

Awareness and practice of family Planning methods in women attending Gyne OPD at Nepal Medical College Teaching Hospital

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ABSTRACT

A cross sectional descriptive study of awareness and practice of family planning methods among 200 women of reproductive age attending gynecology out patient department (GOPD) of Nepal Medical College Teaching Hospital from 14th May 2008 to 14th July, 2008 was carried out. Most of the respondents (93.0%) were aware of at least one of family planning methods out of ten methods, but only 65.0% had ever used it and contraceptive prevalence rate was 33.5% which was slightly higher than the national data as 28.5%. The best known method of temporary contraception was depo provera (78.0%) followed by oral contraceptive pills (74.0%) and condom (71.0%) and least known methods were vaginal foam tablets/jelly (34.0%) and natural methods (16.0%). Among permanent family planning methods, awareness about female sterilization (81.0%) was more than male sterilization (77.0%) which was in accordance with studies done in other countries. Knowledge about emergency contraception was quite low (12.0%) as it was newly introduced in the country. Regarding current use of contraception depo provera (11.0%) was the most widely used followed by oral contraceptive pills (4.5%) and condom (4.5%). 5.5% had undergone female sterilization while only 2.5% of male partner had sterilization. Knowledge of non contraceptive benefits of family planning methods was claimed by only 35.0% of the respondents, 27.0% reported awareness that condoms protect from HIV/AIDS and sexually transmitted diseases (STD) while knowledge about various adverse effects was widespread (52.5%). The most common source of information on contraception was media (55.5%), both printed and electronic. This study also observed that with increase in level of education, awareness also increased. Although most of the women were aware about the methods, they were ignorant about the details like duration of protection, return of fertility on discontinuation and non contraceptive benefits. The most common reason for discontinuation of FP methods was stated as side effects. A wide knowledge practice gap was evident in this study, which was similar to the findings of studies done in other developing countries. Improved female education strategies and better access to services are needed to solve these problems. The use of communication media suitable for the audience and adequate message is important in conducting effective family planning awareness activities. Efforts should be made to educate the public about the safety and convenience of modern, long-term, reversible methods of contraception among both healthcare professionals and the public.

Keywords: Family planning, contraception, awareness, practice, education, Nepal.

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. A variety of different methods of contraception are available, which are generally extremely safe compared with the risks associated with pregnancy and childbirth. Not all methods are suitable for everyone. Expanding the number of family planning options available to women is a critical part of increasing contraceptive coverage, decreasing unintended pregnancies and reducing maternal morbidity and mortality around the globe.^{1,2}

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.³ 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.^{4,5}

Maternal mortality ratio for Nepal is high as 281 deaths per 100,000 live births.⁶ In the effort to reduce maternal deaths in developing nations, family planning can be an important and effective first step. Fewer unwanted pregnancies mean fewer pregnancy related deaths, making family planning a vital way to improve maternal health. Unmet need for contraception has been one of

Table-1: Socio-demographic characteristics of the study population with family planning awareness and practice

Characteristics	n.	%	FP Aware No. (%)	FP Current Practice No. (%)
Age group (yrs)				
Adolescents (<19)	13	6.5.0%	12 (92.3%)	2 (15.4%)
20-34	163	81.5%	158 (96.9%)	53 (32.5%)
>35	24	12.0%	23 (95.8%)	12 (50.0%)
Mean age: 28 yrs. (Range: 17-49 yrs.)				
Area of residence				
Rural	151	75.5%	145 (96.1%)	49 (32.4%)
Urban	49	24.5%	48 (97.9%)	18 (36.7%)
Occupation				
Housewife	126	63.0%	120 (95.3%)	30 (23.8%)
Laborer	34	17.0%	33 (97.1%)	15 (44.1%)
Service	22	11.0%	22 (100.0%)	10 (45.5%)
Business	14	7.0%	14 (100.0%)	11 (78.6%)
Others	4	2.0%	4 (100.0%)	3 (75.0%)
Ethnic group				
<i>Brahmin/Chhetri</i>	76	38.0%	74 (97.3%)	17 (22.4%)
<i>Lama/Sherpa/Tamang</i>	56	28.0%	55 (96.4%)	25 (44.6%)
<i>Newar</i>	34	17.0%	34 (100.0%)	13 (38.3)
<i>Magurali</i>	14	7.0%	13 (94.1%)	6 (42.8%)
Others	22	11.0%	19 (73.0%)	6 (27.3%)
Educational status				
Illiterate	76	38%	66 (86.8%)	18 (23.7%)
Primary	36	18%	32 (88.9%)	9 (25.0%)
Secondary	50	25%	50 (100.0%)	22 (44.0%)
Intermediate & above	38	19%	38 (100.0%)	18(47.4%)
Mean no. of living issue: 1.5 (Range: 0-7)				

the most widely discussed family planning concepts in recent years. It is a disparity between woman's fertility preferences/needs and her family planning practices. It has been found that most of the women of reproductive age who do not want to have a child soon or ever are not using any contraception. According to Bongaarts the knowledge, attitude, practice surveys revealed no complete correspondence between knowledge and attitudes and between attitude and practice of family planning methods.⁷ Fawcett has also reported that respondents usually exhibit considerable knowledge and attitude change over time, but they do not always exhibit corresponding changes in contraceptive practice.⁸

Low use of family planning methods may be the by-product of, the fear of side effects, weak motivation for

fertility control and societal/familial disapproval of family planning. The ideal contraceptive would be 100.0% effective, with no health risks or side effects, independent of intercourse, easily and completely reversible, easily administered and used independently of the medical profession. However such a method does not yet and may never exist. This could be the reason for the gap between knowledge and practice.

The noncontraceptive health benefits of different methods (such as prevention of sexually transmitted diseases and HIV with use of condom, the reduction in menstrual dysfunction and ovarian, colorectal and endometrial cancer associated with the combined pill) have potentially enormous consequences for public health.

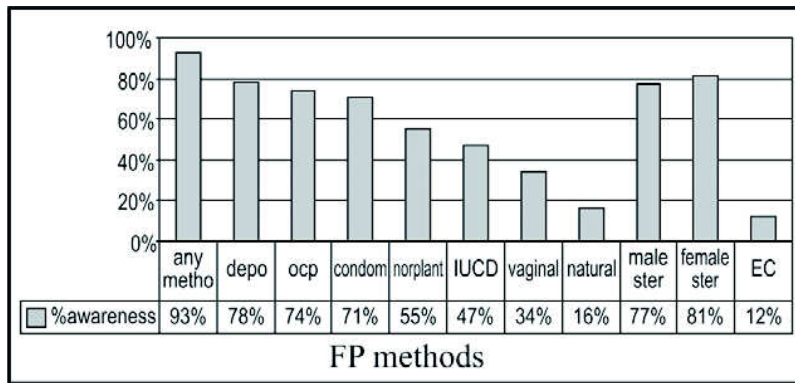


Fig. 1. Awareness about different types of family planning methods

This study was undertaken with the objective to assess the level of awareness about different types of family planning (FP) methods and also to find out the current practice of family planning methods by the women of reproductive age group. In recent years, the need for such kind of studies is very important. More specific knowledge can be acquired from these studies about the factor that determines the fertility and family acceptance. This in turn can be used to develop suitable program for people.

MATERIALS AND METHODS

This cross sectional descriptive study was carried out in Nepal Medical College Teaching Hospital (NMCTH) which is situated at peripheral suburban area of Kathmandu. The duration of the study was from 14th May 2008 to 14th July, 2008. The study population comprised of 200 married women of reproductive age (15-49 yrs) attending gynecology out patient department (GOPD) irrespective of parity, presenting complaints and diagnosis. The women were interviewed by means of partially structured questionnaire. The questionnaire consisted of informations about the respondent’s age, education, occupation, parity, knowledge about family planning methods, adverse effects, non contraceptive benefits, previous and current use of family planning methods and source of information. The data was analyzed using simple tabulations.

RESULTS

Total 200 married women of reproductive age were included in the study. Socio-demographic characteristics of the women along with their awareness and practice of family planning methods are presented in Table-1. Of the 200 sexually active women who participated in the study, 75.5% were from the rural region and 24.5% came from the urban region. Majority (81.5%) of the women were

aged 20-34 yrs, 63.0% were housewives, Brahmin/Chhetri (38.0%) constituted the major ethnic group. Most participants were attending the clinic on the day of the interview for either specific gynecological problems or for antenatal/postnatal care and for family planning services specifically. The mean age was 28 years and 38.0% were illiterate. 88.0% of participants had been pregnant at least once. Forty of the respondents had previous abortions of which 26 had spontaneous and 14 had induced

abortions. Among the women 37% had last child birth >5 years ago. Mean no. of pregnancies was 2.05 (range: 0-10). Mean no. of living issues was 1.5 (range: 0-7).

It is clear from Table-1 that adolescents had less awareness about family planning methods; urban women had slightly higher awareness than rural women. Housewives were less aware than women with other occupations. 100.0% *Newars* were aware about family planning methods. As education of the women increased to secondary and higher level, the awareness also increased up to 100.0%. More or less the same pattern is seen regarding the current practice of family planning methods, although the gap between awareness and practice is evident in all categories of the women.

Among the ten FP methods, 93.0% of the respondents were aware about at least one method. 54.0% claimed to know about more than five methods. Among the temporary methods, depo provera seemed to be the most well known followed by oral contraceptive pills and condom, natural methods were less known. Among the

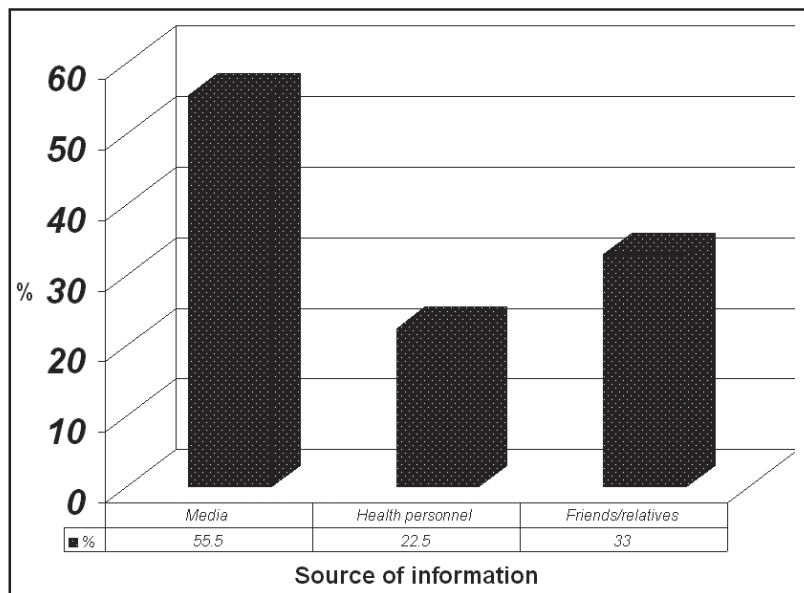


Fig. 2. Source of information of Family planning methods

N.B. Most of the respondents stated more than one source of information.

Table-2: Awareness and practice of family planning methods compared to national figures of NFHS (Nepal Family Health Survey) '96⁹

FP method	Awareness in Present Study % (no.)	NFHS ('96)	Past use in Study %	Current practice in Present Study % (no.)	NFHS ('96)
Any method	93% (186)	98%	65%	-----	-----
Depo provera	78% (156)	84.8%	40%	10% (20)	4.5%
Oral contraceptive pills	74% (148)	80.5%	21%	4.5% (9)	1.4%
Condom	71% (142)	75.3%	20%	4.0% (8)	1.9%
Norplant	55% (110)	57%	6%	3.0% (6)	2.9%
Intrauterine contraceptive device(IUCD)	47% (94)	35.9%	2%	2.5% (5)	0.7%
Vaginal foams	34% (68)	28.5%	----	----	---
Natural method	16% (32)	44.4%	1%	1.5% (3)	----
Female sterilization	81 % (162)	96.3%	----	5.5% (11)	5.0%
Male sterilization	77 % (154)	89.7%	-----	2.5% (5)	2.9%
Emergency contraception	12% (24)	---	-----	-----	----
Contraceptive prevalence rate	----	----	-----	33.5% (67)	28.5%

permanent methods most of the respondents were aware about female sterilization than male sterilization. As emergency contraception (EC) was recently introduced concept, awareness was less.

Table-2 shows the % distribution of the respondents with knowledge and practice of different family planning method, as compared to NFHS study done in '96.⁹ It indicates that family planning knowledge was widespread, as 93.0% respondents as compared to 98.0% in NFHS were aware of at least one method. Among the various methods, depo provera was most

popular among the women followed by oral contraceptive pills. The % awareness was lower for all the methods in present study as compared to the national study. But % of women currently using the methods was higher in our study. 66.5% of women (133) were not using any method. Of the 133 women not using any method, 20.0% (40) were attending the GOPD for antenatal care, while 1.5% (3) came for postnatal care, and 3.0% (6) attended for family planning services on the day of the interview.

From Fig. 2, it is seen that the main source of knowledge about different contraceptive methods was “mass media” as reported by 55.5 % of the respondents. 33.0% of the respondents came to know about these methods through “friends/relatives”. Least common source of information was health personnel (22.5%).

The figure shows that with increase in level of education, awareness for all types of FP methods also increased. The difference was more prominent especially in emergency contraception, norplant, intrauterine contraceptive device (IUCD) and for permanent methods as well. But for more popular methods like depo provera, oral contraceptive pills and condom, even illiterate and less educated women seemed to have equally good knowledge.

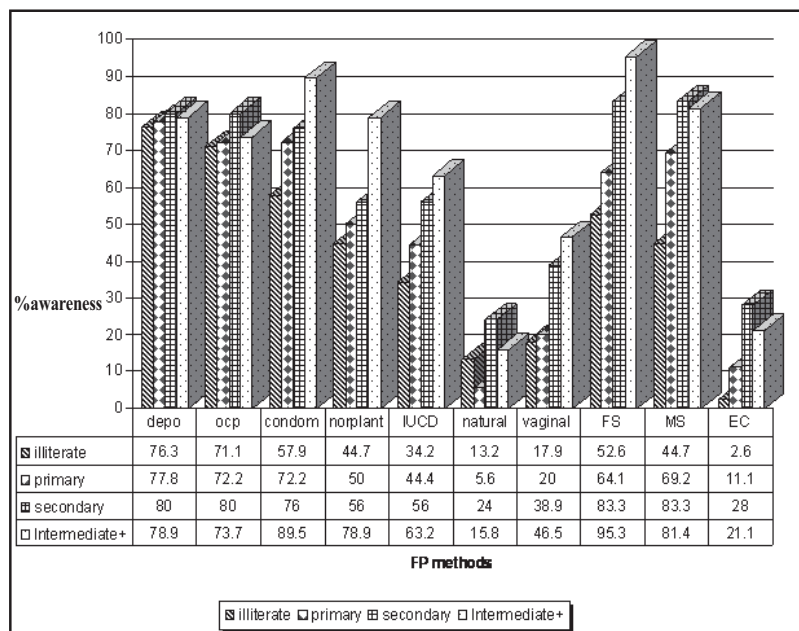


Fig. 3. Awareness of different types of FP methods according to educational status of women

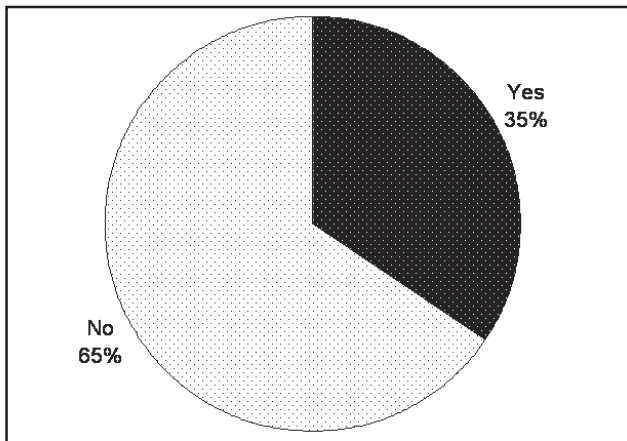


Fig. 4. Knowledge of non contraceptive benefits of FP methods

Only 35.0% of the respondents had knowledge about non contraceptive benefits of family planning methods, whereas majority (65.0%) admitted ignorance of this. 27.0% knew about protection from STD/HIV with use of condom, 6.0% knew about benefits of oral contraceptive, 5.0% and 2.0% knew about benefits of depo provera and norplant respectively.

Most of the respondents stated about more than one adverse effect. Only 37.0% of women had no knowledge about the adverse effects. Majority knew about irregular bleeding and amenorrhea due to depo provera. Similarly weight loss and gain was also of concern.

Regarding knowledge about duration of protection 56% had no knowledge. 53.0% knew about depo, 19.0% and 9.0% knew correctly about duration of protection of norplant and IUCD respectively.

When asked about knowledge about return of fertility after discontinuation only 25.0% had correct idea.. 16.0% had knowledge about depo, 8.0%, 7.0% and 5.0% claimed to know about return of fertility after

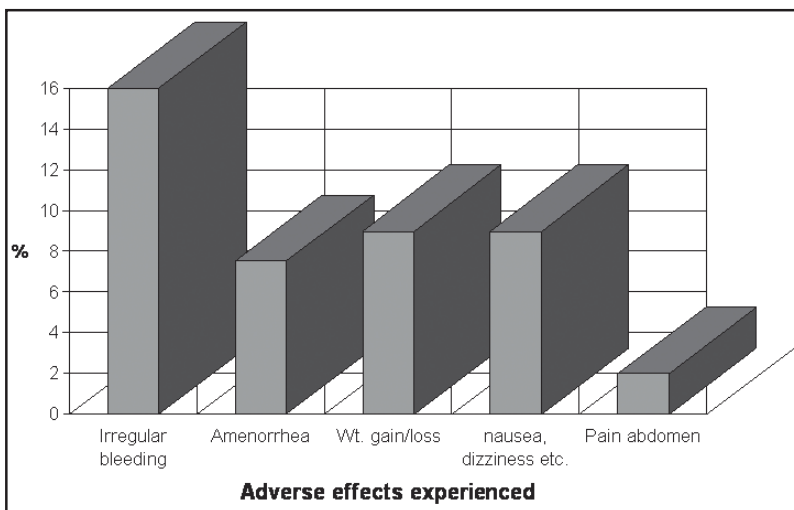


Fig. 5. Adverse effects experienced by FP users

Table-3: Knowledge of adverse effects of FP methods

Adverse effects	n.	%
Irregular p/v bleeding	105	52.5
Amenorrhea	86	43
Wt. gain	85	42.5
Wt. loss	56	28
Pain abdomen	7	3.5
Headache, nausea, giddiness, loss of appetite, fever	25	12.5
Allergy	2	1

discontinuation of norplant, oral contraceptive pills and IUCD respectively.

Irregular bleeding per vaginum was the most commonly experienced adverse effect as stated by 16.0% followed by weight gain/loss and nausea, headache, weakness, dizziness, loss of appetite etc.

Majority (26.0%) of the women had discontinued family planning methods due to side effects, only 12.0% stopped them to conceive next baby, 5.5% gave some other reasons for discontinuation e.g. husband staying away, inconvenience in getting the methods etc.

Fig. 6. shows that with increasing no. of living children, use of permanent methods increased. Proportion of female sterilization was higher than male sterilization. Depo provera was the most commonly used temporary contraception in all categories of women except in nulliparous. The proportion of non users was also high especially in women with less no. of living issue. Natural methods, condom, IUCD and norplant were among less commonly used methods. It was surprising to see that,

still a large proportion of women who already had ≥ 3 living issues were not using any contraception.

DISCUSSION

Various studies have been carried out till date in different parts of the world exploring the knowledge, attitude and practices of family planning methods with different results. Present study revealed a high percentage of awareness in family planning methods, 93.0% of the respondents knew about at least one method. In other studies, the percentage of awareness varied from 94% in Pakistan,¹⁰ 94.2% in Sikkim,¹¹ 95.8% in Korea¹² and even up to 100.0% in a study

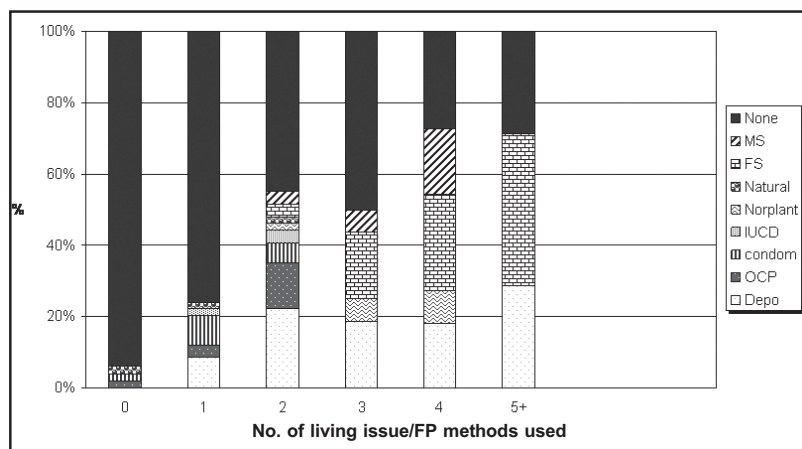


Fig.6. Use of family planning methods according to the no. of living issue

done in Bangladesh.¹³ But the studies in Nigeria have shown quite low awareness as 54.3%.¹⁴ In Srivastav's study¹⁵ 17.0% were not aware of any form of contraception as compared to 7.0% in present study.

Awareness about different methods of family planning methods: Most of the women (54.0%) had knowledge about more than five methods in our study. This percentage is lower than that in Korea where 85.0-100.0% women had heard about five different methods.¹² Among ten contraceptive methods named, depo provera ranked the topmost (78.0%) followed by oral contraceptive pills (74.0%) and condom (71.0%). Natural method (16.0%) and emergency contraception (12.0%) were among the least known methods. According to Bangladesh Demographic Health Survey in 1993-94, 97.0% knew about depo provera followed by IUCD (90.0%) and condom (87.0%).¹³ The finding is different in study done by Renjhen *et al* as maximum awareness was seen for oral contraceptive pills (95.8%) followed by condom (74.2%) and IUCD (72.0%).¹¹ Srivastava *et al* observed, IUCD was the most known (61%) temporary method followed by oral contraceptive pills (60%) and condom (50%).¹⁵ Awareness about EC was similarly low as 11.2% in another study in India,¹⁶ but higher as 30.0% in South African study.¹⁷ Among permanent methods, our results showed that most of the women (81.0%) had heard about female sterilization as compared to only 77.0% for male sterilization. In Sikkim also tubectomy was more well known (67.0%) than vasectomy (34%).¹¹ Study done in Bangladesh similarly reported 99% of the women having knowledge of female sterilization and only 83.0% for male sterilization.¹³ The reason behind this disparity of knowledge between female and male sterilization remains unexplained, maybe it is because of the general concept of the laymen that reproduction is mainly the function of women.

Source of information: The main source of knowledge was mass media as reported by more than half (55.5%)

of the respondents. Most of other studies also have stated print and electronic media to be the common source of public awareness, 57.7%¹⁶ and 50.0%.¹¹ In contrast, Korean study¹² revealed the main source of information to be health center or relatives and neighbors, one more study done in Manipur, India¹⁸ also reported that main source of knowledge was friends (44.0%) followed by mass media (22.0%), relatives (18.0%) and neighbors (16.0%).

Awareness by age group: Present study showed the awareness to be lowest among the adolescents (92.3%) and best among 20-34 years age group (96.9%). According to Park *et al*, the older the women and lower their educational level, the more frequently they were exposed to family planning messages through meeting, home visits and neighborhood communication.¹⁹

Awareness by education: In most of the studies, it was found that education is the prime influencing factor on fertility. Our study also observed that when women's education was of secondary or higher level, awareness was 100.0%. This finding is in accordance with those of studies done in Pakistan with 95.0% awareness in educated women as compared with 73.0% in illiterate women.¹⁰ Another study conducted in Bombay also concluded that education was the main variable and prime influencing factor in the decisions regarding family size and contraceptive awareness.²⁰

In their study among rural Indians, Gautam *et al* found that raise in education helps in improving acceptance of contraceptive devices.²¹

Awareness by area of residence: Women with urban background had slightly better level of awareness than rural women. In Pakistan DHS survey, there were large differences in knowledge between the urban and rural women, 94.0% of the currently married women residing in major cities knew of at least one modern method of contraception whereas among rural women only 71% knew of a modern method.¹⁰

Knowledge of non contraceptive benefits and adverse effects: This study revealed a low (34.5%) level of knowledge of non contraceptive benefits of family planning methods. In contrast, the knowledge about adverse effects was quite widespread as 63.0% of women knew about various effects.

Past and current use of family planning methods: Present study showed a very low use of FP methods in

contrast to the high level of awareness. 65.0% of the women had never used any methods, whereas only 33.5% were currently using one of the FP methods, among which depo provera was the most commonly used one and female sterilization was more common than male. The practice was highest among the age group 20-34 yrs, urban women, business occupation, *Lama/ Sherpa Tamang*, women educated more than secondary level and in women with living issue more than two. According to The Nigerian Demographic Health Survey² only 6.0% were currently using a method while only 3.5% were using a modern method.²²

In Pakistani study, only 16.0% of married women had used a modern method, condom was most commonly used, in their study also proportion of female sterilization (4.0%) was higher than male sterilization (1%).¹⁰ Study done by Shah also reported women's education to be a significant variable, as the use increased from 43% in the primary educated women to 70.0% in secondary and higher educated women.²³ Kanoja also concluded that education was the main variable in the decisions regarding family size and contraceptive awareness as they found that after the birth of the first child 80.0% of the educated couples were using spacing methods whereas even after the birth of the third child more than 55.0% of the uneducated couples did not.²⁰ Lasee . *et al.* had similar results with women 4-5 times more likely to use contraception if they had 3 or more living children than if they had 2 or less.²⁴ These results strongly suggest that the number of children and the women's education are the key determinants in the decision making about contraceptive use. A prospective study done in Bihar, India noted that reversible forms of contraception were used only by 6.8% of the women and tubal sterilization (20.6%) was the most popular method of contraception.²⁵

The contraceptive prevalence rate of Baltistan is 8.5% only, which is much low from rest of Pakistan and important reasons for not using contraceptive measures were that family planning was considered against religious, besides illiteracy, poverty and poor communication.²⁶ Our study showed slightly higher contraceptive prevalence rate of 33.5% as compared to 28.5% in national study.⁹ A high rate of 62% was reported in study of Sikkim.¹¹

Adverse effect and reasons for discontinuation of FP methods: The most common adverse effects experienced by past and current users in this study was irregular bleeding, amenorrhea and weight gain/loss due to depo provera. Side effect is the major reason for discontinuation of the pill (44.0%) IUCD (68.0%) and injectables (54.0%) in Sylvia's study.¹⁴ These data indicate that improved counseling is needed about

possible side effects and correct method use.

Contraceptive continuation rates increase with age and experience. With reversible methods, continuation rates have been shown to be highest with long-acting methods of contraception. The causes of discontinuation are not well understood but side effects, perceived or real, play a major part. Evidence is emerging of a beneficial effect of high quality information and advice on continuation rates.

It was observed that knowledge and awareness does not always lead to the use of contraceptives. There is still a need to educate and motivate the couples and improve family planning services to achieve more effective and appropriate use of contraceptives and to arrest the trend towards increase in population.

Contraceptive method counseling should include sexually transmitted infection prevention messages too.

More research is urgently needed to understand patterns of contraceptive use, the reasons for these patterns and the effectiveness of interventions designed to enhance use. Further research is needed on reasons of premature discontinuation, with particular attention to the meaning of significant side effects of specific methods. Efforts should be made to educate the public about the safety and convenience of modern, long-term, reversible methods of contraception among both healthcare professionals and the public.

Family planning counseling needs to be universally included into routine antenatal clinic activities. Besides, improving formal female education is certain to raise the existing knowledge and also to dispel the prevailing misinformation and misperceptions about FP methods. Providers must know how to communicate with clients such that they are facilitating care rather than just prescribing the FP methods. There is also a need to review the national FP program with particular emphasis on contraceptive needs of adolescents and to improve accessibility and availability of all FP services.

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