https://doi.org/10.36570/jduhs.2019.2.650

JDUHS

ORIGINAL ARTICLE

Barriers in Use of Family Planning Methods among Outpatient Women Seeking Antenatal Care in Tertiary Care Hospitals of Karachi, Pakistan

Ghazala Nasim Pasha,[1] Nighat Nisar,[2] Mehwish Hussain[3]

1. Department of Community Medicine United Medical & Dental College Karachi, Pakistan.
2. Professor, Department of Community Medicine, Dow University of Health Sciences, Karachi-Pakistan.
3. School of Public Health, Dow University of Health Sciences, Karachi-Pakistan.

Correspondence to: Dr. Ghazala Nasim Pasha, **Email:** ghazalanasim1@gmail.com

ABSTRACT

Objective: To identify the barriers in practicing family planning methods (FPM) among reproductive age group women attending antenatal clinics of two tertiary care hospitals of Karachi Pakistan.

Methods: A cross sectional study was conducted in antenatal clinics of Obstetrics Outpatient Department of two tertiary care hospitals of Karachi Pakistan. 450 women of age 15-49 years were included in the study by consecutive sampling, interviewed by using structured questionnaire after taking the informed consent. The data were entered and analyzed by using SPSS version 21. Frequencies and percentages were calculated and logistic regression analysis was performed to determine the barriers related to use of family planning methods.

Results: The mean age of women was 26.6 with SD 4.6 years. The odds of using FPM by women who received advise of FP in last delivery were 2.9 times more as compared to women who did not receive FP advise (OR=2.9, 95%CI: 2.8-3.1) in last delivery. The other variables which showed significant association with use of FPM were living in joint family (OR=1.8, 95%CI=1.7-1.9), having more than two female children (OR=3.0,95%CI=1.7-5.3), Husbands' in favor of use of FPM (OR=24.2,95% CI=1.7-5.3), women ever consulted with family planning clinics (OR=7.7, 95%CI=2.3-26.0), women received antenatal care in last pregnancy (OR=2.1,95%CI=1.3-3.3) and women received post-partum care in last pregnancy (OR=2.7,95%CI=1.5-4.7).

Conclusion: Socio-cultural, minimal access, lack of information, husbands' involvement were the major barriers identified in this study. Antenatal care and family planning counseling can play a major role in uptake of FPM.

Keywords: Family planning, Contraception, Practice, Barriers, Antenatal care.

INTRODUCTION

According to an estimate of the World Health Organization about 214 million women in developing countries are delaying or stopping childbearing, but not using any form of contraception.[1] The Family Planning services played an important role in increasing the prevalence of contraceptive use from less than 10% to 60% and decreasing fertility rate in developing countries from six births per woman to three births per woman. In low and middle income countries (LMICs) mainly in sub-Saharan Africa, contraceptive use found low leading to high fertility, population growth, and unmet need for family planning.[2,3] In Pakistan's fertility rate declined steadily over time from 5.4 births per woman to 3.6 births per woman as reported in PDHS 2017-18. In recent period fertility rate decline is minimal from 3.8 to 3.6 births per women.[4] The overall contraceptive prevalence rate is 34% among currently married women in Pakistan. It varied with age, 7% among women age 15-19, 48% for women age 40-44, and 37% among women age 45-49. It is more frequently used by urban women 43% as compared to rural women 29%. The family planning trend in Pakistan showed that use of contraceptive methods increases with education of women and income of the household. For example, 22% of

currently married women with no education used contraception as compared to 30% of women with secondary or higher level of education.[4]

The contraceptive methods use has remained stagnant over the past 5 years. There are several socio demographic and socioeconomic factors identified as barriers in utilization of family planning services which include; lack of education, low socio-economic status, and poor knowledge about family planning.[5] The health system related factors related to family planning use were identified as; in adequate health services delivery, poor physical access to family planning services and performance of family planning programs.[5-10]

Research studies conducted on barriers for practicing family planning reported that it is important to look beyond barriers of physical access to barriers that arise from the socioeconomic and cultural environment of communities.[11-12] This study is conducted to identify the barriers in practicing family planning among reproductive age group women attending antenatal clinics of two tertiary care hospitals of Karachi, Pakistan. This study provides research evidence about types of barriers and characteristics of women facing barriers in utilizing family planning services. The findings are helpful in designing health promotion strategies for women and developing health service promotion strategies and protocols.

METHODS

A cross sectional study was conducted from November 2015 to November 2016 in antenatal clinics of Obstetrics Outpatient Department (OPD) of Dow University Hospital OJHA and Civil Hospital Karachi. Approval from the ethical review committee of DUHS was obtained prior conducting of the study (IRB #: DUHS/SPH/2015-12-463). A total of 450 pregnant multigravida women of 15-49 years of age visiting for antenatal checkups in clinics were included in the study by using consecutive sampling technique. The sample size was calculated by using, WHO software for sample size determination. For calculating sample size, a proportion of 35% used for knowledge of family planning as a barrier in utilizing family planning services form a study carried out on married women of Peshawar, Pakistan with approximate design effect of 1.5, the sample size came out 365 with 95% confidence interval and 5% margin of error.[13] Adding 20% non-response rate, a total of 450 women were interviewed by using structured questionnaire after taking the informed consent. The confidentiality and privacy were maintained while collecting the information from women by making them assured that their identity and information will be kept confidential. They were interviewed by making them sit comfortably in a separate place at clinic so that their responses were not influenced by their attendants.

The questionnaire comprised of socio-demographic characteristics of women and their husband, family planning use and barriers related to utilization of FP services. The accessibility to FP centers referred to services offered were easily reached, entered or utilized by the individuals who wanted to avail services provided by the center. The variables related to barriers in access to FP services included were distance from residence, mode of transport, walking time to reach the center and time to reach FP facility by using transport.

Data were entered and analyzed by using SPSS version 21. Frequencies and percentages were calculated to express descriptive measures of the variables under study. Logistic regression analysis was performed to and odds ratio were reported with 95% confidence interval to determine the barriers associated with the use of FPM.

RESULTS

Socio-demographic Characteristics: The mean age of women was 26.6 with SD 4.6 years, 46.7% (n=250) women were less than 25 years of age, 43.8% (n=197) women were between 26 to 34 years of age, 9.6% (n=43) women were 35 or more than 35 years of age. About 43.8% (n=197) women were illiterate, 14.9% (n=67) had primary education, 21.6% (n=97) women had secondary education, 7.1% (n=32) women were

intermediate, 8% (n=21) women were graduate and 4.7% (n=6) women were post graduate. Regarding husband educational status, 37.6% (n=169) husbands were illiterate, 15.6% (n=70) had primary education 18.2% (n=82) had secondary education, 9.3% were intermediate (n=42) 10% were graduates (n=45), and 8% (n=36) were postgraduates.

About 20.6% (n=82) women had income less than 10,000 PKR, 56.8% (n=226), had income between 10,000 to 20,000 PKR, 58 (14.6%) had income more than 20,000 to 40,000 PKR, and 32 (8%) had income more than 40,000 PKR. Only 28.9% (n=130) women were living in nuclear family while majority 71.1% (n=320) were living in joint family. About 66.7% (n=300) women had 2 children while 150 (33.3%) had more than 2 children.

Barriers for FPM: Family planning facility was accessible to 47.1% of women while 29.3% women did not have access, and 23.6% women don't know about FP facility access. Among those who had access to FP facility, 16% were facility, 16% were using any kind of transport which is available to them to reach the center while 84% were reaching on foot. Majority (64.9%) reached to the facility in 10 minutes by walking. About 57.1% women reported time taken to reach the facility is up to 15 minutes while 42.9% reported more than 15 minutes.

Counseling for FP was given to 28% participants in last delivery. Among those who received counseling, majority (98.4%) of then received information and advantages of using Family Planning methods. The benefit of FP was told to majority of women (97.6%). Nearly half of the women reported that they did not intend to practice FPM in future and the common reason reported was husband did not want to practice FPM. The other reasons reported to discontinue FPM were sociocultural constraints (n=4, 5%), inaccessibility of contraceptives (n=32, 7.1%), want another child (n=123, 27.3%). Twenty-eight percent (n=128) women reported that they preferred more than two years' gap, 7.1% (n=32) reported less than 2 years and 64.4% (n=290) women were not sure about how much gap is required in next pregnancy. (Table 1)

Table 1: Distribution of variables related to barriers in use of family planning methods

Variables	N	Percentage (%)
Fear of side effects of FP method (n=20)	35	31.8%
Inconvenient to use (n=80)	22	27.5%
Services provided at FPC by staff (n=76)		
Adequate	73	96.1%
Inadequate	3	3.9%
Did not Get counseling about FP methods after your last delivery (n=450)	325	72.2%
Got information about contraception (n= 125)	123	98.4%
Do not want to use contraception (n=293)	143	48.8%
Husband does not want FPM (n=349)	292	83.7%
In-laws pressure (n=349)	33	9.5%
Sociocultural constraints (n=350)	24	6.9%
Wants to have another child (n=450)	123	27.3%
Gap between this pregnancy and previous pregnancy (n=450)		
Up to 2 years	32	7.1%
More than 2 years	128	28.4%
Not sure	290	64.4%

All variables are expressed as n=sample size, N=frequency and percentage (%)

Association of women characteristics with the use of FPM: Women who belonged to age group between 26-34 years were less likely (OR=0.5, 95%CI=03-0.9) to use FPM as compared to those who were 25 years or less than 25 years of age. Women who had secondary education and graduation showed significant protective association in utilizing family planning methods as compared to illiterate women (OR= 0.4,95%CI=0.2-0.7), (OR= 0.1,95% CI=0.0-0.5) respectively.

Husbands' education up to graduation and post-graduation showed significant protective association with using family planning methods by women as compared to husbands who were illiterate (OR= 0.1,95%CI=0.0-0.5),(OR=0.2, 95%CI=0.1-0.6) respectively. Women who had household income of PKR 40,000 or more showed protective significant association (OR=02,95%CI=0.1-0.6), (OR=0.2,95%CI=0.0-0.7) with utilizing family planning methods as compared to women who had household income of PKR 10,000 or less than. (Table 2)

Table 2: Socio-demographic characteristics of women and the use of FPM

Variables		Use of FPM			
		Yes	No	OR (95% CI)	P Value
Current age of participant (years)	<25	154 (73.3%)	56 (26.7%)	1	0.026
	26-34	165 (83.8%)	32 (16.2%)	0.5 (0.3-0.9)	
	>35	31 (72.1%)	12 (27.9%)	1.1 (0.5-2.2)	
Education	Illiterate	136 (69.0%)	61 (31.0%)	1	<0.0001
	Primary	50 (74.6%)	17 (25.4%)	0.8 (0.4-1.4)	
	Secondary	83 (85.6%)	14 (14.4%)	0.4 (0.2-0.7)	
	Intermediate	27 (84.4%)	5 (15.6%)	0.4 (0.2-1.1)	
	Graduation	35 (97.2%)	1 (2.8%)	0.1 (0.0-0.5)	
	Postgraduate	19 (90.5%)	2 (9.5%)	0.2 (0.1-1.0)	
Husband's Education	Illiterate	113 (66.9%)	56 (33.1%)	1	<0.0001
	Primary	55 (78.6%)	15 (21.4%)	0.6 (0.3-1.1)	
	Secondary	67 (81.7%)	15 (18.3%)	0.5 (0.2-0.9)	
	Intermediate	34 (81.0%)	8 (19.0%)	0.5 (0.2-1.1)	
	Graduation	42 (93.3%)	3 (6.7%)	0.1 (0.0-0.5)	
	Postgraduate	33 (91.7%)	3 (8.3%)	0.2 (0.1-0.6)	
	Other	6 (100.0%)	0 (0.0%)	-	
Household Income (PKR)	≤10,000	57 (69.5%)	25 (30.5%)	1	0.002
	>10,000-20,000	174 (77.0%)	52 (23.0%)	0.7 (0.4-1.2)	
	>20,000-40,000	53 (91.4%)	5 (8.6%)	0.2 (0.1-0.6)	
	More than 40,000	30 (93.8%)	2 (6.3%)	0.2 (0.0-0.7)	

OR=odds ratio, p_value significant<0.05, confidence interval 95%CI

Women living in joint family showed significant association with not using FPM as compared to women living in nuclear family (OR=1.8, 95%CI=1.7-1.9). The odds of using FPM by women who received advise of FP in last delivery were 2.9 times more as compared to women who did not receive FP advise (OR=2.9, 95%CI: 2.8-3.1). The other variables which showed significant association with use of FPM were having more than two female children (OR=3.0,95%CI=1.7-5.3), husbands in favor of use of FPM (OR=24.2,95% CI=1.7-5.3), women ever consulted with FP clinics (OR=7.7, 95% CI=2.3-26.0), women received antenatal care in last pregnancy (OR=2.1,95% CI=1.3-3.3), and women received post-partum care in last pregnancy (OR = 2.7, 95% CI = 1.5-4.7). The odds of using FPM by women who ever consulted with FP clinic were 53 times more as compared to women who did not ever consult with FP clinic (OR=53.7, 95 % CI =18.9-152.6).

There was significant association of women who were in favor of raising standard of life and consider that birth spacing is important for better nourishment of children and using family planning methods. (Table 3)

DISCUSSION

The study was conducted to identify barriers to the use family planning methods among pregnant females utilizing antenatal care at antenatal clinics in Karachi, Pakistan. Fear of side effects of using contraceptives was identified as a barrier in the use of FPM which has been reported this study. This showed that people did not have adequate information regarding side effects of contraceptives and hence become a major barrier in the use of FPM in Pakistan. This finding is consistent with findings of other studies conducted in Lahore and Rawalpindi, the two major cities of Pakistan.[14,15]

The other important barriers identified and found associated with FP use in this study were husband's disagreement and disapproval for use of FPM and living in joint family system. In Pakistani households, majority of decisions are made by male members especially husband and in-laws. The husband's approval is crucial for a woman to practice family planning and utilize services of FP. This has clearly been shown in our study that majority of husbands did not approve the use of FPM. Furthermore, living in joint family where a woman is influenced by decision making of in-laws creates further obstacles. The women living in joint family with mother-in-law and not using FPM were facing more psych-osocial barriers to family planning use as compared to women living in nuclear family and have liberty to make important decision related to their household and family.[16,17]

The educational status of women and their husbands' progress to secondary and above education showed significant protective associations with using family planning methods in this study which is consistent with finding of a study conducted in Karachi, Pakistan and other parts of the world.[18-20] In our study women who had more than two daughters were not using FPM as son preference is biggest desire in our culture and society which has become sociocultural barrier in use of FPM. This is making a strong influence on utilization of FPM in South Asian countries and Pakistan reported by a study conducted in Pakistan.[21] Receiving antenatal and postpartum care are the two major health care services available to pregnant women, if utilized properly can change the entire perceptive of women in utilizing FPM.

In our study those women who received antenatal and postpartum care in last pregnancy were using FPM more as compared to those who did not receive care in last pregnancy, which has clearly shown that providing family planning information is essential for pregnant women receiving antenatal and post-partum care. The protocol in its use provides an opportunity for women to uptake family planning services available to them through health care staff counselling which has also been reported by research studies carried out in various part of the world.[22-24]

The role of family planning services available at various family planning centers in Pakistan is commendable in improving contraceptive prevalence rate in Pakistan. In our study women who ever consulted family planning services were using FPM more as compared to those who did not. Family planning clinics provides

Table 3: Family characteristics of women participants and the use of FPM

Variables		Use of FPM			
		Yes	No	OR (95% CI)	P Value
Type of family	Joint	244 (76.3%)	76 (23.8%)	1.4 (0.8-2.3)	0.221
	Nuclear	106 (81.5%)	24 (18.5%)	1	
Living children	Up to 2	238 (79.3%)	62 (20.7%)	1	0.262
	>2	112 (74.7%)	38 (25.3%)	1.3 (0.8-2.1)	
Female children	Up to 2	314 (80.7%)	75 (19.3%)	1	<0.0001
	>2	35 (58.3%)	25 (41.7%)	3.0 (1.7-5.3)	
Male children	Up to 2	325 (77.6%)	94 (22.4%)	1	0.691
	>2	25 (80.6%)	6 (19.4%)	0.8 (0.3-2.1)	
Got antenatal care in last pregnancy	Yes	207 (83.5%)	41 (16.5%)	1	0.001
	No	143 (70.8%)	59 (29.2%)	2.1 (1.3-3.3)	
Got post-partum care after last delivery	Yes	124 (87.9%)	17 (12.1%)	1	<0.0001
	No	226 (73.1%)	83 (26.9%)	2.7 (1.5-4.7)	
Husband favors FP	Yes, always'	218 (98.2%)	4 (1.8%)	1	<0.0001
	No/Don't know	63 (69.2%)	28 (30.8%)	24.2 (8.2-71.6)	
	Neutral	69 (50.4%)	68 (49.6%)	53.7 (18.9-152.6)	
Ever consulted FP clinic	Yes	79 (96.3%)	3 (3.7%)	1	<0.0001
	No	119 (77.3%)	35 (22.7%)	7.7 (2.3-26.0)	
Adopting family planning standard of life can be raised	Yes	323 (97.0%)	10 (3.0%)	1	<0.0001
	No	27 (23.1%)	90 (76.9%)	107.7 (50.2-230.7)	
Birth spacing is important for better nourishment of children	Yes	318 (95.2%)	16 (4.8%)	1	<0.0001
	No	32 (27.6%)	84 (72.4%)	52.2 (27.3-99.6)	

OR=adjusted odds ratio, p-value significant <0.05, confidence interval 95%CI

information on birth spacing and opportunity to our women that by limiting family size they can adopt healthier life style, better nourishment of their children and can raise standard of living. In our study majority of women mentioned that they did not receive counselling after last delivery. Research has proven that there is significant association found between postpartum uptake of family planning services and family planning counselling provided to the women, clarity of information provided to them and counselling on fertility intention. Therefore, there is a need to promote the factors to increase utilization of family planning services after child birth through counselling.[25,26]

CONCLUSION

Socio-cultural, access, lack of information, husbands not in favor of using family planning methods, desire of having more children were the major barriers identified in this study. Those women who were utilizing antenatal care and receiving family planning counselling in last pregnancy were more up taking FPM and knew that this would raise their standard of living.

The limitation of this study is that it's a hospital based study conducted in antenatal clinics and hence findings cannot be generalized to community setting. The strength of associations requires careful interpretation to keep in mind that design is cross-sectional. Therefore, in future community based studies and analytical design studies are suggested.

Recommendation: It is recommended that socio economic and socio cultural status of women should be raised and uplifted and this can be done through providing information to women, making them aware of their rights. Adequate counselling in antenatal care and FP center can play major role in removing the barriers of FP use. Male involvement is necessary and in-laws should be aware of benefits of using FPM by mass education program. Government should make the universal access of FP services to the communities. The future studies should be conducted on unmet need of family planning and factors associated with underutilization of family planning services in Pakistan.

AUTHORS' CONTRIBUTION: GN conceived the study, collected and analyzed the data and finally wrote manuscript. NN supervised the project, editing and writing manuscript.MH co-supervised the research, managed, helped in analysis of data and writing manuscript. All authors read and approved the final manuscript.

CONFLICT OF INTEREST: The authors declare that they have no competing interest.

FUNDING: No funding was obtained for this research.

REFERENCES

1. World Health Organization. Family planning /contraception [Internet]. WHO; 2017 [cited 7 July, 2018]. Available from: http:// www.who. int/ media centr e/facts heets /fs351 /en/.
2. Tolefac PN, Nana TN, Yeika EV, Awungafac NS, Ntsama Y, Njotang PN. Trends and patterns of family planning methods used among women attending family planning clinic in a rural setting in sub-Sahara Africa: the case of Mbalmayo District Hospital, Cameroon. BMC Res Notes 2018; 11:541-5.
3. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: the unfinished agenda. Lancet 2006; 368:1810–27.
4. NIPS/Pakistan N. Pakistan Demographic and Health Survey 2017-18 [Internet]. Dhsprogram. com. 2019 [cited 8 April 2019]. Available from: https://dhsprogram.com/publications/publication-FR354-DHS-Final-Reports.cfm
5. Ortayli N, Malarcher S. Equity analysis: identifying who benefits from family planning programs. Stud Fam Plann 2010; 41:101-8.
6. Campbell M, Sahin-Hodoglugil NN, Potts M. Barriers to fertility regulation: a review of the literature. Stud Fam Plann. 2006; 37:87-8.
7. Kabagenyi A, Jennings L, Reid A, Nalwadda G, N tozi J, Atuyambe Barriers to male involvement in contraceptive uptake and reproductive health services: a qualitative study of men and women's perceptions in two rural districts in Uganda. Reprod Health 2014; 11:21-9.
8. Blackstone SR, Nwaozuru U, Iwelunmor J. Factors Influencing Contraceptive Use in Sub-Saharan Africa: A Systematic Review. Int Q Community Health Educ 2017; 37:79–91.
9. Hamid S, Stephenson R. Provider and Health Facility Influences on Contraceptive Adoption in Urban Pakistan. Int Fam Plan Perspect 2006; 32:71-8.
10. Alemayehu M, Lemma H, Abrha K, Adama Y, Fisseha G, Yebyo H, et al. Family planning use and associated factors among pastoralist community of afar region, eastern Ethiopia. BMC Womens Health 2016; 16:39.
11. Bertrand JT, Hardee K, Magnani RJ, Angle MA. Access, quality of care and medical barriers in family planning programs. Int Fam Plan Perspect 1995; 21:64–74.

12. Kiani Z, Simbar M, Dolatian M, Zayeri F. Correlation between Social Determinants of Health and Women's Empowerment in Reproductive Decision-Making among Iranian Women. Glob J Health Sci 2016; 8:312-21.
13. Ayub A, Kibria Z, Khan F. Assessment of knowledge, attitude and contraceptive use in married women of Peshawar. J Dow Univ Health Sci 2015; 9: 89-93.
14. Sarmad R, Manzoor S, Kaleem R. Family planning; reasons of unmet need in an urban setting of Lahore. Professional Med J 2007; 14:152-7.
15. Anwar S, Aslam Z, Qureshi S, Riaz Q. Unmet need of family planning. J Rawal Med Coll Stud Supp 2015; 19:55-8.
16. Pasha O, Fikree FF, Vermund S. Determinants of Unmet Need for Family Planning in Squatter Settlements in Karachi, Pakistan. Asia-Pacific Population J 2001; 16: 93-108.
17. Mustafa G, Azmat SK, Hameed W, Ali S, Ishaque M, Hussain W, et al. Family planning knowledge, attitudes, and practices among married men and women in rural areas of Pakistan: findings from a qualitative need assessment study. Int J Reprod Med 2015; 2015:1-8.
18. Jawed H, Ullah A, Idrees M, Devi J, Khan T, Shaikh I. effects of social barriers on the contraceptive use among males and females in pns-shifa hospital Karachi. J Bahria Uni Med Dental Coll 2016; 6: 247-50.
19. Okunade KS, Daramola E, Ajepe A, Sekumade A. A 3-year review of the pattern of contraceptive use among women attending the family planning clinic of a university teaching hospital in Lagos, Nigeria. Afr J Med Health Sci 2016; 15:69.
20. Sultan S. The effects of education, poverty, and resources on family planning in developing countries. Clinics Mother Child Health 2018; 15:289.
21. Channon MD. Son Preference and Family Limitation in Pakistan: A Parity- and Contraceptive Method–Specific Analysis. Int Perspect Sex Reprod Health 2017; 43:99–110.
22. Perumal N, Cole DC, Ouédraogo HZ, Sindi K, Loechl C, Low J, et al. Health and nutrition knowledge, attitudes and practices of pregnant women attending and not-attending ANC clinics in Western Kenya: a cross-sectional analysis. BMC Pregnancy Childbirth 2013; 13:146.
23. Barber SL. Family planning advice and postpartum contraceptive use among low-income women in Mexico. Int Fam Plan Perspect 2007; 33:6–12.
24. Vernon R. Meeting the family planning needs of postpartum women. Stud Fam Plann 2009; 40:235–45.
25. Bwazi C, Maluwa A, Chimwaza A, Pindani M. Utilization of Postpartum Family Plan-ning Services between Six and Twelve Months of Delivery at Ntchisi District Hospital, Malawi. Health 2014; 6:1724-37.
26. Gebremedhin AY, Kebede Y, Gelagay AA, Habitu YA. Family planning use and its associated factors among women in the extended postpartum period in Addis Ababa, Ethiopia. Contracept Reprod Med 2018; 3:1.