledge and attitude had significantly good practice of family planning. Age group of 35-44 years of married women, high educational level of married women and their husbands was seen significantly good knowledge about family planning. Married women having the age group 15-24 years, Hindu by religion, and whose husband having service holder as occupation was seen significantly good attitude about family planning. Married women with Hindu by religion and having service holder as occupation was seen good practice about family planning but difference was not significant.

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