**ORIGINAL ARTICLE** 

## ASSOCIATION OF CONTRACEPTIVE BARRIERS WITH SOCIO DEMOGRAPHIC VARIABLES

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#### ABSTRACT

**Background:** In Pakistan population explosion is an important issue. Objectives of this study were to determine frequency of contraception users, frequency of different types of contraceptives used and association between contraceptive barriers and socio demographic variables.

**Materials & Methods:** This comparative cross-sectional study was conducted at Department of Community Medicine, Gomal medical College, D.I.Khan, Pakistan from 1st February to 31st March 2019. Sample size was 100. Sampling technique was consecutive. Only married women of reproductive age having already one child at least were included in the sample. Sociodemographic variables were age, residence, education, family income, family type, awareness of contraception, willingness for contraception, use of different contraceptive methods, age of marriage, age at first pregnancy and number of live children. Research variables were personal, religious, cultural and service barriers to use of contraception. All variables were recorded on categorical scale, whereas age of marriage, age at first pregnancy and number of live children were numerical variables expressed as mean and standard deviation. Chi-square test of association was performed.

**Results:** Out of 100 respondents, 49% were from 15 to 30 years. Family income was <30,000 PKR for 68%. Urban were 65% and family type was nuclear for 30%, 91% respondents were aware of contraception, 69% was contraceptive user couples frequency, 8.6% couples used barrier method, 12% had personal barrier to contraceptive use. Residence was associated with service barrier. Association was also found between religious barrier of contraceptive use and education.

**Conclusion:** Service barrier to contraceptive use was associated with residence and religious barrier was associated with education.

KEY WORDS: Contraception; family planning services; maternal mortality; infant mortality; Population.

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### INTRODUCTION

All the countries of the world have reached a consensus that the right to health includes women's empowerment regarding their decision whether, when and how many children they want to have.<sup>1</sup> This can be achieved through adoption of family planning practices. Family planning is one of the four pillars of safe motherhood initiative.<sup>2</sup>

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Dr. Samina Qadir Associate Professor Department of Community Medicine Gomal Medical College, D.I.Khan, Pakistan. E-mail: samina\_q@yahoo.com Date Submitted: 29-04-2019 Date Revised: 19-05-2019 Date Accepted: 22-05-2019 According to WHO, family planning is defined as a way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitude and responsible decision by individual and couples, in order to promote health and welfare of family, group and these contributing effectively to the social development of country.<sup>3-6</sup> Contraception means all the ways, permanent or temporary, adopted to prevent conception following intercourse.<sup>7</sup>

Family planning has multiple benefits of spacing pregnancy, avoiding unwanted births, deciding timing of wanted pregnancy, deciding family size, protecting against STDs, reducing adolescent pregnancy, empowering people and enhancing education opportunities for women. In this way it not only contributes a lot in improving mother and child health, reducing maternal and infant mortality but by controlling population size, it also contributes to social and economic development of country.8,9

Total fertility rate is largely affected by so many determinants. Age at marriage and age at first child birth and use of contraceptives are among those.<sup>10</sup>There are many barriers that determine adoption of contraception by target couples. These are lack of knowledge, desire for more children, son preference, fear of side effects and complications, religious factors, problem of accessibility of services, dominant role of husband in decision making, lack of women autonomy, taboos and myths.<sup>11</sup>

Worldwide 214 million women of reproductive age have unmet need for contraceptive.<sup>8</sup> Globally Contraceptive prevalence rate is 64% but in low income countries it is 40% to lowest 33% in Africa. To attain health related MDGs, world poor countries need another 120 million users of modern contraceptives by 2020.<sup>1</sup>

Pakistan is 6<sup>th</sup> most populous country in the world with a population of 21 crore. Total fertility rate is 2.62 children per woman and contraceptive prevalence rate is 39.3% according to a report published in 2018. CPR is lowest is in the region except for Afghanistan. It also has high unmet need of contraception that is 24%. Population control is a challenge Pakistan is facing right now. Rate of contraception is low and in the scenario of troubled economy of Pakistan, rapid population growth is really a big problem.<sup>12-14</sup>

As there is knowledge gap regarding contraception barriers in our local population, the rationale of the study was to help us in gathering primary data to fill the gap. Objectives of this study were to determine frequency of contraception users, frequency of different types of contraceptives used and association between contraceptive barriers and socio demographic variables.

#### **MATERIALS & METHODS**

This comparative cross-sectional study was conducted at Department of Community Medicine, Gomal medical College, Dera Ismail Khan, Pakistan from 1<sup>st</sup> February to 31<sup>st</sup> March 2019. Sample size was 100 using Rao soft sample size calculator.<sup>16</sup> Sampling technique was consecutive. Only married women of reproductive age having already one child at least were included in the sample. Women having secondary infertility or who were not living with husbands for the last 6 months or non-willing for participation in study were excluded. Data collecting tool was questionnaire. Informed consent was taken and confidentiality maintained.

Sociodemographic variables were age, residence, education, family income, family type, awareness of contraception (yes, no), willingness for contraception (husband, in-laws), use of different contraceptive methods, age of marriage, age at first pregnancy and number of live children. Age groups in years had three categories; 15-30, 31-40, 41-49. Residence had 2 attributes; rural and urban. Education had four attributes: illiterate, school level, college level, university level. Family income had 4 attributes; PKR per month <30000, 31000-70000, 71000-150000 and >150000. Family type had two attributes; nuclear and joint. Our research variables were personal, religious, cultural and service barriers to use of contraception. All variables were recorded on categorical scale and expressed as frequency and percentages whereas age of marriage, age at first pregnancy and number of live children were numerical variables expressed as mean and standard deviation. Chi-square test of association performed at alpha .05 significance level to see any association among different socio-demographic groups and barriers of contraception. SPSS version 19 was used for statistical analysis.

### RESULTS

Contraceptive user couples frequency was 69 (69%). Barrier method was used by 8.6% of couples. Out of 100 respondents, 49 (49%) were from 15 to 30 years, 46 (46%) were from 31 to 40 years and 5 (5%) were from 41 to 49 years. Out of 100, 39 (39%) women were illiterate, 37 (37%) had school level education, 14 (14%) had college level education and 10 (10%) had university level education. Family income was PKR <30,000 for 68 (68%), 22 (22%) had from 31000-70,000, 7 (7%) had from 71000-150000 and 3(3%) had >150000. Urban were 65 (65%) and rural were 35 (35%). Family type was nuclear for 30 (30%) and 70 (70%) had joint family system. Awareness of contraception was 91%. Willingness for contraception was 86% by husbands and 79% by in-laws. Mean age of marriage was 20.2 years with SD of 1.98 years. Mean age at first pregnancy was 21.6 years with SD of 4.26 years. Mean number of live children was 3.6 with SD of 1.98.

Out of 100 respondents 91 (91%) respondents were aware of some methods of contraception, 78 (78%) were willing for contraception and 22 (22%) were non-willing for contraception. Out of 100 respondents, 12 (12%) had personal barrier to contraceptive use, 27 (27%) had religious barrier, 14 (14%) had to face cultural barrier and only 17 (17%) had service barrier.

Socio demographic variables were tested for any significant association with all the four types of barriers by using chi-square test of association. Service barrier was associated with residence with a chi-square value of 7.826 and p value of .020. Association was also found between religious barrier of contraceptive use and education with p value of .01 and chi square value of 11.34 at 5% significance level. (Table 1&2)

S. No.	Residence	Service barrier to contraceptive use		Row total	d.f.	χ²	P-value
		Yes	No				
1	Rural	17	18	35	1	7.826	.020
2	Urban	0	65	65			
Column total		17	83	Grand total =100	Chi-Square test of association		

# Table 1. Association of service barrier of contraceptive use with residence among married women of reproductive age in D.I.Khan, Pakistan (n=100)

Table 2. Association of religious barrier of contraceptive use with education among married women of reproductive age in D.I.Khan, Pakistan (n=100)

S. No.	Education level	Religious barrier to contraceptive use			d.f.	χ²	P-value
		Yes	No	Row total			
1	Illiterate	25	12	39			
2	School	2	35	37	3	11.34	.01
3	College	0	14	14			
4	University	0	10	10			
Column total		27	73	Grand total =100	Chi-Square test of association		

## DISCUSSION

In a study by Begum KS, mean age at marriage was 18.24 years and mean age at first birth was 21.46. In her study knowledge about contraception was good because 100% respondents were aware of contraception whereas in our study mean age at marriage was 20.2 years and mean age at first pregnancy was 21.6 years and marriage age and 91% were aware about some methods of contraception.<sup>6</sup>

In Begum KS study 33.3% couples were using barrier methods of contraception while in a study done in Bangladesh 10.6% couples used barrier methods of contraception. Our results are similar to study of Bangladesh, here 8.6% couple used barrier methods as husbands did not approve this method much. In study by Nigar A use of barrier method was 26.8% higher than our study.<sup>9</sup>

Most frequent barrier women had to face was cultural barrier according to Khan AW study. Husband and in-laws opposition and husband opposition was also major hurdle. <sup>15</sup> But in our study majority of husband and in laws were supportive of contraception with 86% and 79% respectively. In a study by Casterline JB, 69% husbands approved of family planning and 50% in-laws also approved contraception.<sup>12</sup>

In a study by khan AW religious barriers were significant as majority considered family planning a sin.<sup>15</sup> In our study 34% of women considered family planning a sin. Religious concerns were shown by 22% in Casterline study.<sup>12</sup> Results were different from our study where although 34% considered it a sin but practically religion was barrier for 27% as rest of

respondents were ready to use contraception even if it was sin in their opinion. Our city is conservative with majority of people under the influence of local religious people who consider contraception is against divine will. Religious barrier was significantly associated with education of the respondents. In a study done in Karachi poverty, illiteracy and religious misconceptions were responsible for low frequency of contraceptive use.<sup>3</sup>

### CONCLUSION

Service barrier to contraceptive use was associated with residence and religious barrier was associated with education.

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### **AUTHORS' CONTRIBUTION**

SO

The following authors have made substantial contributions to the manuscript as under:

Conception or Design:

Acquisition, Analysis or Interpretation of Data:

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Manuscript Writing & Approval:

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All the authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



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