

Original Article

CURRENT CONTRACEPTIVE PREVALENCE RATE AND ITS CORRELATES IN AN MCH COVERED COMMUNITY OF LAHORE

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Objective: To determine the current Contraceptive Prevalence Rate (CPR) and its correlates among married women of childbearing age in an MCH covered community of Lahore city, Pakistan.

Methods: This cross sectional study was conducted during October to December 2017 in the catchment area of the MCH centers of Institute of Public Health Lahore. Out of 450 married women of childbearing age, 200 women were included, using simple random sampling technique. Data was collected by interviewing participants using a pre tested questionnaire. SPSS version 24.0 was used for analysis that included descriptive statistics and application of Chi Square test.

Results: The calculated CPR in study population was 41% whereas mCPR was 36%. Use of condoms was the most common contraceptive method. Age of wife, age of husband, number of children, knowledge about family planning, living sons, family planning counseling and discussion about family planning between spouses were significantly associated with contraceptive use. Reasons of not using contraceptives included fear of side effects, previous history of side effects, disapproval from husband, lack of information, disapproval from mother in law, infrequent sexual activity, history of latex allergy in either partner and breast feeding.

Conclusions: The current CPR is way below the expected target value of 50% for Pakistan suggesting that the efforts in terms of health education and behavior change communication need to be stressed. There is a scope to improve health education system, plan a structured counseling for family planning, decrease obstacles and address current issues to meet contraception needs.

Keywords: family planning, population welfare, contraception, CPR, mCPR, contraceptive methods.

Introduction

World population has rapidly increased to 7.5 billion and will reach 9.8 billion in 2050 due to high fertility, uncontrolled births and low contraceptive use.¹ Developing countries account for more than 95% of world's population because of high birth rate and young population. High population burden is an important public health challenge for developing countries.² It is difficult to provide quality life, education, basic needs, food, shelter and health care facilities to so many heads and mouths. Promotion and implementation of good and effective family planning program can combat poverty, control 32% of maternal and 10% of childhood deaths.^{3,4,5}

High fertility, unwanted, unintentional and unplanned pregnancy adds to the burden on maternal and child health.⁶ There is increased risk of maternal malnutrition, death, preterm delivery, complications during birth, low birth weight babies and perinatal deaths.^{7,8} The simple solution to so

many problems is child spacing and family planning which is an effective intervention.^{9,10}

Pakistan was created in 1947 and in 1950 its population was 37 million; now with the census of 2017 it has become the 5th most populous country with a population of 207.8 million.^{11,12} Family planning program was implemented in 1960s in Pakistan and since then its promotion is a priority but has not been able to create an impact on population control. Pakistan is in the phase of demographic transition; its mortality has declined but not the fertility. Fertility rate is 3.8 and is more among rural and less educated women. Pakistan has low contraceptive prevalence rate (35%) and high unmet needs (25%). There is limitation of informed choices for family planning methods.^{13,14}

In Pakistan, there is a clear imbalance between the population's needs and available resources for spacing and limiting childbirth as desired by a family. If population grows at the same pace it will exceed 295 million by 2050.^{3,4} Pakistan was a signatory to

Millennium Development Goals (MDGs) and now Sustainable Development Goals (SDGs). Government has prioritized SDGs; in 2012 Summit conference in London, Pakistan committed to the target of CPR up to 55% by 2020 which has now been revised to 50%. Present CPR of Pakistan (35.5%) is lowest in Asia, lower than the neighboring countries like Bangladesh, India, Nepal and Sri Lanka. Public and private sectors need to focus on target to achieve 50% CPR by 2020. Along with uncontrolled population, Pakistan is also facing the burden of high maternal, perinatal, neonatal, infant and child morbidity and mortality.^{15,16,17}

There are two MCH Centers in MCH department of IPH Lahore, Pakistan which provide promotive, preventive, curative and rehabilitative services to mothers and children of the area. Home visiting and registration of the families is done in catchment area to provide antenatal, natal and postnatal services to mothers, along with counseling regarding breast feeding, newborn care, child and adolescent health care and school health information through health education. Regular growth monitoring of children and Expanded Program on Immunization services are also available for children. Family planning services and awareness about STDs is a component of the services. The two MCH centers are meant for teaching, training and research of postgraduate students in addition to provision of services.

The purpose of present study was to find out the current Contraceptive Prevalence Rate (CPR) in the study population, factors affecting it and to comment on the reasons why contraception is not being adopted by the non-users in the study population. The study will help to evaluate the quality of the services provided by the MCH centers.

Methods

It was a cross sectional study which was conducted in the catchment area covered by the two MCH centers working in IPH Lahore between October and December 2017. The study population comprised of 450 married women of childbearing age that were fecund and sexually active. A sample of 200 women was selected using simple random sampling technique.

Data was collected with the help of anonymous, standardized and pre tested questionnaire. The investigator surveyed catchment area of IPH, accompanied by the lady health visitors working in

the area and interviewed the women.

Data was entered, cleaned and analyzed using SPSS version 24.0. Frequency tables were generated for all possible variables. Means and standard deviation were calculated for continuous data. Chi square was applied to find out association between categorical variables.

The study was approved by the ethical review committee of Institute of Public Health Lahore. Verbal consent was taken from the women and only those who were consenting were interviewed. All the data was kept confidential.

Results

Two hundred fecund and sexually active females participated in this study. About 73% were between 15-35 years of age, with mean age 31.23 ± 5.74 years. Ninety three percent were Muslims, 87.5% were housewives, 63% were living in joint family and 83.5% were literate. Regarding age of the husbands, 57% were 30-39 years of age with mean age 34.67 ± 6.02 years; 87.5% were literate. About two thirds of husbands (66.5%) were unskilled laborers and 68% were doing private jobs. Mean monthly income was $26,552.50 \pm 17,537.49$ Pak rupees. The age of 77.5% women at the time of marriage ranged between 15-24 years with a mean of 21.83 ± 3.41 years; duration of marriage was less than 10 years in majority of cases. About seventy six percent women experienced first child birth at the age range of 16 to 25 years with the mean age of 23.10 ± 3.52 years.

Fifty two percent women had two children or less while 76% families had at least one living son. Results showed that 80.4% participants had youngest child of less than or equal to five years and in 53.3% cases it was a girl; 77.5% families had never experienced child mortality. In 53.2% cases, inter-pregnancy gap was less than two years, and in 69% cases it was above two years with a mean of 2.96 ± 0.85 years. Sixty five percent women mentioned that ideal number of children should be more than 2. Forty one percent showed preference for a boy, 10% opted for a girl while 49% had no preference. Lesser proportion of wives (51%) had desire for more children compared to husbands (57%).

Majority of the respondents (87.5%) had knowledge about family planning; only 34.9% of the respondents knew about three or more methods of contraception. Forty one percent of the respondents were using contraception. Of the contraceptive users ($n=82$) 87.8% reported using modern methods (**Table 1**). Condom was the most frequently (48.8%) used method, followed by intrauterine contraceptive

one participant (1.2%).

Age of wife, age of husband, number of children, knowledge about family planning, living sons, family planning counseling and discussion about family planning between spouses were significantly associated with contraceptive use (Table 2 & 3).

The association of knowledge and attitude towards family planning with contraceptive use among married women of childbearing age is shown in (Table-4). Knowledge about FP methods, decision

Table-1: Frequency of contraceptive use among married women of childbearing age in the catchment area of MCH centers of IPH Lahore (n = 200).

Group A	Group B	Post-treatment
Contraceptive use		
Yes	82	41%
No	118	59%
Types of contraceptives used (n=82)		
Modern contraceptives	72	87.80%
Traditional contraceptives	10	12.19%

Table-2: Association between socio-demographic factors and contraceptive use among married women of childbearing age in the catchment area of MCH centers of IPH Lahore (n = 200)

Characteristics	Contraceptives Use		P-value
	Yes n %	No n %	
Age of wife			
=25 Years	05 (20)	20 (80)	0.022*
> 25 years	77 (44)	98 (56)	
Education of wife			
Illiterate	11 (33.3)	22 (66.7)	0.327
Literate	71 (42.5)	96 (75.5)	
Age of Husband			
20-35 Years	42 (33.3)	82 (66.1)	0.009
> 35 years	40 (52.6)	36 (47.4)	
Education of Husband			
Illiterate	12 (46.2)	14 (53.8)	0.567
Literate	70 (40.2)	104 (59.8)	
Family Income			
5,000-2500	52 (39.4)	80 (60.6)	0.520
26,000-100,000	30 (44.1)	38 (55.9)	

*Statistically significant

Table-3: Association between reproductive characteristics and contraceptive use among married women of childbearing age in the catchment area of MCH centers of IPH Lahore (n = 200).

Characteristics	Contraceptives Use		p-value
	Yes n %	No n %	
Duration of Marriage			
=10 Years	48 (36.9)	82 (63.1)	0.110
> 10 years	34 (48.6)	36 (51.4)	
Number of Children			
= 3	32 (30.8)	72 (69.2)	0.002*
> 3	50 (52)	67 (56.8)	
Gender Preference			
Boy	31 (37.8)	51 (62.2)	0.444
Girl	51 (43.2)	67 (56.8)	
Living Sons			
Yes	69 (45.4)	83 (54.6)	0.025*
No	13 (27.1)	35 (72.9)	
Wife's desire for more children			
Yes	29 (28.4)	73 (71.6)	.000*
No	53 (54.1)	45 (45.9)	
Husband's desire for more children			
Yes	37 (32.5)	77 (67.5)	0.005
No	45 (52.3)	41 (47.7)	

*Statistically significant

Table-4: Association between knowledge and attitude towards family planning and contraceptive use among married women of childbearing age in the catchment area of MCH centers of IPH Lahore (n = 200).

Characteristics	Contraceptives Use		p-value
	Yes n %	No n %	
Knowledge about family planing (FP) methods			
Yes	81 (46.3)	94 (53.7)	0.000*
No	01 (4)	24 (96)	
Decision making about FP method			
Husband	20 (29)	49 (71)	0.012*
Others	62 (47.3)	69 (52.7)	
Discussion between spouses about FP methods			
Yes	60 (48.8)	63 (51.2)	0.005*
No	22 (28.6)	55 (71.4)	

Family planning allowed in religion		
Yes	41 (46.1)	48 (53.9)
No	41 (36.9)	70 (71.4)
0.192		
Family planning counseling		
Yes	54 (54)	46 (46)
No	28 (28)	72 (72)
0.000*		

*Statistically significant

making about FP methods by husband or others, discussion between spouses about FP methods and family planning counseling had significant association with contraceptive use.

Reasons of not using contraceptives included fear of side effects, previous history of side effects, disapproval from husband, lack of information, disapproval from mother in law, infrequent sexual activity, history of latex allergy in either partner and breast feeding (Fig-1).

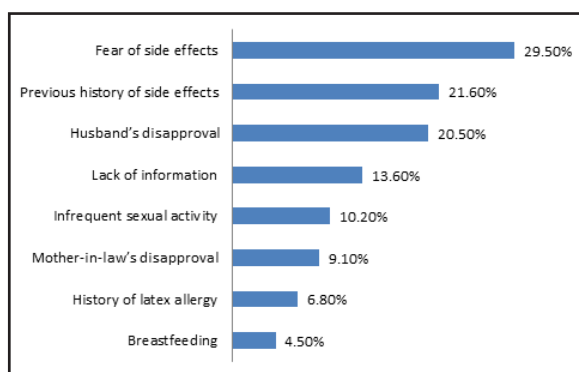


Fig-1: Reasons for not using contraceptives among married women of childbearing age in the catchment area of MCH centers of IPH Lahore (n = 200).

Discussion

This cross-sectional study was done to find out the current Contraceptive Prevalence Rate (CPR) in the study population, factors affecting it and to comment on the reasons why contraception is not being adopted by the non-users in the study population. Two Hundred married fecund women were interviewed through a pre-tested questionnaire, in which 82(41%) were using a contraceptive method;72 of these (87.8%) were using modern methods and 10(12.2%) were using traditional methods hence Modern Contraceptive Prevalence Rate (mCPR) was72(36%) which is comparable with Contraceptive Prevalence Report 2015-2016 released by Pakistan Bureau of Statistics

which showed that mCPR was 35.5% while mCPR for Punjab was 38.9%.¹⁴

Pakistan Demographic & Health Survey (PDHS) 2012-13 shows that CPR was 35% and mCPR was 26%.¹² BetterCPRin present study is because it is in the catchment area of MCH department of IPH from where regular home visits, family planning counseling and health education sessions are conducted. According to PDHS, more than a quarter are using modern methods and 9% are using traditional methods. PDHS gave a range for mCPR as low as 16% for Baluchistan to as high as 44% for Islamabad.¹⁴ In this study traditional method percentage is 12.2% as women have history of previous side effects, fear of side effects and non-availability of all types of methods at MCH center. However, a study done in Rawalpindi, Pakistan showed CPR of 56%;48.9% for modern methods and 7.1% for traditional methods; here the CPR is slightly higher because it addressed employed illiterate women working in schools, colleges, hospitals, offices and households. Another study in Rawalpindi showed CPR of 58.7% which is quite high because of convenient sampling done in hospitals' setting.²³⁻²⁵ Contraceptive prevalence was found to be 69.7% in Botswana; because of high prevalence of HIV/AIDS there is increased use of contraceptives.¹ CPR was 79% in Dangila Town, Awizone, Amhara,² 12.7% in Burkina Faso,² 80.4% in Nigeria,¹⁰ 48.4% in Shire-Enda-Slassie, Ethiopia,^{3,24} 26.25% in Eastern Sudan, 58.8% in Pondicherry India, 48.94% in North Kerala India and 59.4% in Mumbai slum area.^{6,24,26}

PDHS 2012-13 reports that 99% of women who ever got married know about at least one method of contraception while in this study 87.5% had this knowledge.^{12,15} The possible explanation of this difference could be an incomplete coverage of the studied population by the staff of MCH centers.

The present study showed significant association of contraceptive use with age of wife and husband, number of children, living sons, husband and wife's desire for more children, knowledge about family planning, discussion about family planning between spouses and family planning counseling.

Education of wife and husband has a positive role in contraceptive use. Current study showed that contraceptive use is more among literate women, although this difference is not significant. Education of the women increases accessibility and decision making power of women and is proved by many studies done in developed and developing countries.^{18,19} It is the need of time that special

attention be paid to a girl's education.^{10,12,16,17}

Regular health education sessions on family planning addressing women of childbearing age, during antenatal and postnatal period are the key to success. There is need to minimize the missed opportunities for family planning. Health care facilities providing maternal and child health services should have full range of contraceptive methods. Although the majority of the respondents knew at least one method of contraception, current contraceptive practice was far from the ideal.

Conclusion

The current CPR is way below the expected target value of 50% for Pakistan suggesting that the efforts in terms of health education and behavior change communication need to be stressed upon with new zeal and vigor. There is a scope to improve health education system, plan a structured counseling for family planning, decrease obstacles and address current issues to meet contraception needs.

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