

PREVALENCE OF CONTRACEPTIVE PRACTICES IN MARRIED WOMEN OF NAINSUKH VILLAGE NEAR LAHORE

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ABSTRACT

Introduction: Overpopulation is one of the biggest problems faced globally by many developing countries which include Pakistan as well. Pakistan is the seventh most populous country of the world. By 2050 Pakistan will be ranked as the fourth largest nation of the world and its population will grow to 285 million. This study was planned to evaluate the prevalence of contraceptive use in a semi urban area Nainsukh near Lahore, Pakistan and to find out the major factors playing role in selection of contraceptive method. The contraceptive prevalence rate was 35.2% among married females of Nainsukh. It was observed that the most common method used by couples was condom used by 11.70% of the respondents. OCP were used by 4.6%, IUCD by 6.5%. Tubal ligation was opted by 4.6% of the participants. Major source of information was family planning center for 24.8% and friends gave this information to 14.98% of the women. Mother in law 5.9%, dai 9.1%, media 7.8% were other sources. Mean duration of use of contraceptive method was reported to be 2.45 ± 1.81 years. The most common reason of not using any contraceptive method was lack of awareness 29% and religious beliefs 23%. Approximately 58.3% of the clients were getting contraception facilities from private sector. Source of supply was lady doctor for 6.2% and LHW by 5.2%. About 5.5% of the females reported abortion as a choice to be used for contraception and only 4.2% were aware of emergency contraceptive methods.

INTRODUCTION

Overpopulation is one of the biggest problems faced globally by many developing countries which include Pakistan as well. Pakistan is the seventh most populous country of the world. By 2050 Pakistan will be ranked as the fourth largest nation of the world and its population will grow to 285 million.¹ This high population growth has exacerbated a number of problems. In 1960 the Government of Pakistan launched the Population Welfare Program in order to arrest the increasing growth rate of the population.² Family planning service are available at over 1200 family welfare centers run by Ministry of Population Welfare and also by Ministry of Health, Rural Health Centers and Basic Health Units but the facilities are severely underutilised and on an average a family center receives only two clients per day.¹ Since 1965 contraceptive use rate is slowly increasing in Pakistan which was 9.1 in 1984-5 and was raised up to 11.8 by 1990-1 but this increase was far less than what was expected.³ Current contraception prevalence rate reported is only 30%⁴ and even it has been researched that there is a little increase in the use of modern contraceptive methods in Pakistan in the last two decades.⁵

Globally two types of methods are being used: temporary and permanent. Temporary methods include hormonal pills, monthly injectables, intra-

uterine contraceptive devices, barrier methods, withdrawal, fertility awareness and lactational amenorrhea; whereas permanent methods include male and female sterilisation.⁶

World Health Organization (W.H.O) has set a standard definition for the calculation of contraceptive prevalence rate worldwide as the proportion of women of reproductive age who are using (or whose partner is using) a contraceptive method at a given point in time.⁷ The contraceptive prevalence rates of developed countries like United states of America is 78.6%, France is 76.6%, Japan is 54.3% and China is 84.6% whereas that of underdeveloped countries like Bangladesh is 55.8%, Sri Lanka is 68.0% India is 56.3% which is quite high whereas that of Pakistan is only 27% which is indicating an alarming situation.⁸ There is a considerable variation in this rate among the provinces. Punjab being highly populated and majorly urban has a contraceptive prevalence rate of 33% and that of Balochistan which is majorly rural is only 14%.⁹ This low contraceptive prevalence rate is a sad reality owing to the fact that the total fertility rate in Pakistan is as high as 4.8 as estimated in year 2000.¹⁰ It has been identified that there are various major obstacles to contraceptive use and the most important being the woman's perception of the social or cultural unacceptability of contraception.¹¹ This study was planned to evaluate

the prevalence of contraceptive use in Nainsukh which is a semi urban area. Major reason for choosing this location was the fact that most of the studies regarding contraception are done in either urban areas or in rural areas. Nainsukh is a semi urban community close to the city of Lahore and is highly populated. The study in this area will help us to understand the preferred choice of contraception in this area, modes of information and reasons of selection of contraceptive methods by the female population of this community.

METHODOLOGY

It was a Descriptive, Cross – sectional Survey conducted at the Nainsukh Village on married women residing in each house. The study was conducted from December 2010 to June 1011. The sampling size was 307 married females and Sampling Techniques was Non-probability, convenience sampling. Informed consent was taken before the survey. Recently married, infertile and unwilling female residents were excluded. A structured questionnaire was used as the data collection tool and anonymity was maintained. The method of data collection included Personal interviews conducted by 4th year MBBS students. Response rate of study was 92.5% for all those females who gave the informed consent to participate. Data entry and analysis was done in Statistical Package of Social Sciences (SPSS) version 17. The Descriptive statistics were calculated and presented in the forms of frequency tables. Bar and pie charts were constructed to present data.

RESULTS

This cross sectional survey was conducted on 307 married females of Nainsukh Community from December 2010 to June 2011. The socio demographic profile of the surveyed population showed that age group of majority of the surveyed population ranged between 20 – 40 years. Among the 307 women, only 295 (96.1%) females knew their age at the time of marriage. About 179 (58.3%) were less than 20 years at the time of getting married. The mean duration of marital status of these females is 11.814 years with

Table 1: Age of the participant females.

Age of the Participants	Frequency (n)	Percent (%)
< 20 years	16	5.2
20 – 30 years	161	52.4
30 – 40 years	104	33.9
> 40 years	26	8.5
Total	307	100.0

Table 2: Age at marriage.

Age at Marriage	Frequency (n)	Percent (%)
< 20 years	179	58.3
20 – 30 years	114	37.1
> 30 years	2	0.7
Total	295	96.1

standard deviation of 8.32 years.

Majority of the participant females were house wives 289 (94.11%) and only 17 (5.5%) were working females. Regarding educational status of the participants it was observed that 50 (16.3%) were illiterate, 69 (33.3%) were primary pass, 26 (17.3%) metric pass, 4 (2.7%) intermediate pass and only 1 (0.7%) was graduate. Among the 307 respondents, 128 (41.7%) did not know about the educational status of their husbands. A total of 47 (15.3%) were illiterate, 106 (34.5%) were under matric, 20 (6.5%) were intermediate pass and 6 (2%) were graduates and above.

The mean number of children of these women is 3.41 ± 1.788 with the range of 10. The mean number of male children of these females is 1.88 ± 1.116 and of female children is 1.82 ± 1.277 . The mean number of pregnancies of these women is 4.111 ± 2.138 and of abortions is 0.887 ± 1.189 . The mean age of last born child is 5.20 ± 4.44 year.

A total of 282 (91.9%) of 307 females responded the answer regarding breast feeding of these 239 (84.8%) breast fed their children and 43 (15.2%) never had done breast feeding.

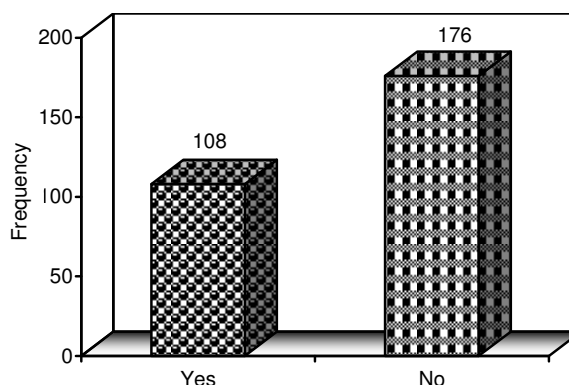


Fig. 1: Use of contraceptive methods.

The total response rate of this questionnaire was 284 (92.5%). About 108 (35.2%) have admitted the use of contraceptive method during their life time and 176 (57.3%) have never used any contraceptive method.

When the choice of contraceptive method was asked by the respondents, multiple responses were obtained. It was observed that contraceptive pills were being used by 14 (4.6%), Intra-uterine contraceptive device (IUCD) is used by 20 (6.5%) and injections were used by 10 (3.3%). The most commonly used method was condoms which were admitted by 36 (11.7%) of the respondents. Breast feeding was reported as a method of contraception by 20 (6.5%) and withdrawal was reported by only 4 (1.3%) as a method of choice of contraception. Tubal ligation was adopted as method of contraception only by 14 (4.6%) of the participants. It was observed that 184 (59.9%) of the respondents were aware of all the methods of contraception.

centers 76 (24.8%) and friends 46 (25%). Other sources of information include mother in law 18 (5.9%), Dai 28 (9.1%) and media 24 (7.8%), 47 (30.3%) of the participants felt difficulty in using various contraceptive methods. When the respondents were asked to inform about the side effects of the contraceptive methods, multiple responses were obtained. Forgetting the pills was reported by 8 (21.6%), dysfunctional uterine bleeding by 25 (43.9%), pain by 16 (34.8%) and obesity after the use by 7 (17.5%). The mean duration of using contraceptive methods by these participants is 2.45 ± 1.81 years. Only 66 (21.5%) of the participants reported that they have never used any contraceptive methods previously.

Table 3: Type of contraceptive method used.

Method of Contraception Used	Frequency (n)	Percent (%)
Pills	14	4.6
Intra-uterine contraceptive device	20	6.5
Injections	10	3.3
Condoms	36	11.7
Breast feeding for contraception	20	6.5
Withdrawal	4	1.3
Tubal ligation	14	4.6

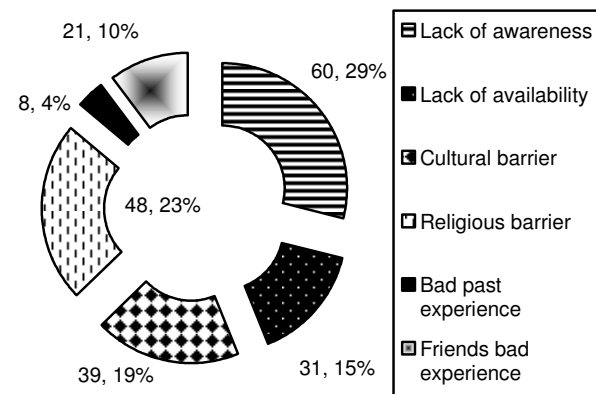


Fig. 3: Reasons of not using any contraceptive method.

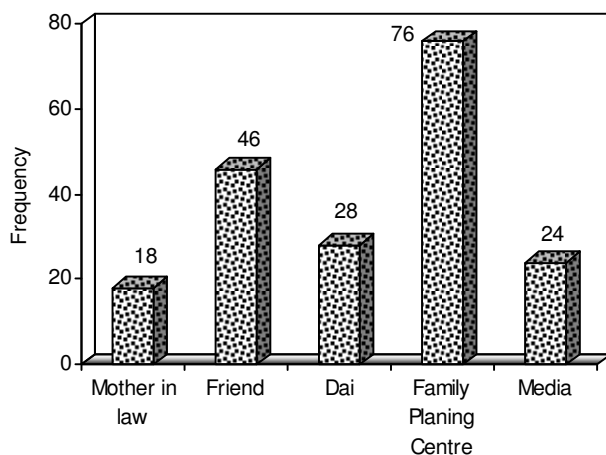


Fig. 2: Source of information about contraceptive methods.

It was noticed that major source of information about contraceptive methods is the family planning

Multiple reasons have been identified for not using any contraceptive method before which included lack of awareness by 60 (29%), religious beliefs 48 (23%), cultural beliefs 39 (19%), lack of availability 31 (15%), friends bad experience 21 (10%) and own bad experience by 8 (4%) among the participants. Approximately 99 (32.2%) of the participants who were using contraceptive methods were satisfied with current method. Those who were using pills as contraceptive method were obtaining it either from government source 20 (41.7%) and private sector 28 (58.3%) both.

Source of supply of contraceptive method is reported as trained birth attendant and lady health visitor by 16 (5.2%) each, lady doctor by 19 (6.2%) and dai by 10 (3.3%). It was observed that family planning centers and markets were considered as sources of supply by 9 (2.9%) and 6 (2%) respectively. Seventeen (5.5%) of the participants reported that they used abortion as an alternate method of family planning and only 13 (4.2%) of the participants were familiar with emergency method of contraception.

DISCUSSION

Family planning is an important issue for many developing countries worldwide, including Pakistan despite of a government programme supporting family planning in Pakistan, the total fertility rate remains as high as 4.8 and current contraception use remains as low as 20% documented in 2000.¹² It was established in year 2004 that Pakistan had lower contraception use than most other Muslim countries.¹³

Fertility and contraceptive use in developing countries are dependent upon various factors the most prominent of which is women's education, husbands' education, age at marriage, husband's occupation, and number of children.¹⁴ In addition to that it is observed that there are five factors potentially affecting fertility regulation in the socio-structural context of Pakistan which include the extent of communication between husbands and wives, religious beliefs, female autonomy, son preference, and the family planning services and supply variables.¹⁵

This survey was undertaken to highlight the prevalence of contraceptive methods used in a semi urban population named Nainsukh, it was chosen as it was a slum area and was near Lahore. Our basic concern was to assess the use of contraception among married women of reproductive age group in this community with particular focus on the extent to which socio-economic and demographic factors exert independent influence on contraception. Among the 307, the majority of females were between 20 – 30 years of age 161 (52.4%). Most of them were below the age 20 at the time of their marriage 179 (58.3%). The results of a study conducted in D.I. Khan, Pakistan showed that frequency of contraceptives is very low in younger age group of 15 – 20 and it increases between age 20 – 30 years. It reflects that there is no trend of contraceptive use immediately after marriage because there is desire from the husbands and mothers in laws for children and the women are not allowed to use contraception.¹⁶

Education of women has been viewed as a powerful change agent and an overwhelming group of population in our study was illiterate 50 (33.3%). It was observed in this survey that the prevalence of contraceptive use among illiterate women is very

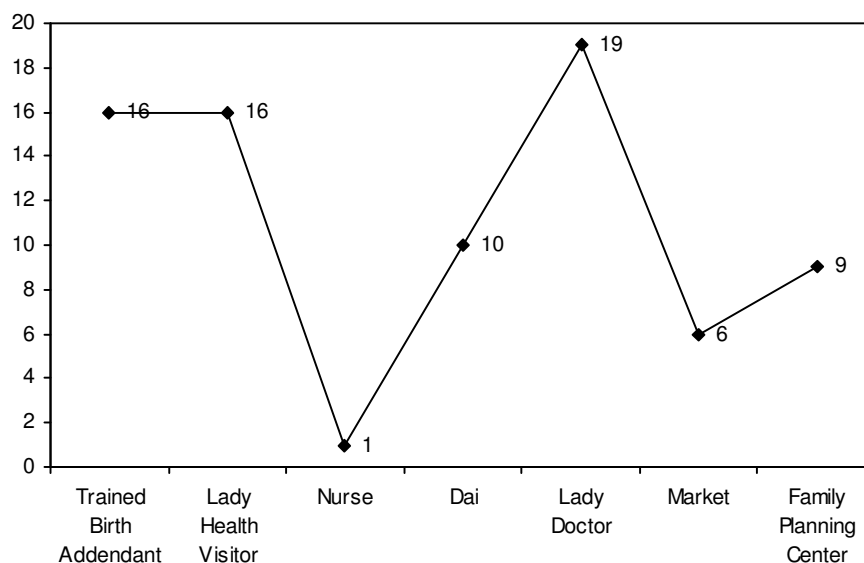


Fig. 4: Source of supply of contraceptive methods.

low. It reflects that uneducated women are less likely to practice contraception than the educated ones.¹⁴ A study carried out in Bangladesh showed that women education and number of children were the main factors associated the use of with family planning.¹⁷

Man approval and decision making is very important in utilizing family planning services. Husband's education is one of the key factors which influence decision making regarding use of contraceptive methods in society. Our research group included 51% matriculate males and only 0.3%% master's degree holders. Similar results were obtained in a survey done by Nasir on university men who showed that education and awareness family planning alters the attitude of men towards use of contraceptive methods.¹⁸ Whereas a survey held in the Taluka Hala district of Hyderabad which is a rural area showed that a major fraction of women who were not using any contraceptive method was due to their husband's disapproval of it.¹⁹

The results of our study have shown that the mean number of children in this group was 3.416 ± 1.787 with the mean number of boys and girls were 1.88 ± 1.11 and 1.82 ± 1.27 respectively. The mean number of pregnancies and abortions of the participants in our group is calculated as 4.111 ± 2.138 and 0.887 ± 1.18 respectively. It has been observed that the number of children a couple had determined the attitude towards contraceptive usage in a family as shown by many studies.¹⁶⁻¹⁸

The issue of choice of contraceptive methods is very important, both for increasing contraceptive prevalence and for reducing dropouts. A study in

Turkey in 2010 showed that condom was the first method of choice with 32.2%, OCPs were used by 15.1% as a method of choice after delivering their babies in Tertiary Head Quarter hospitals.²⁰ In our study 108 (38%) of the respondents were using contraceptive method. Pills were used by 14 (4.6%), IUCD was used by 20 (6.5%) and injections by 10 (3.3%). Around 36 (11.7%) were using condoms as the contraceptive method, just 4 (1.3%) practiced withdrawal method for contraception. Breast feeding as a method of contraception was used by 20 (6.5%) females. It was encouraging to note that 184 (59.9%) respondents were fully aware of all the methods of contraception available.

Men and women have different priorities and perceptions with respect to contraceptive method characteristics. Women in our population group preferred male condoms as an effective method as compared to pills as statistics reveal that only 4.6% women used pills while 11.7% used male condoms. Condoms were considered harmless and easily accessible as compared to other known methods. Similarly barrier methods (condom) were in practice also by most of the women studied in the outpatient clinic of Fatima hospital, Baqai Medical University Karachi.²¹

Another study conducted in an Urban health center Azizabad Sukkur has shown that the contraceptive methods used by female population vary. It was injections by 24%, IUCD by 7%, OCPs by 5% and condoms by 4% used by female respondents as a method of choice.²²

In our study difficulty in using contraceptive method was reported by 47 (15.3%) female population. It included forgetting the intake of pills, uterine bleeding, pain and obesity as reported in multiple responses as by 21.6%, 8.1% 5.2% and 2.3% respectively. Pills are the most convenient reversible method of contraception but oral contraceptive users' risk of accidental pregnancy may be higher than it should be, because of inconsistent pill – taking.²³ Other highly effective methods that are long acting include intrauterine devices (IUDs) which has too many basic advantages to be gained including, that it has the lower lifetime cost of any effective method of contraception, and that user compliance is not an issue once the device is in place.²⁴ The main side – effects of IUDs are menstrual abnormalities, heavy bleeding, inter-menstrual spotting and infections.²⁵ Tubal ligation is the permanent method of contraception adopted by women after they have completed their families or due to the socioeconomic burdens on the family.

Contraceptive method of choice, out of available variety of contraceptive methods ensures continuation of use and reduces the dropout rate. The needs and values of individuals change over time and any

one method cannot be suitable to an individual's need all the time. So if more than one method is available, and acceptor can switch over to a more suitable method of choice if the first or previous method of choice becomes unacceptable. In this regard personal satisfaction with the method of choice is very important.²⁶ Results of our study have shown that 99 (32.2%) were satisfied with the use of current contraceptive method.

Source of information plays a key role in selection of method of contraception. In our study trained birth attendants and lady health visitors were the source of information in 5.2% each in the population, while dais were only 3.3% effective in transmitting information to the clients. Lady doctors were the most effective way of communicating about the information of these contraceptive methods which were reported by 59.4% of the population. In another study it was noticed that media, relatives, health care providers play important role in transforming the relevant information.²²

Increase in contraceptive prevalence has coincided with a concerted effort on the part of the Pakistani government to increase access to contraceptive services, particularly in rural areas. A network of community – based female workers referred to as Lady Health Worker. (LHW) provide a major source of awareness in the rural population.²⁷ Religious and cultural factors have the potential to influence the acceptance and use of contraception by couples from different religious backgrounds. Cultural factors are equally important in couples' decisions about family size and contraception.²⁸ In our study, multiple reasons have been identified for not using any contraceptive method before which included lack of awareness by 60 (29%), religious beliefs 48 (23%), cultural belief 39 (19%), lack of availability 31 (15%), friends bad experience 21 (10%) and own bad experience by 8 (4%) of the participants. A huge population group is still unaware of the emergency contraception. In our study about 17 (5.5%) of the participants reported that they have used abortion as an alternate method of family planning and only 13 (4.2%) of the participants were familiar with emergency method of contraception. Timely access to emergency contraception (EC) has emerged as a major public health effort in the prevention of unintended pregnancies. Mode of access notwithstanding, misperceptions regarding pregnancy risk and side effects are among the key reasons that this safe and effective method is not better utilised by young women.²⁹

ACKNOWLEDGEMENTS

The authors are thankful to senior medical students of FMH College of Medicine and Dentistry for conducting interviews with study population.

REFERENCES

1. Shah NA, Nisar N, Qadri MH. Awareness and pattern of utilizing family planning services among women attending Urban Health Care Centre Azizabad Sukkur. *Pak J Med Sci* 2008; 24 (4): 550-5.
2. Khan MH, Shah H, Saba N, Anwar S, Ahmad I, Babar K, Afifa M, Gul B. Study of contraceptive user women in D.I. Khan Pakistan. *Biomedica* 2007; 23: 2.
3. Bhatti M. Correlates of Choice of Contraceptive Methods in Pakistan. *The Pakistan Development Review*, (Winter 1995); 34: 4 Part III: pp. 889-898.
4. Jabeen M, Gul F, Wazir F, Javed N. Knowledge, attitude and practices of contraception in women of reproductive age. *Gomal Journal of Medical Sciences*, 2011; 9 (2): 223-9.
5. Agha S. Intentions to use contraceptives in Pakistan: implications for behavior change campaigns. *Agha BMC Public Health* 2010; 10: 450.
6. WHO factsheet 351, April 2011. www.who.int/mediacentre/factsheet/fs351/en/
7. WHO statistical information system (WHOSIS) 2008. www.who.int/whosis/indicators/compendium/2008/3pcf/en/
8. World Health Report 2011. www.who.int/whosis/whostat/2011/en/
9. Ikhlas S. Exploring the link between contraception, abortion and maternal health in Pakistan. *Collective for social science journal* 2010. Resource brief no. 3. Jan 2010.
10. Saleem S, Bobak M. Women's autonomy, education and contraceptive use in Pakistan: a national study. *Reproductive Health* 2005; 2: 8 doi:10.1186/1742-4755-2-8.
11. Casterline JB, Sathar ZA, ul Haque M. Obstacles to contraceptive use in Pakistan: a study in Punjab. *Stud Fam Plann.* 2011 Jun; 32 (2): 95-110.
12. Hakim A, Sultan M, Ahmad F. Pakistan Reproductive Health and Family Planning Survey (2000-01) Preliminary report. Islamabad, National Institute of Population Studies; 2001.
13. Population growth and its implications. Islamabad, National Institute of Population Studies; 2004.
14. Nisar N, Yousfani S, Baloach R, Mumtaz F. Knowledge, prevalence and factors associated with never use and discontinuation of contraception in women attending tertiary care hospital. *Medical channel* 2010; 16 (1): 65-8.
15. Agha S. Intentions to use contraceptives in Pakistan: implications for behavior change campaigns. *BMC Public Health* 2010; 10 (450): 1-13.
16. Khan MH, Shah SH, Saba N, Anwar S, Ahmad I, Babar KS et al. Study of contraception user women in D.I Khan – Pakistan. *Biomedica* 2007; 23: 24-6.
17. Shahid Ullah M, Chakraborty N. Factors affecting use of contraception in Bangladesh: a multivariate analysis. 1993; 8 (3): 19-30.
18. Nasir JA, Tahir MH, Zaidi AA. Contraceptive attitude and behavior among university men: a study from Punjab, Pakistan. *J Ayub Med Coll Abbottabad* 2010; 22 (1): [<http://ayubmed.edu.pk/JAMC/PAST/22-1/Nasir.pdf>].
19. Safdar S, Inam B SN, Omair A, Ahmad ST, Alam ES. Contraception: a rural perspective. *J Coll Physicians Surg Pak* 2002; 12 (7): 421-4.
20. Pirnicci E, Polat A, Kumru S, Korogulu A. Fertility characteristics and family planning methods used by women delivering at a university hospital in Eastern Turkey. *J Obstet Gynaecol.* 2010; 30 (7): 707-11.
21. Mustafa R, Afreen U, Hashmi HA. Contraceptive knowledge, attitudes and practices among rural women. *J Coll Physicians Surg Pak.* 2008; 18 (9): 542-5.
22. Shah NA, Nisar N, Qadri MH. Awareness and pattern of utilizing family planning services among women attending Urban Health Care Centre Azizabad Sukkur. *Pak J Med Sci* 2008; 24 (4): 550-5.
23. Rosenberg MJ, Waugh MS, Burnhill MS. Compliance, counseling and satisfaction with oral contraceptives: a prospective evaluation. *Fam Plann Perspect.* 1998 Mar – Apr; 30 (2): 89-92, 104.
24. Lara Torre E, Spotswood L, Correia N, Weiss PM. Intrauterine contraception in adolescent and young women: a descriptive study of use, side effects and compliance. *J pediatric adolesc Gynecol.* 2011; 24 (1): 39-41.
25. Herbert B, Peterson M.D, Kathryn MC. Long acting methods of contraception. *N Engl J Med* 2005; 353: 2169-75.
26. Nanbukhsh H, Poral R. Study of rural satisfaction from the health and treating services of health houses of Urmia city, Iran. *Journal of Urmia University of Medical Sciences*, 2003; 14 (1): 20-6.
27. Arends Kuenning M. Reconsidering the doorstep – delivery system in the Bangladesh family planning program. *Studies in Family Planning* 2002; 33: 87-102.
28. Amirrtha Srikanthan, Robert LR. Religious and cultural influences on contraception. *Women's health JOGC* 2008: 129-37.
29. Rocca CH et al. Beyond access: Acceptability, use and nonuse of emergency contraception among young women. *Am J Obstet Gynecol* 2007 Jan; 196: 29. e1-6.