

Trends in Family Planning Practices of Women in Child Bearing Age: A Community Based Survey in Northern Peri-Urban Areas of Lahore

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Abstract

Background: Pakistan being the sixth most populous country in the world needs to control its population explosion as well as understand the importance of family planning practices and its inherent relationship with improved maternal health.

Objectives: This study was conducted with the aim to assess the family planning practices in the Northern Peri-Urban areas of Lahore, Pakistan.

Subjects and Methods: Community based survey was conducted on 852 households by interviewing married females aged 15 – 49 years with the help of a pretested structured questionnaire. Every third household was selected by employing systematic random sampling.

Results: Mean age of the women was 19 ± 3.54 years with mean number of pregnancies 4.05 ± 2.50 . Contraceptive prevalence rate was 36%. Most preferred method of contraception was tubal ligation 37% and condoms 29% vasectomy being the least preferred. Tubal ligation 10%, condoms 6.5% and intrauterine contraceptive device 2.6% was the choice for females aged 15 – 20 years. Women having four to six pregnancies were opting for tubal ligation 10.3% (p -value < 0.0001).

Conclusion: In the Northern Peri-urban areas of Lahore, contraception is being practiced at the same rate as in the rest of the province. It is pertinent for improved maternal health to ensure maximum utilization of family planning services within this community.

Key words: Family planning, trends, peri-urban, Lahore.

Introduction

Maternal and child health needs to be the most pertinent and targeted domain in countries like Pakistan as the mortality rates pertaining to it are on the rise, maternal mortality ratio being 178/100,000 in 2015-16, despite various measures they are still not under control.^{1,2} Maternal health can be improved by using different strategies, community based interventions encompassing family planning have been playing a significant role,

but developing countries still need to strengthen their approach.³ According to Census 2017, females in Punjab constitute a total of 54,046,759⁴ having a contraceptive prevalence rate of 38.9%.⁵ Pakistan faces the dilemma of unmet need of contraception which is estimated to be 20% according to the Pakistan Demographic and Health survey 2012-13.⁶ It is imperative to develop strategies not only to control the population explosion, but also to cater for the reduction in maternal morbidities and mortalities.³

Despite many efforts, contraception usage is barricaded by cultural, social, political and economic factors.⁷ As mentioned in studies unmet need for contraception can be attributed to lack of knowledge regarding family planning methods, past experiences with different methods, dissatisfaction, family and social disapproval.⁸ The role of both partners cannot be denied in the acceptance and practice of contraception of females especially in countries like Pakistan. Gohar and colleagues (2017) in their study highlighted that knowledge and prevalence regarding family planning practices in males was deficient affecting the attitudes and

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Authors Contribution

NO & IM conceptualized the project, data collection, literature search, statistical analysis, drafting, revision and the writing of the manuscript.

decision making of themselves and their wives respectively.⁹

Rural population and lack of education is a major cause of deficit of family planning usage despite the implementation of family planning programs since the early 60's in Pakistan. Evidence states that rural urban and education level contrast in both genders contributes to the reduced awareness and low contraceptive prevalence rate. In addition, it was observed that rural area inhabitants were concerned about the accessibility and availability of services and some had trust issues with the deliverers.¹⁰

Pakistan being a developing country and the sixth most populous country in the world,¹¹ needs to strengthen its family planning program for which major strategies are being applied, but still the desired results have not been achieved. This imploring that we need to further explore the barriers, one of the most important being the practices within the community. It is the need of the hour that trends in family planning practices be assessed so that the gap of unmet need can be filled ultimately leading to improved maternal child health with achievement of targets of millennium and sustainable development goals.¹² The researchers conducted this study with the aim to assess the trends in the family planning practices in the Northern Peri-Urban areas of Lahore, Pakistan.

Subjects and Methods

A community based survey was conducted to assess the family planning practices in the Northern Peri-urban areas of Lahore including the villages of Malikpur, Bheni, Talwara, Jandiala, Icho Gill and Awan Dhain Wala, Union Council 176 within a period of three months. The estimated population of these villages was 15,000, a total of five percent of the population was considered within the sample amounting to be 750, considering a 15% non-response rate and feasibility the calculated sample

size was 862. Systematic random sampling was employed, every third house was selected and married females of child bearing age (15 – 49 years) having at least one child were enrolled in the study. Informed consent was taken from the participants. In addition, formal permission of head of the household, parents or husbands for females of less than 18 years of age was taken. Data pertaining to socio-demographic profile and usage of family planning practices was obtained. A pretested structured questionnaire translated in local language was used to collect the data. The community was benefitting from the outreach services of family planning being provided by the government which were responsible for the source of information regarding family planning. SPSS version 20 was used to enter and analyze the data. The test of significance used was chi-square for comparison between different variables (Table-1 & 2) at 95% confidence interval (p -value of <0.05 was taken as significant).

The study was approved by Institutional Review Board (approval # FMH-09-2017-IRB-296-M) of Fatima Memorial Hospital, Lahore before starting the study.

Results

This survey was conducted on a total of 852 households inhabited by 5056 people, 852 married females fulfilling the inclusion criteria were enrolled in this study. Mean age at the time of marriage was 19 ± 3.54 years. A total of 599 (70.3%), females belonged to the age group of 15-20 years, 206 (24.2%) to 21-25 years and 47 (5.5%) were more than 25 years of age. Monthly income of 746 households was more than 15,000 rupees compared to 106 having less than 15,000 rupees. The mean number of pregnancies were 4.05 ± 2.50 with 358 (42%) having 1-3, 277 (32.5%) 4-5 and 217 (25.4%) >6 pregnancies. Live births were 941 and abortions 940.

Table 1: Relationship between age and contraceptive practices of women.

Age in years	Contraceptive Practices IUCD		Chi Square	p-value
	No	Yes		
15 – 20	576 (96.2)	23 (3.8)	1.879	0.391
21 - 25	198 (96.1)	8 (3.9)		
>25	47 (100)	0		
<i>Hormonal Contraceptives</i>				
15 – 20	595 (99.3)	4 (0.7)	13.63	0.001
21 - 25	204 (99)	2 (1.0)		
>25	44 (93.6)	3 (6.4)		
<i>Tubal Ligation</i>				
15 – 20	512 (85.5)	87 (14.5)	2.278	0.320
21 - 25	184 (89.3)	22 (10.7)		
>25	42 (89.4)	5 (10.6)		

Table 2: Total number of pregnancies and contraceptive practices of women.

Number of Pregnancies	Contraceptive Practices IUCD		Chi Square	p-value
	No	Yes		
1-3	350 (97.1)	8 (2.2)	13.76	0.001
4-5	261 (92.2)	16 (5.8)		
>6	197 (94.2)	20 (9.2)		
<i>Hormonal Contraceptives</i>				
1-3	355 (99.2)	3 (0.8)	0.51	0.741
4-5	273 (98.6)	4 (1.4)		
>6	215 (99.1)	2 (0.9)		
<i>Tubal Ligation</i>				
1-3	333 (93.0)	25 (7.0)	23.2	0.000
4-5	233 (84.1)	44 (15.9)		
>6	173 (79.7)	44 (20.3)		
<i>Condoms</i>				
1-3	334 (93.3)	25 (7.0)	14.95	0.0006
4-5	232 (83.8)	45 (16.2)		
>6	188 (86.6)	29 (13.4)		

A total of 104 women were pregnant at the time of the survey, out of which 97 (93.3%) pregnancies were planned while 7 (6.7%) resulted due to failure of contraception. The survey witnessed the use of contraception in 307 females with a contraceptive prevalence rate of 36% (Table-3).

Table 3: Demographic, obstetrical and contraceptive profile of women. (n=852)

Age (years)	Frequency	Percentage
15 – 20	599	70.3
21 - 25	206	24.1
>25	47	5.5
<i>Total No of Pregnancies</i>		
1 – 3	358	42.0
4 - 5	277	32.5
>6	217	25.4
<i>Pregnant</i>		
Yes	104	12.2
No	748	87.8
<i>Contraception</i>		
Yes	307	36.1
No	545	63.9
Total	852	100
<i>Contraceptive Prevalence Rate</i>		36%

Different methods of contraception were being used with tubal ligation and condoms being the most preferred method in 114 (37%) and 89 (29%) respectively while vasectomy 2 (1%) being the least preferred choice for contraception (Figure).

It was observed that majority of the females including 170 (55%) having the age 15-20 years were practicing contraception compared to 55 (18%) of 21-25 years and 9 (3%) >25 years (p -value =0.487). Women of the age group of 15 - 20 years were mostly practicing tubal ligation 87 (14.5%), condoms 56 (9.0%), intrauterine contraceptive devices 23 (3.8%), hormonal pills 4 (0.7%). Similarly

condoms 23 (11.0%) and tubal ligation 22 (10.7%) being the most preferred methods in women aged 21 -25 years (Table-2). Tubal ligation was the most commonly opted method, in women having 4 - 6 pregnancies 44 (20.2%), (p -value <0.0001) (Table-3).

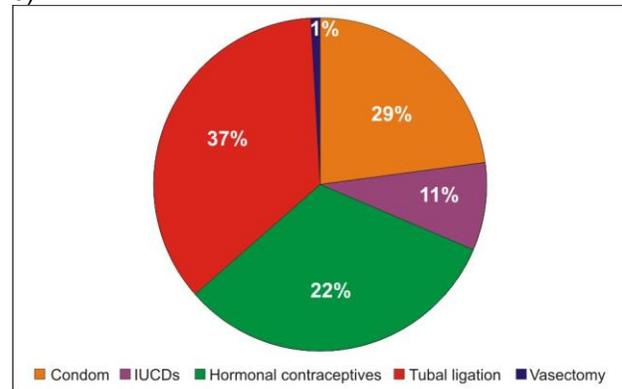


Figure: Relationship between Age and contraceptive practices of women.

Discussion

Pakistan faces the dilemma of population explosion¹³ thus making it imperative to understand the importance of family planning practices and its inherent relationship with improved maternal health. The current survey witnessed the family planning practices in the Northern Peri-Urban areas of Lahore. Overall, contraceptive prevalence rate of 36% was observed in the Northern Peri-Urban areas of Lahore in the current survey which is reflective of the overall estimated contraceptive prevalence rate of Lahore 38%.⁵ This highlights the fact that the government is involving all areas within the family planning program umbrella but still a lot of gaps need to be identified so as to achieve the

desired goals for which further research needs to be done. This study has highlighted an important aspect in women found to be pregnant during the survey; majority had planned pregnancies compared to failure to contraception contra indicatory the findings of a study in which half of the pregnancies reported were unplanned and attributed to desire for male child and failure of contraception.¹⁴ This can be considered as an important breakthrough indicating a change in the behavior of the community.

Average age of the women interviewed was 19 ± 3.54 years with most of them belonging to the age group 15-20 years and having more than three children, contrary to a study conducted in Karachi mean age of the women was 29 ± 7.2 majority belonging to the age group of 21 – 30 years with a parity of more than five children.¹⁵ Another study reported an average age of 15 ± 2.7 with parity of more than four children.^{2,16} These differences can be attributed to different regions or areas may be due to trends of early marriages. There is a dire need to strengthen the family planning programs with special emphasis on the average family size.

Current study reports that well known methods of contraception were being practiced and adopted by the general public with tubal ligation and condoms being the most widely used methods. Many studies support the findings, tubal ligation being the most preferred choice followed by condoms, intra uterine contraceptive devices and hormonal pills.¹⁷⁻¹⁹ Tubal ligation being a commonly preferred choice as it is suitable for large family sizes reported in most of the studies,¹⁹ but surprisingly in this study, this method was opted by all ages of females as they had more than four children even at very young ages highlighting the implications of trend of early marriages within our culture and society. This study observed that although not preferred but vasectomy was adopted thus highlighting the involvement of males in family planning definitely the need of the hour as corroborated by the findings of a study conducted in Nepal more than half of the respondents had opted for male sterilization.²⁰ These findings support the fact that males are being given an essential role in the family planning awareness campaigns as well as service provision.

Choice of contraception and age of the user are related, as observed in this study women aged 15 - 20 years preferred tubal ligation, condoms and intrauterine contraceptive device, while women aged 21 - 25 years preferred condoms and tubal ligation. Tubal ligation being the preferred choice as quoted in a study conducted in Pakistan.¹⁹ The use of condoms is a positive sign depicting the role of

men which is essential in countries like Pakistan as they are the major decision makers as far as fertility is concerned. Family size can be considered as a major determinant in selection of contraceptive method.²¹ The current study witnessed that women with four to six children opted for tubal ligation and condoms (p -value <0.0001 and 0.0006 respectively) as observed in other studies,^{19,20} although only significant association was determined for tubal ligation but these findings emphasize that there is need to focus on all age groups of women and their spouses to adopt methods according to their age and needs.

Family planning can be considered as major strategy to improve maternal health as it plays a major role in reduction of unwanted pregnancies thus lesser fertility leading to decreased maternal morbidity and mortality.²¹

In the Northern Peri-Urban areas of Lahore, contraception is being practiced at the same rate as in the rest of the province. Thus emphasizing the fact that all areas within the city of Lahore are being provided family planning services equally.

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