

**ORIGINAL RESEARCH ARTICLE****COMPARATIVE STUDY ON KNOWLEDGE AND PRACTICE OF FAMILY PLANNING METHODS AMONG MARRIED CHEPANG AND BRAHMIN/CHHETRI MEN IN KORAK VDC OF CHITWAN DISTRICT****LD Lama<sup>1\*</sup>, M Bharati<sup>1</sup>, L Bharati<sup>2</sup>**<sup>1</sup> College of Nursing, Nepalese Army Institute of Health Sciences, College of Nursing, Kathmandu, Nepal<sup>2</sup> Department of Pharmacy, Institute of Medicine, Maharajgunj Medical Campus, Kathmandu, Nepal**\*Correspondence to:** Ms Laxmi Devi Lama, MSc in International Health, College of Nursing, Nepalese Army Institute of Health Sciences, Kathmandu.Email: [laxmilb@yahoo.com](mailto:laxmilb@yahoo.com)**ABSTRACT**

The purpose of this study was to compare knowledge and practice of family planning methods among Chepang and Brahmin/Chhetri men. Chepang are more disadvantage ethnicity of Nepal therefore by examine the knowledge and practice of family planning in these two groups it will be helpful to find out whether or not family planning program has been reach to un-reach group. Data were collected from the 1st Jestha 2070 to 31 Jestha 2070 (15.5.2013 to 14.6.2013) through interview methods. The average age group of both the respondents was between 26-35yrs. Majority of respondents had knowledge about both temporary and permanent (56.8 percent Chepang and 50.9 percent Brahmin/Chhetri). While most of the family planning information was obtained through a health worker (88.2 percent Chepang and 79.4 percent Brahmin/Chhetri). Family planning using was 42.1 percent in Chepang and 40.2 percent in Brahmin/Chhetri. Temporary family planning method was found to be commonly used (74.4 percent Chepang and 73.1 percent Brahmin/Chhetri). Spousal communication seemed to exist by two third portions in both the groups and the most common topic for discussion was about family and family size. .

**Key words:** Brahmin/Chhetri, Chepang, Family planning, Knowledge, Practice.**DOI:** <http://dx.doi.org/10.3126/jcmc.v5i4.16551>**INTRODUCTION**

Family planning services have the potential to improve the quality of the lives of people and also their economic welfare. Increasing population growth is a world wide problem today and Nepal is no exception. According to WHO Family planning is the practice that help individuals or couple to attain certain objectives; to avoid unwanted birth; to bring about wanted births; to regulate the interval between pregnancies; to control time at which birth occur in relation to the age of the parents; and to determine the number of children in the family.<sup>1</sup>

Of the 182 million pregnancies that occur in developing countries, more than a two-third are

unintended.<sup>2</sup> Two-thirds of unintended pregnancies occur among women who are not using a method of family planning. A variety of different methods of contraception are available, which are generally extremely safe compared with the risks associated with pregnancy and childbirth. Family planning through contraception tries to achieve two main objectives; firstly, to have only the desired number of children and secondly, to have these children by proper spacing of pregnancies.<sup>3</sup> A lack of knowledge of contraceptive methods or a source of supply, cost and poor accessibility are the barriers that exist in developing countries. Side effects perceived or real are major factors for the abandoning of modern

methods. Mass media also plays an important role in promotion and acceptability of contraception.<sup>4</sup>

Population growth of a country largely depends on birth and death rates. To control the population explosion fertility regulation is very important. In the Annual Health Report 2003-2004 the crude birth rate in Nepal was estimated at 33.58 per 1000 population and crude death rate was 9.96 per 1000 population, the growth rate stands at 2.27, which is considered population explosion.<sup>5</sup> The importance of male involvement in sexual and reproductive health decisions emerges especially to encompass the various ways in which men relate to reproductive health problems, program, reproductive health rights and important behaviors. There is an urgent need for equity in gender relations, responsible sexual behavior and active involvement of men in reproductive health program in order to fulfill women's reproductive health requirements as well as their own. This study explored the knowledge and practice of family planning methods among the married male of Brahmins/Chhetri which rank highest in the caste hierarchy and Chepang are one of the indigenous people of Nepal and at the bottom ladder in the social status.

## MATERIALS AND METHODS

The study was conducted at Korak Village Development Committee (VDC), Chitwan district. The research has adopted descriptive cross-sectional design. The sample size was 204 respondents among which 102 respondents were the Chepang men and 102 respondents were Brahmin/Chhetri men. The study population was men within five years of married life. All married males of whose wives are in reproductive age (Under the age of 15-49yrs) were selected by non probability purposive sampling technique. The data was collected from 1 Jestha 2070 to 31 Jestha 2070 (15.5.2013 to 14.6.2013).

The study was carried out by directly interviewing with subject for the details. The subjects had given in their informed consent to participate in the research and the study was in accordance to the Helsinki declaration of 1975 as revised in 2000.

### Inclusion and Exclusion Criteria

#### Inclusion Criteria

- Married men inhabitant of Korak VDC.
- All married males of whose wives are in reproductive age (Under the age of 15-49yrs).

#### Exclusion Criteria

- Unmarried men inhabited in Korack VDC
- Male whose wife exceed the reproductive age (<15- >49yrs)

The entire questionnaire was rechecked immediately after interview to ensure completeness, missing responses were asked immediately. The collected data were entered in Statistical Program for Service Solution) SPSS 16 was used for data analysis. Data were categorized into similar attributes, coding were done and variables were created in SPSS.

Univariate analysis: In univariate analysis, frequencies of different demographic, socio economic characteristics were analyzed. Then the output was generated in frequency table

## RESULTS

### 1. Demographic Information

**Table no: 1 Age of Respondents**

Age in yrs	Chepang Men(n=102)		Brahmin/Chhetri Men (n=102)	
	Frequency	Percent	Frequency	Percent
15-25	29	28.4	30	29.4
26-35	40	39.2	33	32.4
36-45	22	21.6	26	25.5
46-55	9	8.8	8	7.8
56-65	2	2.0	5	4.9

The result showed that most of the respondents were between 26-35 years in age in both Chepang and Brahmin/Chhetri population. The frequency of the respondents declined after the age group 26-35 years.

The least group of the respondent was 56-65 years for both the population.

**Table no 2: Educational Status of Respondents**

Educational Status	Chepang Men (N=102)		Brahmin/Chhetri Men (N=102)	
	Frequency	%	Frequency	%
Illiterate	30	29.4	5	4.9
Literate	72	70.6	97	95.1
Total	102	100	102	100

Most of the respondents were found to be literate i.e. 70.6 percent of Chepang men were literate while about 95.1 percent of Brahmin/Chhetri men were literate.

**Table no 3: Educational Level of Literate Respondents**

Educational Level	Chepang Men (N=72)		Brahmin/Chhetri men (N=97)	
	Freq	%	Freq	%
Primary Level	58	80.5	39	40.2
Secondary Level	10	13.8	37	38.1
Higher secondary Level	2	2.7	17	17.5
Bachelors and above	1	1.5	3	3.1
Vocational training	1	1.5	1	1.1
Total	72	100	97	100

Majority of the respondent in both the population had completed the primary level of education. The result shows that 80.5 % of the Chepang and 40.2% of the Brahmin/Chhetri population had completed the primary level of education.

**Table no 4: Source of Income of Respondents**

Source of Income	Chepang Men (n=99)		Brahmin/Chhetri Men(n=102)	
	Freq	%	Freq	%
Agriculture	56	56.6	30	29.4
Business	10	10.1	28	27.5
Service	6	6.1	22	21.6
Labor	23	23.2	19	18.6
Others	4	4	3	2.9
Total	99	100	102	100

The result shows that most of the respondents relied upon agriculture as their source of income.

Agriculture was the major source of income for 56.5 % of Chepang population and 29.4 % of the Brahmin/Chhetri population. The other source of income and their frequency in respective population is shown in table 4.

## 2. Knowledge on Family Planning

**Table no 5: Knowledge on Meaning of Family Planning**

Meaning of FP	Chepang Men (n=102)		Brahmin/Chhetri Men(n=102)	
	Freq	%	Freq	%
Yes	91	89.2	90	88.2
No	11	10.8	12	11.8
Total	102	100.0	102	100.0

Majority of the respondents in both populations had knowledge on meaning about Family Planning i.e. 89.2 % in Chepang men and 88.2 % Brahmin/Chhetri men.

**Table 6: Purpose of Family Planning**

Purpose of FP	Chepang Men (n=91)		Brahmin/Chhetri men (n=90)	
	Freq	%	Freq	%
Space Children	83	91.2	75	83.3
Avoid unwanted pregnancy	30	32.9	19	21
Bring about the wanted birth	53	58.2	42	46.6
Control birth in relation to the age of the mother	25	27.4	18	20

Multiple Response

The result shows that, space between the children is the most common purpose of family planning in both ethnic group (Chepang and Brahmin/Chhetri) accounting for 91.2% and 83.3% respectively. To bring about the wanted birth is the second most common purpose of family planning in both ethnic

group (Chepang and Brahmin/Chhetri) accounting for 58.24% and 46.6% respectively and to avoid the unwanted pregnancy is the third common purpose representing 32.9% in Chepang and 21% in Brahmin/Chhetri respondent.

**Table no 7: Knowledge about Methods of Family Planning**

Methods of FP	Chepang Men (n=102)		Brahmin/Chhetri men(n=102)	
	Freq	%	Freq	%
Temporary	27	26.4	46	45.1
Permanent	4	3.9	0	0
Don't know	13	12.7	4	4.0
Both	58	56.8	52	50.9
Total	102	100	102	100

The results for knowledge about methods of family planning in both the respondent population is shown in table 7. Both the respondents group had knowledge about permanent as well as temporary methods of family planning. 26.4% and 45.1% had knowledge only about temporary methods in Chepang and Brahmin/Chhetri population respectively. 12.7% and 4% didn't know about any methods available in both the respondents group.

**Table no 8: Knowledge about various types of Family Planning available in country**

Types of FP	Chepang Men (n =102)		Brahmin/Chhetri men (n=102)	
	Freq	%	Freq	%
Oral pills	85	83.3	99	97.0
Injection (Depo-Provera)	97	95.0	100	98.0
Norplant	54	52.9	41	40.1
Copper T	42	41.1	39	38.2
Vasectomy	55	53.9	48	47.0
Condom	91	89.2	97	95.0
Laparoscopy	27	26.5	20	19.6
Minilap	23	22.5	21	20.5

Multiple Response

The result shows that most of the respondents in both populations had knowledge about oral pills, depo-provera and condom. Most of the respondents in both populations had least knowledge about laparoscopy and minilap. The knowledge about other methods (norplant, copper T and vasectomy) was intermediate as shown in table 8.

**Table 9: Information obtained about Family Planning**

Information obtained	Chepang Men (n =102)		Brahmin/Chhetri men (n =102)	
	Freq	%	Freq	%
Health Worker	90	88.2	81	79.4
Television	22	21.6	24	23.5
Friends/Relatives	81	79.4	75	73.5
Radio	40	39.2	31	30.4
Others	6	5.9	6	5.9

Multiple Response

The result shows that the respondents in both the population obtained the information about family planning from health worker. It was 88.2% and 79.4% for Chepang and Brahmin/Chhetri population respectively. 79.4% of Chepang and 73.5% of

Brahmin/Chhetri population obtained information about family planning from their friends/relatives. The other methods of obtaining information about family planning is shown in table 9.

**Table no 10: Places to receive Family Planning facilities**

Place	Chepang Men (n=102)		Brahmin/Chhetri men (n=102)	
	Freq	%	Freq	%
PHC/HP/SHP	52	50.9	41	40.2
Female Community Health Volunteer	78	76.5	82	80.4
Medicine Shop	4	3.9	25	24.5
Private Clinic	7	6.7	17	16.7
Others	5	4.9	4	3.9

Multiple Response

The result is shown in table 10. It shows that majority of the respondents i.e. 76.5 % of Chepang and 80.4% of Brahmin/Chhetri population received the family planning facilities from the female community health volunteer. The second major place for receiving family planning facilities was PHC/HP/SHP for both the population.

### 3. Practice on Family Planning among men

**Table no 11: Currently using Family Planning**

FP used	Chepang Men (n=102)		Brahmin/Chhetri Men (n=102)	
	Freq	%	Freq	%
YES	43	42.1	41	40.2
NO	59	57.9	61	59.8
Total	102	100.0	102	100.0

Among total responses, 42.1 percent and 40.2 percent have been using different forms of Family planning in both Chepang and Brahmin/Chhetri men respectively. Majority of the respondents in both populations were not using family planning at the time of response.

**Table 12: Types of Family Planning used by male**

Types of FP used	Chepang Men(n=43)		Brahmin/Chhetri men(n=41)	
	Freq	%	Freq	%
Temporary	32	74.4	30	73.1
Permanent	10	23.3	11	26.8
Natural method	1	2.2	0	0
Total	43	100	41	100

Among the respondent currently using family planning methods, most uses temporary method.

74.4% Chepang and 73.1% Brahmin/Chhetri are currently using temporary method. Only few Chepang were using natural method accounting for 2.2%. The majority of respondent use temporary method because it allows the opportunity to choose when the time is right to have a child.

**Table 13: Temporary FP methods used by male**

Temporary FP used	Chepang Men(n=32)		Brahmin/Chhetri men(n=30)	
	Freq	%	Freq	%
Condom	31	96.8	30	100
Pills	0	0	0	0
Others	1	3.1	0	0
Total	32	100	30	100

The most common temporary FP method used by male was condom. 100% Brahmin/Chhetri and about 97% Chepang uses condom. It is because Condoms are safe and effective at preventing both pregnancy and some infections. Prescription isn't needed to get condoms and also economical.

**Table 14: FP methods used by Wife**

FP used by Wife	Chepang Men(n=102)		Brahmin/Chhetri men (n=102)	
	Freq	%	Freq	%
Yes	42	41.1	47	46.0
No	60	58.8	55	53.9
Total	102	100.0	102	100.0

Most respondent's wife is not using FP method. 58.8% Chepang and 53.9% Brahmin/Chhetri's wives' were

not using FP method at the time of response.

**Table 15: FP methods use by wife**

Method used by wife	Chepang Men(n=42)		Brahmin/Chhetri men(n=47)	
	Freq	%	Freq	%
	Temporary	32	76.1	36
Permanent	10	23.9	11	23.4
Total	42	100	47	100.0

Among the respondent wife using Family planning, most uses temporary method representing 76% in Chepang and 77% in Brahmin/Chhetri population. The temporary method allows women the opportunity to choose when the time is right to have a child and it also gives women the option to wait until they are financially able to care for a child,

**Table no 16: Temporary method of FP used by wife**

Wife FP used	Chepang Men (n=32)		Brahmin/Chhetri men(n=36)	
	Freq	%	Freq	%
Pills	7	21.8	17	47.2
Injection	15	46.8	13	36.1
Implant	6	19.0	2	5.6
Copper T	1	3.1	3	8.3
Others	3	9.3	1	2.8
Total	32	100.0	36	100.0

Table 16 shows that the most common temporary method of family planning used by Chepang respondent wife were Injection, pills and implant accounting for about 47%, 22% and 19% respectively. But it is different from Brahmin and Chhetri where most common methods used are Pills and Injection accounting for 47% and 36%. Some less common methods in both ethnic groups are as mentioned in table above.

**Table no 17: Spousal Communication about FP**

Types of FP	Chepang Men (n=102)		Brahmin/Chhetri men(n=102)	
	Freq	%	Freq	%
YES	67	65.6	74	72.5
NO	35	34.4	28	27.5
Total	102	100	102	100

In both ethnic groups, most spouses communicate about the family planning and the method of family planning. Nearly 72% of Brahmin/Chhetri and 66% Chepang spouses communicate about family planning.

## DISCUSSION

### Socio-demographic characteristics

The study shows that the age of the respondents varies from 15 to 65 years. More than half of the respondents in both ethnic group were in the 15-35 years age group. Most of the respondents in Chepang ethnic group were illiterate. The result is similar to the study reported by UNRCHCO.<sup>6</sup> This shows that this ethnic group is less aware towards the education. Among the literate groups, most of the population in the Chepang and Brahmin/Chhetri ethnic group had only completed the primary school level. This might be due to the rural location of study site. A study carried out by Panthhe et al also shows that level of education is lower in the rural areas of Nepal.<sup>7</sup>

### Knowledge on family planning

Acquiring knowledge of family planning is an important precondition towards gaining access to and then using a suitable method of family planning. In the present study majority of the respondents in both population had heard or know the meaning of Family Planning i.e. 89.2 % in Chepang men and 88.2 % Brahmin/Chhetri men. In a study carried out by Tuladhar et al, the result showed that majority (93.0%) of the respondents had heard about family

planning.<sup>8</sup> The study reveals that majority of the population in both ethnic groups have heard or know the meaning of family planning.

Both the respondents group had knowledge about permanent as well as temporary methods of family planning. 26.4% and 45.1% had knowledge on only temporary methods in Chepang and Brahmin/Chhetri population respectively. This percentage is lower than that in Korea where 85.0 -100.0% had heard about different methods of family planning.

<sup>9</sup> The result shows that, space between the children is the most common purpose of family planning in both ethnic group (Chepang and Brahmin/Chhetri) accounting for 91.2% and 83.3% respectively. To bring about the wanted birth is the second most common purpose of family planning in both ethnic group (Chepang and Brahmin/Chhetri) accounting for 58.2% and 46.6% respectively. In a study carried out by Stash<sup>10</sup> approximately 17% of the respondents wished to limit childbirth and approximately 13% wished to space their children by using the methods of family planning. From the current study it can be said that both ethnic groups were familiar to the purpose of family planning which is in contrast to the finding by Mahadeen et al<sup>11</sup> which shows that the concept of family planning was not well understood by majority of the respondents.

Among the various contraceptive methods named, most of the respondents in both population had knowledge about oral pills, depo-provera and condom. Laparoscopy and minilap were among the least known methods. This result is in consistent with the findings of various studies.<sup>8,12,13</sup> The respondents had more knowledge about oral pills, depo-provera and condom because these are the most popular methods of temporary family planning and are easily available. Moreover, this might be due to the fact that government has been providing information about

this method of family planning through various media. Among these methods Depo was the most popular one as one shot of it worked for three months; privacy was ensured about the use, easily availability of it and can be used secretly without even asking any family members.

The result shows that the respondents in both the population obtained the information about family planning from health worker. It was 88.2% and 79.4% for Chepang and Brahmin/Chhetri population respectively. This is quite less than the number stated in the study carried out by tuladhar et al<sup>8</sup> which showed that only 41.6% of the respondents obtained information about family planning from health workers. In the current study health workers were the major source of information because female community health volunteers, being a part of local mothers group had an influence over local women for health information and advice. 79.4% of Chepang and 73.5% of Brahmin/Chhetri population obtained information about family planning from their friends/relatives. Most of other studies have stated print and electronic media to be the common source of public awareness i.e. 57.7% and 50.0%.<sup>14</sup> In the present study only 21.6 % of Chepang and 23.5% of Brahmin/Chhetri population mentioned television as their source of information about family planning. This low percentage might be due to the unavailability of television in the majority of the study groups as a result of poor socio-economic status. The study shows that majority of the respondents i.e. 76.5 % of Chepang and 80.4% of Brahmin/Chhetri population received the family planning facilities from the female community health volunteer. The second major source for receiving family planning facilities was PHC/HP/SHP for both the population. This finding is supported by the study carried out by Pandey et al<sup>13</sup> which shows that these places of receiving family planning services are most common

because they provide contraceptive methods with incentives and without cost.

### **Practice on family planning**

Though the knowledge of FP methods was quite good, this was not translated into action which is supported by the findings that 57.9% of the Chepang and 59.8% of the Brahmin/Chhetri ethnic groups were not using family planning at the time of response. In a study carried out by Khanal et al<sup>15</sup> though 98.27% of the respondents had heard about family planning, only 21% of them had been using family planning. Among the respondents using family planning, the current study showed that 42.1% of Chepang and 40.2 % of the Brahmin/Chhetri ethnic group had been using family planning since the last 6 months at the time of response.

Regarding the methods of family planning, both male and female of Chepang and Brahmin/Chhetri ethnic group had been using temporary methods of family planning. Condom was the most common method of family planning in males of both ethnic group which accounted 96.8 % for Chepang and 100 % for Brahmin/Chhetri ethnic group. The result is similar to the study carried out by Pandey et al.<sup>13</sup> Basically, condom is one of the safest contraceptive methods, easily available, cheap and can prevent sexually transmitted diseases as well. Among the females, pills was the most commonly used (47.2%) temporary method of family planning in Brahmin/Chhetri group. 36.1% of this group had been using injection (depo provera). This finding is a different from the findings by Rayamajhi et al<sup>12</sup> which reported that Depo-Provera (Injectable) (92.6%) was the most popular mode of family planning method followed by oral pills (3.9%). In our study, only 21.8% female of Chepang ethnic group had been using pills as the temporary method of family method. The

findings by Gupta et al<sup>16</sup> shows that 54% of the respondents had been using injectable and 18% had been using oral pills. The other methods were used by few populations as there weren't any trained health man power for family planning methods that needed skill to administer. Spousal communication is a key factor in the adoption and sustained use of family planning because such discussions allow couples to exchange new ideas and clarify information, which might change some wrong beliefs about the use of some family planning devices. The current study shows that in both ethnic groups, most spouses communicate about the family planning and the method of family planning. Seventy two point five percent (72.5%) of Brahmin/Chhetri and 65.6% Chepang spouses communicate about family planning. In a study by Undelikwo et al<sup>17</sup>, the result showed that only 46% of the respondent had spousal communication regarding family planning. In a similar study by Toure et al<sup>18</sup>, one-half of the male in Ghana and two-third in Cameroun responded that they communicated with their wife on family planning matters.

### **CONCLUSION**

From the current study, it was found that more than two third of the respondents in both the ethnic group had knowledge about family planning. However, knowledge about family planning is slightly higher in Chepang men than in Brahmin/Chhetri men. Half of the respondents in both the group knew about availability of permanent and temporary methods of family planning and while comparing it seemed Brahmin/Chhetri men had more knowledge regarding availability of temporary methods than compared to Chepang men. According to the responses of both groups, injection was found to be most commonly known temporary type of planning for female. While,

more than half of the respondents comparatively much higher in Brahmin/Chhetri men didn't know about available permanent type of family planning for female.

The study revealed that condom is most commonly viewed as a kind of device for family planning in both Chepang and Brahmin/Chhetri group. However, Brahmin/Chhetri viewed it more as family planning device than compared to Chepang. The study found out that female community health workers are the most common people through which family planning commodities is received. The study also revealed that Chepang men practice towards family planning was slightly higher than that of Brahmin/Chhetri men. Regarding the method of family planning used temporary method was mostly used in both groups and comparatively permanent method of family planning used by Brahmin/Chhetri men is slightly higher than Chepang men. Most of the respondent used condom as a type of temporary family planning while few used other methods as well as in Chepang men. The study shows Brahmin/Chhetri men wives use more family planning methods than compared to Chepang men wives. Spousal communication seemed to exist by two third portions in both the groups and the most common topic for discussion was about family and family size.

**Acknowledgements:** Researchers would like to express sincere thanks to the secretary of Korak VDC and all research participants for their cooperation and valuable information provided for this study. Thanks to Sharmila Gajmer for helping us in data collection.

## REFERENCES

1. Evaluation of family planning in health services. WHO expert committee. World health organization, Geneva, 1975.
2. VGuttmacher Institute. "In Brief: Facts on Induced Abortion Worldwide." 2008 Available from: [http://www.guttmacher.org/pubs/fb\\_IAW.pdf](http://www.guttmacher.org/pubs/fb_IAW.pdf) [August 10, 2015].
3. Dabral S, Malik SL. Demographic Study of Gujjars of Delhi: IV. KAP of Family Planning. *J Hum Ecol* 2004;16:231-7.
4. Bhat PNM. Contours of fertility decline in India. A district level study based on the 1991 Census. Shrinivasan K, editor, Population Policy and Reproductive Health. New Delhi: Hindustan Publications. 1996.
5. Annual Report, Department Of Health Services, 2003/2004, HMG/Nepal.
6. Chepangs' Struggle for Survival: Views from Makwanpur and Chitwan Districts, United Nations Resident and Humanitarian Coordinator's Office, Issue 47, September 2012.
7. Panthhe KP, McCutcheon AL. Rural urban education in Nepal. *Int.J.Eco. Res.*, 2015, 6(1), 30-44.
8. Tuladhar H, Marahatta R. Awareness and practice of family Planning methods in women attending Gyne OPD at Nepal Medical College Teaching Hospital. *Nepal Med Coll J* 2008; 10(3):184-191.
9. Planned Parenthood Federation of Korea (PPFK) Yonsei University. Center for Population and Family Planning. Benchmark survey report on community based distribution of contraceptives in Korea. 1976; 51-64.

10. Stash S. Explanation of unmet need for contraception in Chitwan, Nepal. *Studies in family planning* 1999;30(4):267-87.
11. Mahadeen AI, Khali AOI, Hamdan-Mansour AM et al. Knowledge, attitudes and practices towards family planning among women in the rural southern region of Jordan. *Eastern Mediterranean Health Journal* 2012;18(6):567-572.
12. Rayamajhi RB, Ghimire A, Niraula SR et al. A descriptive study on contraceptive practices among mothers in Belhara VDC of Dhankuta district, Nepal. *Journal of Chitwan Medical College* 2013;3(6):34-37.
13. Pandey S, Karki S, Pradhan A. Practices of contraceptives. *Journal of Institute of Medicine*, December, 2009; 31(3):1-9.
14. Renjhen P, Gupta SD, Barua A et al. A Study of knowledge, attitude and practice of family planning among the women of reproductive age group in Sikkim. *J Obstet Gynecol India* 2008; 58:63-7.
15. Khanal V, Joshi C, Neupane D, Karkee R. Practices and perceptions on contraception acceptance among clients availing safe abortion services in Nepal. *Kathmandu Univ Med J* 2011;35(3):179-84.
16. Gupta S, Singh A, Gupta N et al. Family Planning Knowledge and Practices among Women in a District Hospital. *J Nepal Med Assoc* 2012;52(188):159-61.
17. Undelikwo VA, Osonwa OK, Ushie MA et al. Family Planning Behaviours and Decision-Making among Couples in Cross River State, Nigeria. *International Journal of Learning & Development* 2013;3(1):100-120.
18. Toure L.. Male involvement in family planning. A review of literature and selected programme initiatives in Africa. Washington, DC: Academy for Educational Development. 1996.