ORIGINAL ARTICLE

Contraceptive Usage Frequency and its Associated Factors Amongst Married Women in District Okara, Punjab

SADIA IRSHAD LEGHARI¹, SHAMAILA ZAMIR², RABBIYA SARWAR³, TAZEEM AKHTER⁴, WARDAH NISAR⁵

Senior Demonstrator, Department of Medical Education, University College of Medicine & Dentistry, The University of Lahore.

²Senior Demonstrator, Department of Community Medicine, University College of Medicine & Dentistry, The University of Lahore.

³Lecturer, Public Health Department, University of Health Sciences

⁴Associate Professor, Public Health Department, University of Health Sciences

⁵Lecturer (Nutrition), Public Health Department, University of Health Sciences

Correspondence to: Sadia Irshad Leghari, Email: sadialeghari@gmail.com, Cell: 0321-4284735

ABSTRACT

Aim: To determine the frequency and associated factors of contraceptives usage amongst married women in District Okara, Puniah.

Methodology: To highlight the factors that have a positive impact in increasing the knowledge and all the barriers that hinder the usage of contraceptive a regional survey was conducted in which 350 married women 175 from rural and 175 from urban areas of Okara were selected through convenient sampling. Logistic regression was used in determination of the link between different explanatory variables with outcome variables that was the usage of contraceptives.

Results: 37.42% women used contraceptives in both rural and urban areas of Okara. Different economic activity shaped by various social factors was pinpointed. Information, education and facts about modern birth control methods, women's bodily autonomy and the need to have another newborn in future were a few of highlighted associated factors.

Conclusions: This study depicts that women empowerment was consistently and positively linked with intention to use contraception. Moreover, updated and modern information related contraceptive services and personal motivation to have a child were the censorious factors in usage of present time contraceptive services. Hence these aroused problems need serious attention in formulating policies regarding maternal health in Pakistan.

Keywords: Maternal health, contraceptive services, lady health care workers

INTRODUCTION

Advancement in technology is ensuring the access to people for preferring modern contraceptive services. This promotes different human rights including freedom of speech, right to live the way they want, acquiring education and planning the number of children as per their economic status and desire level. The couple now has control over if and when they want to have children1. Population wise Pakistan is world's fifth and Asian's second most populous country. It adversely impacts socio-economic condition and quality of life with in Pakistan. Despite of various maternal health programs initiated by government, there has been still a little change in usage of modern contraceptives methods and products. Pakistan through its pool of researchers, community leaders, health workers, civil society members and conveners has committed to increase family planning coverage and promoting positive sexual and reproductive health of females. However, it has failed to achieve its target, despite a large research volume at the provincial level. Therefore, investigating the factors that influence contraceptive use at the district level has become increasingly crucial to determine the effective designing and implementation of family planning programs.

Literature has shown that during 1947-1975 in Pakistan despite of multiple efforts the fertility rate has lessened down at a slower rate in comparison to other neighboring countries. In 2010-2015, total fertility rate was 69 percent. There was a gradual increase in its usage during in 1994 to 1995 ². However, the contraceptive prevalence rate became low to 35% in 2016³. Continued efforts are required for building up a strong consensus, involving general public , public and private organizations, bureaucrats, social media⁴. Social and cultural factors are important to consider while initiation of health promoting and disease preventing programs. Therefore, by controlling constrains related to it may leads to reduction in fertility rates and hence will result in less population momentum of Pakistan^{5,6}.

It can be argued that a large body of literature is available on this topic, but this does not obviate the need to determine which variables among numerous are more related to a particular geography. Previous research has indicated that variables associated with modern contraceptive use vary from one geographical location to another regarding their importance for a specific geography⁷.

The causes are social, cultural and economic disparity that differs from one district to another. Therefore, it is vital to find out the factors that play essential role in fruitful successful practice of contraceptive products among women of reproductive age at district levels. For instance, a survey conducted in Kenya where it was found that improving education and economic status are the chief determinants for modern contraceptive use8. However, a similar study in Mardan determined that engaging religious leaders is the principal factor for the success of the contraceptive program9. Thus, the Government of Punjab funded this survey to make an evidence-informed policy decision that would focus resource allocation for the variables distinctively identified in the Okara district. These steps are important for policy initiatives to change the Pakistani couples' fertility behavior. Therefore, understanding and knowledge of contraceptive predictors at the district level help divert resources on the factors that produce more desirable results. Also, determination of frequency findings in this study would also assist the researchers and policymakers to later compare the effectiveness of their program that was designed in the light of this research finding. This study's findings would also raise the need why different health programs required to be designed at district-level in the underserved areas of Pakistan. No study till date in our knowledge has specifically determined the frequency and factors linked with current contraceptive devices and products that are focused and highlighted in our research. The main objectives of this study were to determine the frequency of contraceptive usage and it's inter related numerous socio demographic factors in married women.

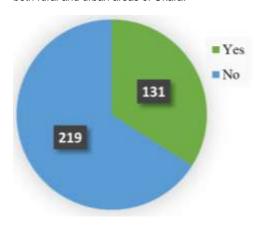
MATERIAL AND METHODS

Approval of the study was gained from the Institutional review committee of the University of Lahore. This study's design was cross-sectional (analytical), and the geographical domain was Okara city, Punjab, Pakistan. The data was collected from the rural and urban hospitals in district Okara and permission for data collection was also taken from the Medical Superintendent of DHQ Okara. Through convenient sampling women of reproductive age (15-45 years) specifically married women were selected. Those couples were excluded from the study those were not cohabitating (must stay at least two nights a week in the house). Women who were no longer able to reproduce due to any reasons i.e. endometriosis, uterine fibroids, having sexually transmitted

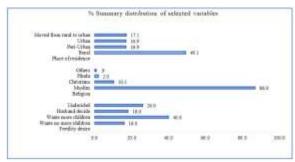
disease, gone through hysterectomy or permanent surgical method, radiation therapy or other cancer treatments were also excluded from the study. Interview session of the targeted population was initiated from first to third week of February 2020. Obstetrics and gynecology outpatient department of hospitals in district Okara. Sample size estimation was done by using proportional formula and through prevalence of contraceptive method as 35%, 10 at 5% margin of error and 95% confidence level and it was found to be 350.25 For analysis of data statistical package for social sciences SPSS version 22.0 was used for data analysis. Age, gender, marriage duration, number of offspring was a few quantitative variables. Quantitative variables were analyzed through standard deviation. While percentages were helpful in calculation of qualitative variables. Qualitative variables include contraception method type and education about it. The association among different variables with modern contraceptive usage was calculated through bivariate and multivariate logistic regression. Response to review comment 2 = No chi-square (X2) used for data analysis; the p-value is of logistic regression in the study.

RESULTS

Descriptive: The frequency shows that only 131 women were utilizing modern contraceptives for birth control, while 219 women informed that they did not use any contraception product for family planning. Total of 37.42% women used contraceptives in both rural and urban areas of Okara.



40 percent of child bearing women were of view that they want more kids; similarly, 26 percent of the targeted group did not decide yet in terms of preceding their family. Only 16% of the female answered that they don't want any child in present or in upcoming future. From the total sample, Muslim's were of majority, followed by 10.3 percent Christians. Similarly, rural participants were more as compared to urban population and peri-urban.



Bivariate and multivariate logistic regression analysis

The literacy level and usage of contraceptives are important predictors of family planning. A strong inversely association was found with decreased household income. Were as, other variables

like residence, the education of couple, job, family structure, total dependents, duration of the marriage, and total offspring were not found to be significantly associated with contraception techniques. (Table 1).

Table 1: Bivariate and multivariate logistic regression analysis

	Sig.	Exp(B)	95% C.I. for EXP(B)	
			L	U
Age	0.20	1.64	0.77	3.51
Fertility desire	.003*	0.86	0.65	1.13
Education	.038*	1.17	1.01	1.36
Place of residence	0.09	1.27	0.96	1.67
Husband education	0.32	1.15	0.87	1.52
Monthly salary	.009*	1.07	0.90	1.27
Occupation	0.14	1.09	0.98	1.21
Family type	0.08	1.40	0.96	2.04
Dependents	0.17	0.83	0.63	1.08
Women autonomy	.004*	2.50	1.34	4.68
Access to information	.019*	0.77	0.62	0.96
Duration of marriage	0.18	1.29	0.89	1.85
Number of offsprings	0.39	0.94	0.81	1.09
Living with husband	0.69	1.16	0.56	2.42

Logistic regression, L Lower, U*Upper, p-value <0.05=significant

DISCUSSION

This study investigated the frequency of modern contraceptive usage amongst married women. It was hypothesized that a significant association exists between the use of contraceptive methods and factors such as age, fertility desire, education, place of residence, the literacy level of husband, wealth index of the family, occupation, family type, number of dependents, women empowerment, and access to information, duration of the marriage, number of children and living with the husband. The study results are in alignment with the previous research conducted in Uganda, where women who use modern contraceptive methods tend to have a better quality of life and exercise greater autonomy compared to those who were not employing such methods.

This study also highlighted that accomplishing minimum secondary education significantly increases modern contraceptive methods among married women. This conclusion is consistent with past research on similar areas where education found to be a significant factor in the practice of these methods¹¹⁻¹³. It is because formal education provides women with more autonomy in making vital decisions in life. The autonomy of women is found to have a positive association with contraceptive usage. Moreover, it also improves the women's understanding of the advantages and disadvantages of different contraceptive methods, making them more inclined to recourse to the less harmful techniques. Literature demonstrated that education of women is a consistent predictor of the use of the current contraceptive method^{14,15}. The women who live in the Okara city Centre were more educated than rural women. Therefore, the use of contraceptive methods is more prevalent in Okara city. Educated women are more independent of making autonomous decisions. They are more empowered to decide when and how they should have children. Furthermore, due to easy & free access to contraceptive methods, a significant difference was discovered to be associated with living in rural or urban areas in this research16.

Our study also reported that wealth index significantly increased the probability of contraceptive methods. More educated women have easy access to information and it has been seen in our study that usage of contraceptive is increased with access to information. This was consistent with literature reviewed¹⁷⁻¹⁹. The problem with the developing country is that most family's average income is not sufficient to meet their ends¹⁷,^{20,21}. Thus, a large proportion of married women do not have such a privilege^{22,23}.

To promote health equity and increase general public awareness, health care professionals and educators in modern era supports social media. This conducted research also bring into the light that rural social gatherings, media sharing networks,

discussion forums and other type of social media was directly associated with use of safe contraceptive methods^{24,25}. There were other factors which was although highlighted to see the significance over safe contraceptive use but they were not found to be significantly associated with the modern contraceptive methods. The aforementioned variables include residency, education and information level of husband, women own occupation, family structure, currently present offspring's and number of dependents.

The study identified the chief determinants for opting modern contraception procedures among married female in Okara. The findings of our study suggest that district level studies are needed because factors influencing the contraceptive use varies from one place to another. Therefore, these results are only generalizable to those districts that are socially, culturally and economically match with Okara district. These districts could be Pakpattan, Kasur and Sahiwal. However, it is suggested that findings should be cautiously generalized to those districts where disparity exist in term of the above-mentioned factors. Therefore, it is strongly advocated that similar studies should be conducted in such districts as well for the success of implementation of family planning program.

CONCLUSION

The study concluded that women education and empowerment are the predictors of contraceptive usage. Therefore, stakeholders should give utmost importance to these issues so that utilization rate of contraceptives can be improved. Regional variations should be addressed while providing family planning services in order to improve contraceptive prevalence rate.

REFERNCES

- Hameed W, Azmat SK, Bilgrami M, Ishaqe M. Determining the factors associated with unmet need for family planning: a cross-sectional survey in 49 districts of Pakistan. Pakistan Journal of Public Health. 2011;1(1):21
- Darroch JE, Singh S. Trends in contraceptive need and use in developing countries in 2003, 2008, and 2012: an analysis of national surveys. The Lancet. 2013 May 18;381(9879):1756-62.
- Afzal M, Kayani MF, Mohammad A, Hashmi SS. An Indirect View of the Fertility Changes in Pakistan [with Comments]. The Pakistan Development Review. 1993 Dec 1;32(4):1081-96.
- Ghaffar A, Pongpanich S, Mohiuddin N. Determinants of frequency of antenatal care visits among Pakistani pregnant women: An analysis of the Pakistan Demographic and Health Survey, 2012-13. Rawal Medical Journal. 2018 Jul 1;43(3):429-
- Zaidi B, Morgan SP. The second demographic transition theory: A review and appraisal. Annual review of sociology. 2017 Jul;43:473.
- Bressler LH, Bernardi LA, De Chavez PJ, Baird DD, Carnethon MR, Marsh EE. Alcohol, cigarette smoking, and ovarian reserve in reproductive-age African-American women. American journal of obstetrics and gynecology. 2016 Dec 1;215(6):758-e1.
- Ejembi CL, Dahíru T, Aliyu AA. Contextual factors influencing modern contraceptive use in Nigeria. DHS Working Papers. 2015(120).
- Jalang'o R, Thuita F, Barasa SO, Njoroge P. Determinants of contraceptive use among postpartum women in a county hospital in rural KENYA. BMC public health. 2017 Dec;17(1):1-8.

- Azmat SK, Hameed W, Hamza HB, Mustafa G, Ishaque M, Abbas G, Khan OF, Asghar J, Munroe E, Ali S, Hussain W. Engaging with community-based public and private mid-level providers for promoting the use of modern contraceptive methods in rural Pakistan: results from two innovative birth spacing interventions. Reproductive health. 2016 Dec;13(1):1-5.
- Shah NZ, Ali TS, Jehan I, Gul X. Struggling with long-time low uptake of modern contraceptives in Pakistan. Eastern Mediterranean Health Journal. 2020;26(3):297.
- Kavanaugh ML, Jerman J. Contraceptive method use in the United States: trends and characteristics between 2008, 2012 and 2014. Contraception. 2018 Jan 1:97(1):14-21.
- Asiimwe JB, Ndugga P, Mushomi J, Manyenye Ntozi JP. Factors associated with modern contraceptive use among young and older women in Uganda; a comparative analysis. BMC public health. 2014 Dec;14(1):1-1.
- Geist C, Cole WM. Beyond geography: Cultural zones and global patterns of modern-method contraceptive use. Health Care for Women International. 2020 Apr 2;41(4):382-96.
- Beson P, Appiah R, Adomah-Afari A. Modern contraceptive use among reproductive-aged women in Ghana: prevalence, predictors, and policy implications. BMC women's health. 2018 Dec;18(1):1-8.
- Wurie HR, Samai M, Witter S. Retention of health workers in rural Sierra Leone: findings from life histories. Human resources for health. 2016 Dec;14(1):1-5.
- Asadisarvestani K, Khoo SL, Malek NM, Yasin SM, Ahmadi A. Determinants of contraceptive usage among married women in Shiraz, Iran. Journal of Midwifery and Reproductive Health. 2017;5(4):1041-52.
- Adebowale AS, Gbadebo B, Afolabi FR. Wealth index, empowerment and modern contraceptive use among married women in Nigeria: are they interrelated? Journal of Public Health. 2016 Oct;24(5):415-26.
- Moreira LR, Ewerling F, Barros AJ, Silveira MF. Reasons for nonuse of contraceptive methods by women with demand for contraception not satisfied: an assessment of low and middle-income countries using demographic and health surveys. Reproductive health. 2019 Dec:16(1):1-5.
- Patrikar SR, Basannar DR, Sharma MS. Women empowerment and use of contraception. Medical journal armed forces India. 2014 Jul 1;70(3):253-6.
- Adedini SA, Omisakin OA, Somefun OD. Trends, patterns and determinants of long-acting reversible methods of contraception among women in sub-Saharan Africa. PloS one. 2019 Jun 4;14(6):e0217574.
- Muanda MF, Ndongo GP, Messina LJ, Bertrand JT. Barriers to modern contraceptive use in rural areas in DRC. Culture, health & sexuality. 2017 Sep 2;19(9):1011-23.
- Sano Y, Antabe R, Atuoye KN, Braimah JA, Galaa SZ, Luginaah I. Married women's autonomy and post-delivery modern contraceptive use in the Democratic Republic of Congo. BMC women's health. 2018 Dec;18(1):1-7.
- Amakor GO. Contraceptive Use by Young Unmarried Mothers in Nigeria: An Intersectional Analysis. InIntersecting Religion and Sexuality 2020 Oct 5 (pp. 168-189). Brill.
- Gafar A, Suza DE, Efendi F, Has EM, Pramono AP, Susanti IA. Determinants of contraceptive use among married women in Indonesia. F1000Research. 2020;9...
- Shah NZ, Ali TS, Jehan I, Gul X. Struggling with long-time low uptake of modern contraceptives in Pakistan. Eastern Mediterranean Health Journal. 2020;26(3):297.