Contraceptive and Abortion-Related Practices Among Females of Lower Income Group in District Lahore

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ABSTRACT

Introduction: Reproductive age females in Pakistan are still having poor access to adequate contraceptive information and difficulty in decision making, resulting in abortions many times. **Aims & Objectives:** To identify contraceptive and abortion-related practice among married reproductive age females of lower income group in District Lahore. **Place and duration of study:** Study was conducted in 30 union councils (UCs) of District Lahore, Pakistan in 2011-2016. **Material & Methods:** A cross sectional descriptive study was carried out on a sample of 210 married females of reproductive age in 30 UCs of District Lahore. 30 UCs were randomly selected out of 150 followed by random selection of one village/ward which was considered as a cluster and 7 females were recruited through convenience sampling in each cluster. Data was collected on contraceptive use, preferences, decision making and abortion-related practice and their associations with socio-demographics of these females. **Results:** The survey was carried out among 210 females with mean age 29 ± 5.28. 97.6% were Muslims, 23.3% were illiterate and 96.2% were housewives. Per capita per month income was ≤ PKR 3000 in 99 % of the respondents. 20% females used contraception. 39% women were delivered by untrained birth attendants, 95.7% females breast fed and amongst them only 15.7% fed for two years. 33(15.7%) of respondents had 48 abortions and amongst them 27% got it done by a Dai while female neighbors did it in 4.2% cases so a total of 31.2 % abortions were conducted at home. Place of abortion and delivery was decided by husbands in 87.4% respondents. Lower age and age at marriage were found to be associated with higher contraceptive use and abortions (P<0.001). **Conclusion:** Contraceptive use is very low and abortion-related practices are poor. Respondent's age and age at marriage are the determinants showing significant association with contraceptive use and abortion.

Key words: Reproductive behavior, contraceptive use, abortion-related practices, Contraceptive preferences, decisions

INTRODUCTION

Developing countries are facing huge economic and social issue of high fertility resulting in high population growth leading to increased poverty and low life expectancy.[1,2] Maternal mortality is reduced by 40% in developing countries owing to improved contraceptive prevalence rates during past 20 years by reducing unintended pregnancies.[3] Married women either using contraception or having an unmet need for contraception and family planning is projected to increase/grow in most developing countries.[4] It is critical to improve access to modern safe and reliable contraceptive services for eligible couples. Lower income is found to be associated with increased use of injectables and condoms while decrease in use of oral contraceptives.[5] Decision making by couples jointly is found to be a stronger predictor of contraceptive use than decision-making by women only.

Increased age, higher literacy, high parity and belonging to better income group are found to be associated with better contraceptive decision making.[6] Many social and cultural norms and expectations serve as barriers to contraceptive choices, preferences and decision making, thus influencing fertility. These factors play important role in conservative context so must be considered while designing programs to improve contraceptive use.[7] Employment status of women influence contraceptive use and is found to be higher in employed women. Predictors of contraceptive choices and use among unemployed women are found to be; age of women, woman and husband's education, parity, region and preference for a child.[8]

Contraceptive failure results in unintended and unwanted pregnancies and in many situations end up in abortions. Abortion's stigma results in poor post-abortion care and influence the practices related to abortion.[9]

Reproductive autonomy of Pakistani women influences contraceptive use. This was found as a major factor in the 'Pakistan Reproductive Health and Family Planning Survey 2000' done on 6579 married women.[10] It is still a challenge to understand gendered influences on reproductive health status of women in Pakistan.[11] A systematic review and meta analysis revealed that the contraceptive use is low after pregnancy so unmet need for family planning is high in LMICs[12] and many factors and barriers are associated with unmet need.[13] Pakistan is facing a growth rate 1.89 and has a population of 195.390 million, keeping it on the sixth rank in the world. Infant mortality is 65.8 per 1000 live births along with poor progress in other indicators of social and economic growth.[14] Pakistan is signatory to the 'London Summit on Family Planning 2012' which focused on commitment to improve FP services to women and girls in the poor countries by 2020.[15] Pakistan is facing high unmet need for family planning among women of reproductive age group.[16] Pakistan is committed to improve contraceptive prevalence rate (CPR) so in a recent interventional study published in 2020, estimates made using Inverse probability weighting (IPW) showed that the contraceptive prevalence rate (CPR) was increased from 51% to 64%, while the modern contraceptive prevalence rate (mCPR) increased from 34% to 53%.[17] Pakistan is facing high burden of abortion as well and practices related to abortion are poor too. There is under-reporting of abortions and usually indirect methods of exploring such events is better in estimating correct figures.[18]

The current scenario of high fertility and low mortality in Pakistan is making this natural increase in population, a challenge for our government. Bridging this gap of births and deaths needs an assessment of factors associated with fertility, contraceptive use, decision-making and abortion-related behaviors in different ethnic groups and socio-economic strata of Pakistan. Current study aims to identify contraceptive use, preferences, decisions and abortion-related practice among married reproductive age females belonging to low income group in District Lahore.

MATERIAL AND METHODS

A descriptive cross-sectional study was conducted in Lahore District, the provincial capital of Punjab as a part of doctoral research project (2011-2016). All married ever-gravid females of reproductive age group (15-49 years) residing in Lahore were included in the study. The lowest expected frequency of experience of any reproductive event was taken as 15% and worst acceptable 20%. At 95% confidence level the sample size is calculated to be 135 subjects but sample size was increased to 210 subjects to cater for non responses, dropouts and refusals. Cluster sampling technique was used. Thirty (30) union councils were selected randomly out of 150 union councils then one ward/village was selected again by simple random method from each union council. A cluster of 07 females from that ward/village was identified conveniently and the participants were interviewed after taking informed consent. Females with primary infertility and women with early menopause were excluded from the study.

A self-constructed, structured, interviewer-administered questionnaire was pre-tested and modified accordingly. Socio-demographic variables included age, parity, age at marriage, income and literacy of wife and husband. Illiterate meant not able to read and write in her/his national language. Income /capita/month was categorized as $\leq$ PKR 3000 and above PKR 3000. History of contraceptive use, their preferences and decision-making about method to be used was taken. Abortion-related practices including experience of abortion (number/woman), decision about abortion and health care seeking after abortion, place and reason for abortion were recorded.

Permission was obtained from Directorate General of Health Service Punjab. Written informed consent was taken from each participant and confidentiality and privacy of data, address and telephone number was maintained. Study was approved by Institutional Review Board of University of Health Sciences, Lahore, Punjab, Pakistan.

Statistical analysis:

Data was analyzed using SPSS version 18. Categorical data was presented in tabulated form and statistical test was applied where needed on the categorical data.

RESULTS

Out of total 210 respondents, 51.9% were having a family size of less than 6 members. 205 (97.6 %) were Muslims with mean age of 29.0 years $\pm$ 5.23. 79.5% females conceived within one year after marriage. 74.8% females had gravidity of less than 5 while 80% had parity of less than 5. 2.9% women

had last born of less than 30 days. 95.7% subjects breast fed their children (Table-1).

It was studied that 168 (80.0%) respondents never used any contraceptive. Among them 95.9% thought that it has bad effect on health and 4.1 % respondents wanted to increase their family size. Only 42 (20.0 %) of the respondents used contraceptive, out of these 40.8 % of respondent used IUCD, 28.5 % had tubal ligation, 23.8 % prefer condoms, 4.8 % used oral pills, 2.4 % of the respondents used injectables. Regarding decision about contraceptives usage: 11 (26.2 %) of the respondents started using contraceptives after two children, 33.3 % after three children, 14.3 % of after first child, 9.5 % of the respondents used after fifth child and 7.2 % of the respondent used after fourth and sixth child and 2.3 % of the respondent used after seventh child. 24 (57.1%) used contraceptive before last pregnancy and 18 (42.9%) of the respondents did not use any contraceptive before last pregnancy. Regarding future pregnancy 132 (62.9%) don't want to have more children, 9.5% wish to have one more child and 27.6 wanted to have two more children (Table-2).

Only 15.7% respondents ever experienced abortions. Among these 33 respondents, 48 abortions took place, making 1.45 abortions per woman. 23/33 (69.7%) experienced one abortion, 15.2% faced 2, and 15.2% experienced 3 abortions. 91.6% of the abortions were spontaneous, 4.2% of the respondents had missed abortions and 4.2% had induced abortions. Majority of the induced abortions were conducted due to economical reasons and on respondent's own request. 60.4% abortions were performed by doctors, 27% by Dai, 8.4% by LHV, and 4.2 % of the abortions were performed by neighbor (unskilled person). 15 (31.3 %) abortions were performed at home, 18 in clinic and 15 in hospital. Regarding decision about place of abortion, 42 (87.4 %) females decided herself for place of abortion. Husband was present at time of abortion in 36 (75.0 %) cases of the abortions, 22.9 % abortions took place at home. 66% had a bed rest of one day following abortion while 22.9% had a rest of 2 weeks. 96.8% had to face no complications after abortion but 2 (4.2%) faced complications (Table-3).

Table-4 shows that the analyses of socio demographic variables with contraception and abortion only after controlling other variables. Age of respondents, age of respondent at marriage had significant association with abortion and contraceptive use. But educational status had no significant association with abortion and contraceptive use.

Variables	F (%)	Variables	F (%)
Religion of respondents (n=210)		**Occupation of spouse (n=210)**	
Islam	205 (97.6)	Employed	207 (98.6)
Christianity	5 (2.4)	Unemployed	3 (1.4)
Age of respondents (n=210) Mean age =29+ 5.28		**Daily working hours of spouse (n=210)**	
15 - 25 years	60 (28.6)	6 -10 hours	101 (48.1)
26 - 35 years	125 (59.5)	11 – 18	106(50.5)
36 - 45 years	25 (11.9)	**Total family member (n=210)**	
Age at marriage (n=210)		1 - 5 Members	109 (51.9)
13 - 18 years	82 (39)	6 - 10 Members	84 (40)
18 and above	128 (61)	11 - 15 Members	15 (7.1)
Respondents education (n=210)		16 & Above	2 (1)
Illiterate	49 (23.3)	**Income /capita/month**	
Islamic Education	4 (1.9)	< than Rs 2000 /-	189 (90)
Upto Matric	115 (55)	Rs 2001/-Rs 4000/-	19 (9)
Above Matric	42 (20.1)	Rs 4001 - Rs 6000/-	1 (0.5)
Respondent's years of schooling		Rs 6001/- & Above	1 (0.5)
Illiterate	49 (23.9)	**Time of 1st conception after marriage**	
Islamic teaching	4 (1.9)	Within 1 Year	167 (79.5)
Below 10 years	66 (31.4)	Within 2 Years	28 (13.3)
Ten Years& above	91 (43.3)	Within 3 -9 Year >	15 (7.2)
Respondent's occupation (n=210)		**Gravidity (n=210)**	
House Wife	202 (96.2)	1-4	157 (74.8)
Office worker	1 (0.5)	5–8	43 (20.4)
Laborer	2 (1)	9-12	10 (4.8)
Others	5 (2.4)	**Parity (n=210)**	
Daily working hours of females		1-4	168 (80)
4 – 8 hours	5 (2.4)	5-8	35 (16.7)
> 12 hours	3 (1.4)	9-12	7 (3.3)
Working status of females		**Duration of Breast feeding**	
House Wife	202 (96.2)	Never breast fed	9 (4.3)
Working	8 (3.8)	Usually One Year	157 (74.8)
Age of Last born child (n=210)		Usually Two Year	33 (15.7)
Less than 30 Days	6 (2.9)	Usually < 6 Months	11 (5.2)
Less than one Year	32 (15.2)		
1 year - 3 year	140 (66.7)		
3.1 year - 5 year	32 (15.2)		

Table-1: Socio-Demographics of the respondents

Variables	Frequency	Percent
Contraception Use (ever used) (n=210)		
Never used Contraception	168	80.0
Use Contraception	42	20.0
Type of Contraception used (n=42)		
IUCD	17	40.5
Tubal Ligation	12	28.5
Condoms	10	23.8
Oral Pills	2	4.8
Injectable	1	2.4
Reasons for Non usage (n=168)		
Bad Effect on Health	161	95.9
Want more children	7	4.1
Decision about Contraception was done after; (n=42)		
One child	6	14.3
Two Children	11	26.2
Three Children	14	33.3
Four Children	3	7.2
Five Children	4	9.5
Six Children	3	7.2
Seven Children	1	2.3
Contraception usage before Last Pregnancy (n=42)		
Yes	24	57.1
No	18	42.9
Respondents' wish about future Pregnancy (n=210)		
Don't want any more child	132	62.9
Want one more child	20	9.5
Want two more children	58	27.6

Table-2: Contraception-related practices among respondents in 30 UCs

Variables	Frequency	Percent
No. of females experienced Abortions (n=210)		
No Abortions	177	84.3
One Abortion	23	11.0
Two Abortions	5	2.4
Three and more Abortions	5	2.4
Total Abortion among respondents(n=210)		
No abortions	177	84.3
Abortions	33	15.7
No of abortions among respondents (n==33)		
1 Abortion	23	69.7
2 Two Abortions	5	15.2
3 Three Abortions	5	15.2
Total no of respondents with abortion	33	100.0
Total no of abortions (n=48)		
Type of Abortions (n=48)		
Spontaneous	44	91.6
Missed	2	4.2
Induced	2	4.2
Reason for abortions (n=48)		
Spontaneous	44	91.6
Due to own request	1	2.1
Self-request due to Economic Reason	3	6.3

Abortion performed by! (n=48)		
Doctor	29	60.4
Dai	13	27.0
LHV	4	8.4
Female Neighbor	2	4.2
Place of Abortion(n=48)		
Clinic	18	37.4
Home	15	31.3
Hospital	15	31.3
Decision about Place of Abortion made by; (n=48)		
Husband	42	87.4
Friend / Neighbors	2	4.2
In laws	4	8.4
Accompanying Person for abortion (n=48)		
Husband	36	75.0
In laws	1	2.1
At home	11	22.9
Bed rest after Abortion(n=48)		
One Day	32	66.6
Two Days	4	8.4
One Week	1	2.1
Two Weeks	11	22.9
Complications after Abortion(n=48)		
Yes	2	4.2
No	46	96.8

Table-3: Abortion-related practices among respondents in 30 UCs

Variable	Abortion		p- value	Contraceptive use		p-value
	Yes	No		Yes	No	
Age of Respondents						
≤ 29 years	27	84	0.00029	34	77	0.000
> 29 years	6	93		08	91	
Age of Respondents at marriage						
13-18 years	27	55	0.000	33	49	0.000
More than 18	6	122		09	19	
Educational status of Respondents						
Illiterate	8	41	0.893	08	41	0.463
Literate	25	136		34	127	

Table-4: Socio-demographic determinants of abortion and contraceptive use

DISCUSSION

In present study 80% respondents never used any contraceptive which is a quite high proportion. Reason given was bad effect on health in 95.9% while rests were interested to increase their family size. A study in Karachi in 2020 showed current contraceptive use to be 49.7% which is much better than current study findings.[19] This might be

explained by improvement in family planning services over these 5 years after FP 2020 initiative or another reason could be a better knowledge and attitudes of females residing in Karachi than Lahore. Only 20% of the respondents used contraceptives and IUCD was the most commonly used followed by condoms, oral pills and injectables. Oral contraceptive use is found to be most common in young females to avoid unintended pregnancies as found in a study showing 59.2% using OCP.[7] 33.3 % of females started using contraception after three children. 57.1% used contraceptives before last pregnancy. Additional research is required to identify ways to provide information to females and couples to get an effective, scientifically sound and best fit method suitable according to their reproductive life priorities and preferences.[20]

In our study 15.7% respondents ever experienced abortions, showing 1.45 abortions per woman. Majority experienced one spontaneous abortion (91.6%) and 4.2% had induced abortions. A study conducted in low income group in Lahore is showing abortions/women as 1.48 but a high proportion of induced abortions (58.3%) in that community setting.[21] This might be due to difference in sampling technique in both studies and some locality specific factors like some bad traditions etc could be responsible for high induced abortion rate in this specific village community as compared to ours sample clusters from 30 union councils of Lahore.

Majority of the induced abortions in present study were conducted due to economical reasons and on respondent's own request. Abortion-related decision making is influenced by many socio-economic, cultural and service-related factors.[22] In present study 35.4% abortions were conducted by Dai and LHV, and 4.2 % by unskilled person and 31.3 % abortions were performed at home. Decision about place of abortion was done by female her-self in 87.4 % cases and husband was present at time of abortion in 75% of cases. 66% females had a bed rest of only one day. 96.8% had to face no complications after abortion but 2 (4.2%) faced complications. In a study from Lahore the post-abortion morbidity was found to be quite high.[23] This could be due to different attitudes and norms and also due to different sampling techniques. Healthcare seeking is very diverse in same district in low income groups.[24] This shows how important it is to identify and address these socio-cultural differences.

In current study, age of respondents, age of respondent at marriage showed significant association with abortion and contraceptive use but educational status was not associated with abortion and contraceptive use. In Bangladesh, current age, residence area, religion, age at first marriage, education, family planning, exposure to media and fertility preferences are found to be significant determinants in 2014 survey. While current employment status and wealth index were significant factors identified in 2004 survey.[25] On the other hand, husband's education, number of living children were additional factors identified as predictors of contraceptive use among non-working or unemployed women.[8] Moreover, education and contraceptive use shows a stronger association while talking about high-literacy contexts.[26] The possible reason why education is not found to be associated with contraceptive use and abortion is explained by the fact of poor gender equality and equity in decision making, and furthermore, a large number of females with only schooling as the study were on low socio-economic group. If it was having diverse income groups, education and religion then we could have find an association.

Reproductive autonomy of women in Pakistan is influenced by number of socio-demographic and cultural factors. Improvement in educational level of couples will enable them to exercise reproductive autonomy resulting in better informed choices, increased use of contraceptives and better abortion-related practices.[10] Use of tailored messages for counseling may help in overcoming myths and misconceptions associated with contraception and abortion.[12] Factors predicting poor contraceptive use and associated with unmet need for family planning are found to be common in low and middle income countries. These similar barriers to family planning are important to be identified and highlighted so a better informed reproductive health policies could be developed focusing specifically strategies to handle unmet need.[13]

Our study has a limitation of size of cluster and technique used. In the cluster probability sampling technique could be tried. The study is a survey and tried to get a diverse sample to cater females belonging to different localities and diverse background.

CONCLUSION

Abortions were common but induced abortions were less in number. Abortion-related practices are not as per requirement but low complication rate is a good sign. Contraceptive users are low and are more inclined towards having a large family size. The respondent's age, age at marriage are the

determinants showing significant association with contraceptive use and abortion-related practices.

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