ORIGINAL ARTICLE

Status of Modern Contraceptive use among Married Women in Lahore, Pakistan

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ABSTRACT

Aim: To assess the status of modern contraceptive use among married women in Lahore, Pakistan
Methods: A community based cross-sectional study was conducted among married women of reproductive age. Systematic random sampling technique was used to choose 851 study subjects. Before data collection, ethical clearance was obtained from the institution, and data was collected by t rained diploma nurses using pretested structured questionnaire and analyzed by SPSS, version 20. Logistic regression analysis was employed to identify the predictors of modern contraceptive use.
Result: Modern contraceptive prevalence rate among married women was 46.9%. Injectable were the most frequently used type of modern contraceptive method (62.9%) followed by intrauterine device (16.8%), pills (14%), Norplant (4.3%), male condom (1.2%) and female sterilization (0.8%).Multiple logistic regression model revealed that the need to have more children(AOR 95% CI: 9.27(5.43-15.84)), husband approval (AOR 95% CI: 2.82(1.67-4.80)) and husband-wife communication about contraceptives (AOR 7.32, 95% CI 3.60-14.86) were found to be an independent predictors for the use of modern contraceptives. There were no statistical significant differences between modern contraceptive use and other socio-demographic.
Conclusion: Modern Contraceptive use declined among married women in the district Lahore. The culture of publicly discussing the use of contraceptives and breaking the silence among the people demands substantial efforts.
Keywords: Married women, Modern Contraceptive

INTRODUCTION

Despite the introduction of modern contraceptives in Pakistan in 1976 contraceptive prevalence rate (29%) remained lowest (Central Statistical Authority, 2011). The country is the most populous in Asia with a total fertility rate of 4.85. The importance and benefits of slowing down population growth does not seem to get more attention by the government. Maternal and child health related problems are also rampant in the country. Unwanted pregnancy is among the prominent reproductive health related problems (USAID Health Policy Development, 2010) resulting unsafe abortion to be the most significant cause for maternal morbidity and mortality (WHO, 2004). Imagine how appropriate use of modern contraceptives would save the life of millions of women. But with this current rate of utilization, the country may not be successful in achieving one of the indicators of Millennium Development Goal 4 and

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5 unless all stakeholders able to exert substantial and multidimensional efforts collaboratively.

However, local government efforts complemented by strong support of NGOs working on reproductive health have not been able to bring the desired impact as demanded and expected. Much remains to be done in pinpointing the main local context contributing factors for the low utilization of modern contraceptives. Program implementers/ stakeholders need to make evidence-based decisions based on reliable information for action if service provision needs to be improved. Reproductive health strategies need to be tailored taking the potential risk factors of the local situation into consideration, otherwise, the trend may continue as such and further damages may occur. Thus, the need to improve modern contraception use within the country in one way or the other is a must to do assignment for all potential stakeholders.

Currently, family planning service is offered as free of charge in both governmental and NGO health facilities in Pakistan, including hospitals, clinics, health centers, and health stations. But, Pakistan is among countries with low contraceptive prevalence rate, with only 28%.

METHODS

This community-based cross-sectional study was carried out among married women aged 15 to 49 year in Lahore, Pakistan. Based on information obtained from the DHO, family planning services were available in most of the health institutions.

Sample size and sampling: EPI INFO was used to calculate the sample size using single population proportion formula based on an assumption that 29% of the modern contraceptive prevalence utilization in Pakistan, and design effect of 2 (The main reason of using design effect of 2 to reduce the variability as a result two stages that we passed from the District level to village and then household level). A total of 851 study subjects were selected from all married women lived at least for six month in the district using systematic random sampling technique. Simple random sampling technique was applied for the selection of representative community. In cases of selected households with more than one eligible study subjects, only one was chosen using a lottery.

Data collection: Pretested structured questionnaire composed of closed-ended questions was used to collect the data on variables related to socio-demographic characteristics, reproductive history, modern contraceptive use and other related factors. Female diploma-holding nurses were recruited as data collectors and collected the data through face-to-face interview after being trained for two days on interview techniques, data collection methods and confidentiality and privacy issues. Oral consent was obtained from each participant once the purpose, confidentiality and anonymity of data for this study is explained to each individual. Study subjects who were not available in the household during the first visit were revisited two more times before the women in the next household made the substitution. Two immediate supervisors were assigned to help the data collectors during the process of data collection. The questionnaire was developed and administered in the local language.

Data analysis: Data were entered and cleaned using EPI INFO software and then analyzed using SPSS 18. Univariate analysis was used to describe study variables accordingly whereas Bivariate regressions analysis with crude odds ratio (COR) along with the 95% confidence interval was used to verify the association between covariates and modern contraceptive use. Multivariate Logistic regression analysis on the other hand was carried out to determine the adjusted effect of each factor on modern contraceptive use. Variables with more than two categories were entered into the model in the form of two "indicator" contrasts comparing each category to the first group as reference. Variables that were statistically significant at the bivariate level were entered into a multivariate logistic regression analysis, and the strength was presented using odds ratios and 95% confidence intervals at the conventional P-value =0.05 level. The significance for variable removal and entry was set to 0.10 and 0.05 respectively. The Hosmer and Lemeshow test was used to check goodness-of-fit of the model as well.

RESULT

Of all 851 married women who responded to the questionnaire, the mean age of the respondents was 29.5±6.6 years. The proportion of illiterate respondents was as high as 22.3%, more than $3/4^{TH}$ of the respondents was from urban areas.

Reproductive history: the number of married women who ever experienced birth was eight times higher than their counterparts. The average number of living children per woman was 2.37. In addition, 498 (58.5%) of respondents had a desire to have one or more children in the future, and the average number of desired children was 3.54.Among the pregnant women, 21.6% reported as unwanted and resulted 5.3% abortion rate.

Fig.1. Married women's awareness about modern contraceptives in Lahore
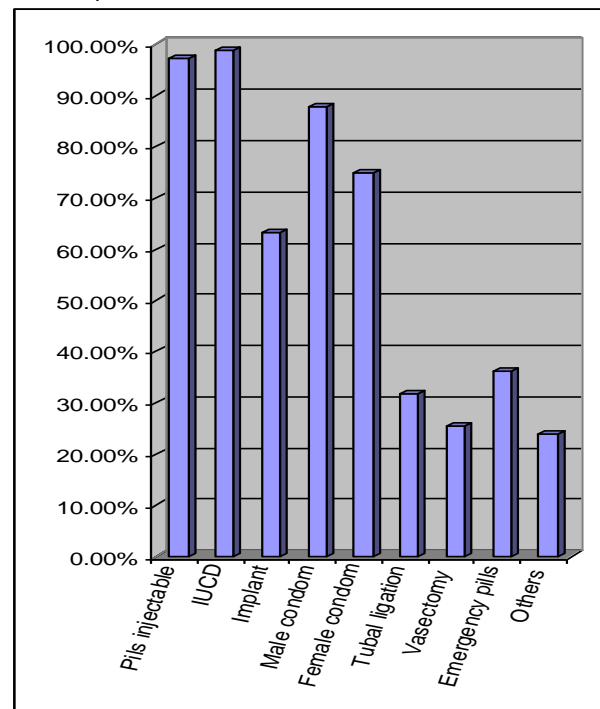
Married women's awareness about modern contraceptives: Of all respondents, 98.5%heard about either of the contraceptive methods. Their main sources of information were health professionals of the health centers (66.83%), radio

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programs (57.4%), television program (55.08%) and health extension workers (20.17%). The most commonly reported types of modern contraceptives were Injectable (98.9%) and pills (97.3%) In addition, child spacing (70.5%), prevention of unwanted pregnancy (63%), prevention of unwanted pregnancy (48.6%) and prevention of HIV/AIDS (12.3%) were mentioned as an advantage of modern contraceptive methods among study participants.

Table1. Socio-demographic characteristics of married women in Lahore

Variables	Frequency	%age
Rural		
Urban	652	76.6
Rural	199	23.4
Age		
15-19	21	2.5
20-24	174	20.4
25-29	273	32.1
30-34	159	18.7
35-39	145	17.0
40-44	62	7.3
45-49	17	2.0
Educational level		
Can't read & write	190	22.3
Read and write	77	9.0
Primary school	280	32.9
Secondary school	225	26.4
12+	79	9.3
Occupational status		
House wife/house work	495	58.2
Merchant	89	10.5
Farmer	53	6.2
Daily laborer	113	13.3
Government employee	71	8.3
Others	**30**	**3.5**
Average monthly income of the family		
≤ 300	30	305
301- 600	289	34
601- 927	137	16.1
≥ 928	212	24.9
Having radio/TV		
Radio only	293	34.4
TV only	80	9.4
Both radio and TV	324	38.1
None of them	154	18.1

Communication about modern contraceptives: Only one-fifth of married women discussed contraceptive related issues with the nearby health extension workers whereas the proportion of married women who discussed with their husbands was more than three-fourth of the total respondents. However, one-fourth of the respondents did not get approval to use contraceptives of their choice by their husbands.

Table 2: Reproductive history of married women Lahore

Variables	Frequency	%age
Previous delivery status		
Yes	758	89.1
No	93	10.9
Desired number of children		
1-2	141	28.3
3-4	270	54.2
≥5	87	17.5
Desire for more children		
Within two year	201	23.6
After two year	297	34.9
No more wanted	353	41.5
Desired number of children		
1-2	141	28.3
3-4	270	54.2
≥5	87	17.5
Have living child		
Yes	754	88.6
No	97	11.4
Number of living children		
1-2	424	56.2
3-4	287	38.1
≥5	43	5.7
Number of living children		
Male only	179	23.7
Female only	185	24.5
Both male and female	390	51.7
Current pregnancy status		
Pregnant	51	6.0
Not pregnant	800	94.0
Status of their current		
Wanted	40	78.4
Wanted later	9	17.7
Not wanted	2	3.9
Previous abortion status		
Yes	45	5.3
No	806	94.7
Way of abortion		
Health professionals	25	55.6
Traditional medicine	13	28.9
Others	7	15.5

Modern contraceptive use: more than half of the respondents, 448(52.6%) had ever used contraception. Three hundred ninety nine (46.9%) of them had been using during the time of the interview. Injectable 251(62.9%) were among the most frequently used type of contraceptives followed by IUD 67(16.8%), pills 56(14 %), Norplant, 17(4.3%) and male condom 5(1.2%), and the remaining 3(0.8%) used permanent type of modern contraceptive method namely female sterilization. Of the total current modern contraceptive users, 335(80.3%) were from the urban areas and the remaining 82(19.7%) were

from rural areas. Of currently married women who had ever used contraceptives, 49(10.9%) of them discontinued taking contraceptives. The total number of married women who never used contraceptives was 403(47.4%), and reasons for discontinuing and/or never using modern contraceptives were need more children (160), natural method (82), religion probation (56), husband disapproval (56) and health concern were the frequently mentioned

Relationship between socio-demographic characteristic of married women and use of modern contraceptives: Results of Bivarate analysis showed that education status of the women, average family income, educational status of the husband and having access to television and radio were statistically significant to the use of modern contraceptives unlike the place of residence, age, and educational status of the husband (P-value <0.05).

Relationship between children, communication and Knowledge related variables and use of modern contraceptives: As shown in table 5 below, all tested variables showed statistically significant associations with the use of modern contraceptives at a P-value <0.01. For example, women who didn't wish to have more children in the future were 6.42 times more likely to use modern contraceptive than women who wished to have children within two year (OR 6.42, 95% CI 4.21 - 9.78). Women who had three or four children were 2.45 times more likely to use modern contraceptive than women who had no children (OR 2.45, 95% CI 1.5– 3.99). Likewise, those women who discussed about contraceptives more than three times with their husbands were 14.89 times more likely to use modern contraceptive than women who didn't discuss family planning with their husband

Determinant factors: As presented in table 6, results of the multiple logistic regression model revealed that women's desire for more children, husband-wife discussion and approval of husband to use modern contraceptive were among the predictors of modern contraceptive use by married women. Married women who didn't desire more children at all were 7.75 times more likely to use modern contraceptive methods than those women who desire children within two year. Similarly, women who had discussion with their husband on contraceptives were more likely to use modern contraceptives than their counterparts. But, variables like educational status of the women and husband, residence, women and husband occupation and discussion with health extension workers including average monthly family income were not statistically significant to the use of modern contraceptives in the multiple logistic model.

DISCUSSION

The need to have a well organized and coordinated birth control program for Pakistan where its population increases alarmingly from time to time is an evident. Monthly income of a family was not found to be an independent predictor for modern contraceptive use despite available evidences in the literature indicating that modern contraceptive use is associated with income level both in developed(Chourn T., 2008) and developing countries(Ibnouf A., Van den born H et al., 2007). Women with high socioeconomic status are more likely to use modern contraceptive than those women with low socioeconomic status. However, in this study sufficient evidence depicting the relationship between income level and modern contraceptive use was not found when adjusted for other variables. The concept that having children is a gift from God may be the reason for the absence of statistical differences between women with higher and lower income level. Stakeholders have to work to change such attitudes and opinions across the district so that people start to appreciate the joy of having sensible family size.

Generally, with all the efforts of governmental and nongovernmental organizations including the provision of family planning services free of charge, the proportion of modern contraceptive users in the district remained low. This indicates the absence of breakthrough efforts and actions in the area of empowering women and modifying cultural beliefs. Women have to know that using modern contraceptives is their right like other basic human rights and needs.

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