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## Practices of diverse birth control methods among local population of district Kohat, KPK, Pakistan

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### Abstract

Fertility control or contraception is being used historically from a long period of time but sophisticated techniques in this regard started from 20<sup>th</sup> century. In many religions, birth control is considered to be an ethical issue; it is not welcomed religiously and morally. An assessment study was conducted in general population of rural and urban areas of district Kohat. Married couples were investigated for the use of specific contraception method. Respondents were asked different questions regarding contraception and record of each respondent was recorded in a questionnaire. About 217 participants were included in this study; they were asked different questions about the use of contraceptives. A tight relation of contraceptives was found with the number of children of a couple. A high usage of contraceptives was observed in urban areas. Where use of injections was 38/123 (30.89%) while use of condoms was 31/123 (25.20%) which was far more than any other contraceptive method. Operation methods were only observed in urban areas as this method is very costly, the people of rural areas are often unable to afford such costly methods for contraception. Use of IUCD was high in rural areas i.e. 34(44.1%) as compare to urban areas i.e. 8(6.50%). IUCDs, Condoms and Operations were the contraception methods which were used more than last 10 years. They were considered to be more enduring contraception methods

**Keywords:** Kohat, contraceptives, IUCDs, Condoms

### 1. Introduction

Contraception is a technique / method that are used to control the birth; in short we can say it is the method used to prevent pregnancy [1]. Fertility control or contraception is being used historically from a long period of time but sophisticated techniques in this regard started from 20<sup>th</sup> century. In many religions, birth control is considered to be an ethical issue, it is not welcomed religiously and morally [2]. The term Family planning is used for using contraception methods [3]. Operative methods are considered to be more effective birth control techniques which include vasectomy in males while in female it is called tubal ligation. In vasectomy, vas deferens of the male are detached and then sealed so that the sperm cannot be ejaculate hence prevent fertilization. While in tubal ligation fallopian tubes of women are either obstructed or detached so that the egg is unable to reach the uterus to get implant. Other techniques involve Oral pills, Condoms, Intra Uterine Contraceptive devices, vaginal rings, injections and many more [4]. Pills and some other methods like that are called emergency birth controls, they can protect to get a female pregnant within 3-5 days after an unprotected sexual intercourse [5, 6]. It is recommended for a woman who has reached to menopause, to continue birth control methods after her last menstruation period. In women who have reached menopause, it is recommended that birth control be continued for one year after the last period [7]. Use of contraceptives and birth control methods has decreased the mortality rate of women during the time of pregnancy [8]. The current study is designed to investigate the usage of contraception methods in married couples of rural and urban areas of district Kohat.

### 2. Materials and methods

**2.1 Ethical consideration:** An assessment study was conducted in general population of rural and urban areas of district Kohat from March 2016 to July 2016. Before collection of information, an ethical consent was granted from each respondent included in this study as this study was related to the use of contraceptives which is considered to be confidential / private information.

**2.2 Data Collection:** 200 Married couples were investigated for the use of specific contraception method. Respondents were asked different questions regarding contraception and record of each respondent was recorded in a questionnaire. Every aspect regarding the use of contraceptives was recorded.

**3. Results**

**3.1 Use of Contraceptive in relation to number of children**

About 217 participants were included in this study; they were asked different questions about the use of contraceptives. A tight relation of contraceptives was found with the number of

children of a couple. About 17(7.83%) respondents were included in this study who were either just married or they don't have any children, all of them i.e. 17(100.00%) were not using any sort of contraception method. While 103(47.47%) respondents who had 1-3 no. of children, 75(34.56%) respondents who had 4-6 no. of children and 22(10.13%) respondents who had 7-9 no. of children, all of them were using contraception methods as they have desired no. of children. Out of 217 overall respondents about 200(92.16%) were using while 17(7.83%) were not using contraceptives. (Table-1)

**Table 1:** Use of Contraceptive in relation to number of children

No of Children	To. No of Respondents n (%)	No of Respondents Using Contraceptives n (%)	No of Respondents Not Using Contraceptives n (%)
0	17(7.83)	0(0.00)	17(100.00)
1-3	103(47.47)	103(100.00)	0(0.00)
4-6	75(34.56)	75(100.00)	0(0.00)
7-9	22(10.13)	22(100.00)	0(0.00)
10<	0(0.00)	0(0.00)	0(0.00)
Grand Total	217	200(92.16)	17(7.83)

**3.2 Usage of Contraception methods in rural and urban areas of district Kohat**

A high usage of contraceptives was observed in Urban areas i.e. 123/200 (61.5%) as compare to Rural areas of district Kohat i.e. 77/200 (38.50%). In Rural areas about 14(18.18%) respondents were using oral Pills, 34(44.1%) were using IUCDs, 4(5.19%) were using Injections, 30(38.96%) were using Condoms, while no respondent with operated reproductive organs was reported. Similarly, in Urban areas 21(17.07%) respondents were using oral pills, 8(6.50%) were using IUCDs, 38/123(30.89%) were using injections, 31/123 (25.20%) were using condoms while 20/123 (16.26%) had operated their reproductive organs for contraception (Table-3).

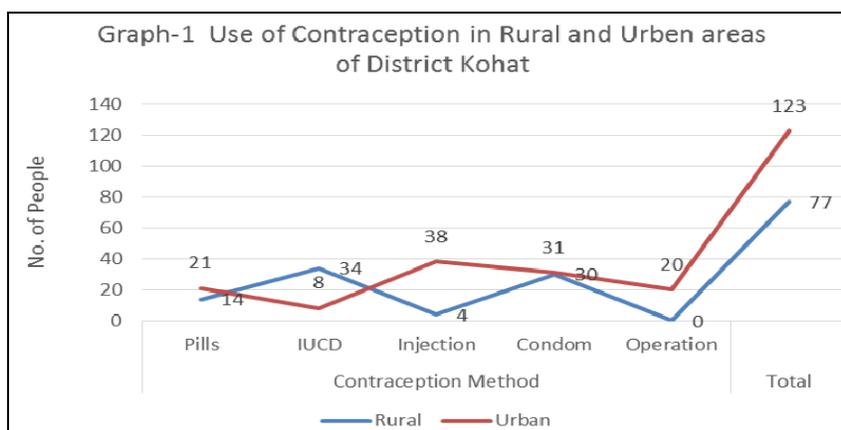
using Condoms, while no respondent with operated reproductive organs was reported. Similarly, in Urban areas 21(17.07%) respondents were using oral pills, 8(6.50%) were using IUCDs, 38/123(30.89%) were using injections, 31/123 (25.20%) were using condoms while 20/123 (16.26%) had operated their reproductive organs for contraception (Table-3).

**Table 3:** Usage of Contraception methods in rural and urban areas of district Kohat

Location	Contraception Method n (%)					Total N (%)
	Pills	IUCD	Injection	Condom	Operation	
Rural	14(18.18)	34(44.1)	4(5.19)	30(38.96)	0(0.00)	77(38.50)
Urban	21(17.07)	8(6.50)	38(30.89)	31(25.20)	20(16.26)	123(61.50)
Grand Total	35(17.5)	42(21.00)	42(21.00)	61(30.50)	20(10.00)	200

An elevated level of use of contraceptives was observed in urban areas of district Kohat as compare to rural areas. Usage of condom was almost same in both rural and urban areas

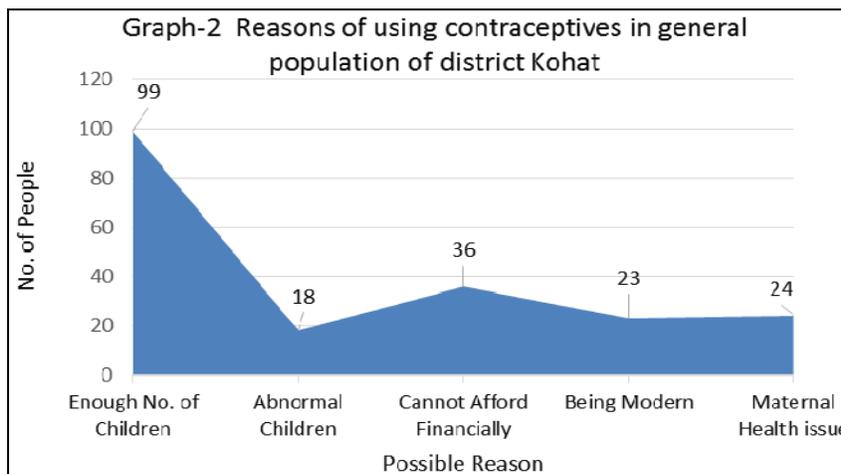
while IUCDs were being used more in rural areas as compare to urban areas (Graph-1).



**3.3 Reasons of using contraceptives in general population of district Kohat**

About 99/200 (49.50%) respondents were using contraceptives because they have enough no. of children, they didn't want any more children. About 18/200 (9.00%) had their child with either mild or severe developmental abnormalities, to avoid this in future they started using contraceptives to stop birth of children. 36/200 (18.00%)

respondents were not sound financially; they were not in condition to afford further children so they decided to use contraception methods. About 23/200 (11.50%) were considering themselves being modern, they were of the opinion that less number of children leads to a successful life. About 24/200 (12.00%) respondents had maternal health issues, mothers were not healthy reproductively (Graph-3).



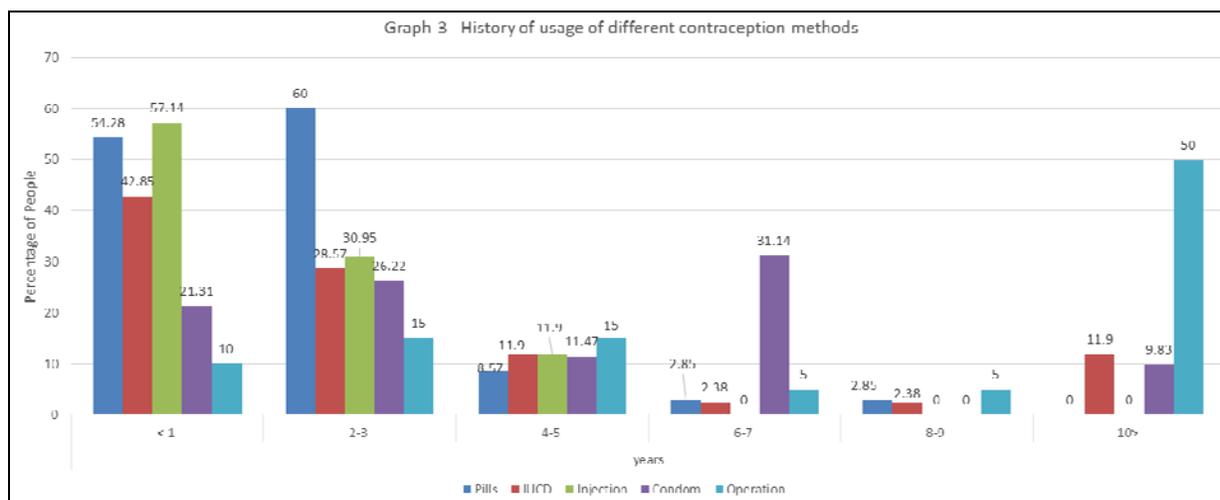
**3.4 History of usage of different contraception methods**

About 35/200 (17.50%) respondents were using Oral pills as contraception methods, 9/35 (54.28%) respondents were using it from less than a year duration, 21/35 (60.00%) respondents were using them till 2-3 years, 3/35 (8.57%) respondents were using them from last 4-5 years, 1/35 (2.85%) respondents were using them from last 6-7 years, 1/35 (2.85%) respondents were using them from last 8-9 years. About 42/200 (21.00%) respondents were using IUCDs as contraception methods. 18/42 (42.85%) respondents were using it from less than a year duration, 12/42 (28.57%) respondents were using them till 2-3 years, 5/42 (11.90%) respondents were using them from last 4-5 years, 1/42 (2.38%) respondents were using them from last 6-7 years, 1/42 (2.38%) respondents were using them from last 8-9 years while 5/42 (11.90%) respondents were using them from last 10 years. About 42/200 (21.00%) respondents were using Injections as contraception methods. 24/42 (57.14%) respondents were using it from less than a year duration, 13/42 (30.95%) respondents were using them till 2-

3 years, 5/42 (11.90%) respondents were using them from last 4-5 years, no respondent was reported who were using injectable contraceptives from more than last 5 years. About 61/200 (30.50%) respondents were using Condoms as contraception method. 13/61 (21.31%) respondents were using it from less than a year duration, 16/61 (26.22%) respondents were using them till 2-3 years, 7/61 (11.47%) respondents were using them from last 4-5 years, 19/61 (31.14%) respondents were using them from last 6-7 years, no respondents were reported using them from last 8-9 years while 6/61 (9.83%) respondents were using them from last 10 years. About 20/200 (10.00%) respondents operated themselves as contraception method. 2/20 (10.00%) respondents were using it from less than a year duration, 3/20 (15.00%) respondents were using them till 2-3 years, 3/20 (15.00%) respondents were using them from last 4-5 years, 1/20 (5.00%) respondents were using them from last 6-7 years, 1/20 (5.00%) were reported using them from last 8-9 years while 10/20 (50.00%) respondents were using them from last 10 years (Table-4) (Graph-3).

**Table 4:** History of usage of different contraception methods

Contraception Method	Years (%)						Total N (%)
	< 1	2-3	4-5	6-7	8-9	10<	
Pills	9(54.28)	21(60.00)	3(8.57)	1(2.85)	1(2.85)	0(0.00)	35(17.50)
IUCDs	18(42.85)	12(28.57)	5(11.90)	1(2.38)	1(2.38)	5(11.90)	42(21.00)
Injection	24(57.14)	13(30.95)	5(11.90)	0(0.00)	0(0.00)	0(0.00)	42(21.00)
Condom	13(21.31)	16(26.22)	7(11.47)	19(31.14)	0(0.00)	6(9.83)	61(30.50)
Operation	2(10.00)	3(15.00)	3(15.00)	1(5.00)	1(5.00)	10(50.00)	20(10.00)
Grand Total	66(33.00)	65(32.50)	23(11.50)	22(11.00)	3(1.50)	21(10.50)	200



### 3.5 Use of Contraception methods in relation to literacy level

About 40/200 (20.00%) respondents who were using contraceptives, were illiterate. Out of them 7/40 (17.50%) were using pills, 10/40 (25.00%) were using IUCDs, 12/40 (30.00%) were using Injections, 8/40 (20.00%) were using condoms while only 3/40 (7.50%) had operated for contraception. A total of 45/200 (22.50%) contraceptive users had their education level till 10<sup>th</sup> standard, out of them 6/45 (13.33%) were using pills, 13/45 (28.88%) were using IUCDs, 8/45 (17.77%) were using Injections, 13/45 (28.88%) were using condoms while 5/45 (11.11%) had operated for contraception. A total of 51/200 (25.50%) contraceptive users had their education level till intermediate

(12<sup>th</sup> standard), out of them 8/51 (15.68%) were using pills, 12/51 (23.52%) were using IUCDs, 10/51 (19.60%) were using Injections, 15/51 (29.41%) were using condoms while 6/51 (11.76) had operated for contraception. About 34/200 (17.00%) contraceptive users had undergraduate educational level, out of them 8/34 (23.52%) were using pills, 2/34 (5.88%) were using IUCDs, 2/34 (5.88%) were using Injections, 18/34 (52.94%) were using condoms while 4/34 (11.76) had operated for contraception. About 30/200 (15.00%) contraceptive users had graduate educational level, out of them 6/30 (20.00%) were using pills, 5/30 (16.66%) were using IUCDs, 10/30 (33.33%) were using Injections, 7/30 (23.33%) were using condoms while 2/30 (6.66%) had operated for contraception.

**Table 5:** Use of Contraception methods in relation to literacy level

Literacy Level	Contraception Method n (%)					Total n(%)
	Pills	IUCD	Injection	Condom	Operation	
Illiterate	7(17.50)	10(25.00)	12(30.00)	8(20.00)	3(7.50)	40(20.00)
Matric	6(13.33)	13(28.88)	8(17.77)	13(28.88)	5(11.11)	45(22.50)
Intermediate	8(15.68)	12(23.52)	10(19.60)	15(29.41)	6(11.76)	51(25.50)
Undergraduate	8(23.52)	2(5.88)	2(5.88)	18(52.94)	4(11.76)	34(17.00)
Graduate	6(20.00)	5(16.66)	10(33.33)	7(23.33)	2(6.66)	30(15.00)
Grand Total	35(16.5)	42(21.00)	42(21.00)	61(30.50)	20(10.00)	200

### 3.6 Use of Contraception methods in relation to age groups

In age group 16-20 years about 15/200 (7.50%) respondents were using contraceptives, out of which 5/15 (33.33%) were using Oral pills, were using injections, 4/15 (26.66%) were using Condoms while no respondents of IUCDs and Operated organs were reported. In age group 21-30 years about 74/200 (37.00%) respondents were contraceptive users, out of them 11/74 (14.86%) were using Oral pills, 19/74 (25.67%) were IUCDs users, 19/74 (25.67%) used injections, 22/74 (29.72%) were using Condoms while 3/74 (4.05%) respondents had operations for contraception. In age group 31-40 years 97/200 (48.50%) respondents were found

contraceptive users out of them 19/97 (19.58%) were using Oral pills, 19/97 (19.58%) were IUCDs users, 16/97 (16.49%) used injections, 32/97 (32.98) were using condoms while 11/97 (11.34%) had operations for contraception. In age group 41-50 years 12/200 (6.00%) respondents were found contraceptive users out of them 4/12 (33.33%) were IUCDs users, 1/12 (8.33%) used injections, 3/12 (25.00%) were using condoms while 4/12 (33.33%) had operations for contraception. In age group 51< years only 2/200(1.00%) respondents were users of contraception methods. All of them i.e. 2/3(100.00%) had operations for contraception. No one was reported for any other contraception method.

**Table 6:** Use of Contraception methods in relation to age groups

Age Groups	Contraception Method n (%)					Total n (%)
	Pills	IUCDs	Injection	Condom	Operation	
16-20	5(33.33)	0(0.00)	6(40.00)	4(26.66)	0(0.00)	15(7.50)
21-30	11(14.86)	19(25.67)	19(25.67)	22(29.72)	3(4.05)	74(37.00)
31-40	19(19.58)	19(19.58)	16(16.49)	32(32.98)	11(11.34)	97(48.50)
41-50	0(0.00)	4(33.33)	1(8.33)	3(25.00)	4(33.33)	12(6.00)
51<	0(0.00)	0(0.00)	0(0.00)	0(0.00)	2(100.00)	2(1.00)
Grand Total	35(17.50)	42(21.00)	42(21.00)	61(30.50)	20(10.00)	200

### 3.7 Use of Contraception methods in relation to income of respondents

About 56/200 (28.00%) respondents had their monthly income <10000 PKR, out of them 8/56 (14.28%) were using Oral pills, 18/56 (32.14%) were using IUCDs, 12/56 (21.42%) were using Injections, 18/56 (32.14%) were using condoms while no case of operation was observed. A total of 19/200 (9.50%) respondents had their monthly income 10000-20000 PKR, out of them 3/19 (15.78%) were using Oral pills, 2/19 (10.52%) were using IUCDs, 8/19 (42.10%) were using Injections, 5/19 (26.31%) were using condoms while 1/19 (5.26%) case of operation was observed. A total of 27/200 (13.50%) respondents had their monthly income 21000-30000 PKR, out of them 2/27 (7.40%) were using Oral pills, 10/27 (37.03%) were using IUCDs, 6/27 (22.22%) were using Injections, 7/27 (25.92%) were using condoms while 2/27 (7.40%) had operated for contraception. A total of 29/200 (14.50%) respondents had their monthly income 31000-40000 PKR, out of them 5/29 (17.24%) were using

Oral pills, 5/29 (17.24%) were using IUCDs, 9/29 (31.03%) were using Injections, 9/29 (31.03%) were using condoms while 1/29 (3.44%) had operated for contraception. About 30/200 (15.00%) respondents had their monthly income 41000-50000 PKR, out of them 6/30 (20.00%) were using Oral pills, 6/30 (20.00%) were using IUCDs, 7/30 (23.33%) were using Injections, 8/30 (26.66%) were using condoms while 3/30 (10.00%) had operated for contraception. About 20/200 (10.00%) respondents had their monthly income 51000-60000 PKR, out of them 6/20 (30.00%) were using Oral pills, 1/20 (5.00%) was using IUCDs, 8/20 (40.00%) were using condoms while 5/20 (25.00) had operated for contraception. No Injection user was reported in this income group. About 19/200 (9.50%) respondents had their monthly income 61000<PKR, out of them 5/19 (26.31%) were using Oral pills, 6/19 (31.57%) were using condoms while 8/19 (42.10%) had operated for contraception, no respondent of IUCDs or Injection user was reported in this group (Table-7).

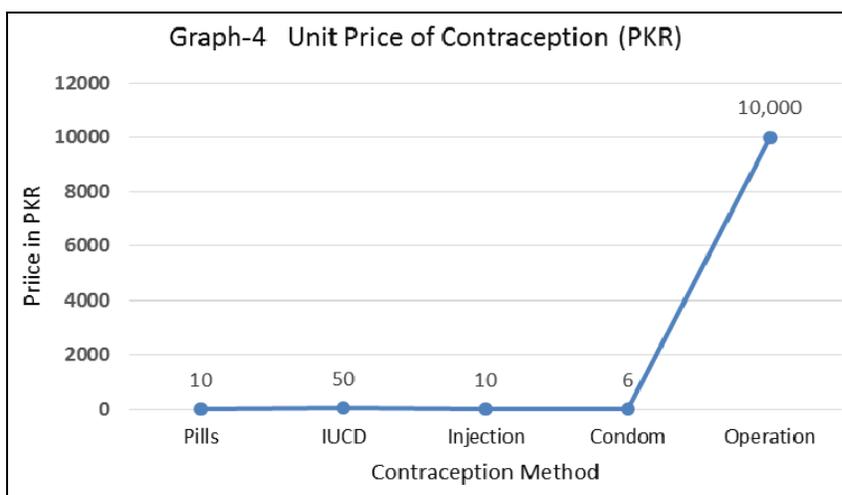
**Table 7:** Use of Contraception methods in relation to income of respondents

Monthly Income (PKR)	Contraception Method n (%)					Total N (%)
	Pills	IUCD	Injection	Condom	Operation	
<10000	8(14.28)	18(32.14)	12(21.42)	18(32.14)	0(0.00)	56(28.00)
10000-20000	3(15.78)	2(10.52)	8(42.10)	5(26.31)	1(5.26)	19(9.50)
21000-30000	2(7.40)	10(37.03)	6(22.22)	7(25.92)	2(7.40)	27(13.50)
31000-40000	5(17.24)	5(17.24)	9(31.03)	9(31.03)	1(3.44)	29(14.50)
41000-50000	6(20.00)	6(20.00)	7(23.33)	8(26.66)	3(10.00)	30(15.00)
51000-60000	6(30.00)	1(5.00)	0(0.00)	8(40.00)	5(25.00)	20(10.00)
61000-<	5(26.31)	0(0.00)	0(0.00)	6(31.57)	8(42.10)	19(9.50)
Grand Total	35(17.50)	42(21.00)	42(21.00)	61(30.50)	20(10.00)	200

**3.8 Unit Price of contraception**

In Pakistan contraception methods are very inexpensive, as most of the government and non-government organizations allow local population to get contraceptives free of cost. A single packet of Oral pills that are to be used for whole

month costs about 10 PKR, IUCDs costs 50 PKR per device, one injection cost about 10 PKR while a single condom cost about 6 PKR. Operative contraception method is considered to be very costly but an average cost of this method is about 10,000 PKR.



**4. Conclusions and Discussions**

People with don't have any children do not use contraceptives. A high usage of contraceptives was observed in urban areas. Where use of injections was 38/123 (30.89%) while use of condoms was 31/123 (25.20%) which was far more than any other contraceptive method. Operation methods were only observed in urban areas as this method is very costly, the people of rural areas are often unable to afford such costly methods for contraception. Use of IUCD was high in rural areas i.e. 34(44.1%) as compare to urban areas i.e. 8(6.50%). A large number i.e. 99/200 (49.50%) of contraceptives users were those who have their desired number of children while a least number i.e. 18/200 (9.00%) of contraceptive users were those who had abnormalities in their children so they decided not to have any more children. In this study it was revealed that IUCDs, Condoms and Operations were the contraception methods which were used more than last 10 years. They were considered to be more enduring contraception methods. Injections are the most common contraception method which is most frequently used from last 1 year. Injections and condoms are the contraception methods which are more often used by people with intermediate and graduate literacy level. While IUCDs and Injections are being chosen by most of the illiterate respondents of this study. Most of the People with high literacy level refuse to choose operation method for contraception because in future if they need a child they can easily revert and can conceive without any costly operative method. An elevated level of contraceptive users was

observed in age group 31-40 years i.e. 97(48.50%) while no contraceptive users were reported in age group 51< years except only 2(1.00%) cases who already had operations for contraception. As in this old age a female has a very less chance to conceive a baby. As this age is considered to be menopause age, a female is unable to give birth. A large comparative number of contraceptive users (28.00%) were those who had low monthly income i.e. <10000 PKR. Operative contraception method was mostly used by people with high income as they are able to afford such a costly surgical method. IUCDs and injections were not being used by people with high income. A large number of IUCDs and Condoms were being used by people with low income. Operation is the least used contraception method while IUCDs and Condoms are most frequently used methods for contraception. Operative contraception method is costly that is why many people with low income choose other contraception methods which are inexpensive and easy to use.

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