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ORIGINAL ARTICLE

Contraceptive prevalence rate in women of reproductive age in a semi urban community of Islamabad

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Author`s Contribution

[1, 2] Conception, design and planning of research study
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A B S T R A C T

Objective: To determine the prevalence of utilization of family planning methods among married women of reproductive age in a semi urban community of Islamabad.

Methodology: A cross-sectional survey was done using two stage sampling, including cluster and consecutive sampling techniques. A proportionate sample from each mohallas of Nurpur Shahan was taken to achieve our sample size. All married women of the reproductive age group (15-45 years) living with their husbands, not diagnosed as a case of infertility and permanent residents of Nurpur Shahan were included.

Results: Total of 550 women were included in the study with mean age of 31.64 years. Majority of women 497 (94.7%) were currently married while 322 (59.9 %) were literate. Of all the women, 72 (13.2%) women were currently pregnant and only 62 (11.3%) had a planned pregnancy. Induced abortion was practiced once by 9 (1.8%) women and 21 (4.1%) had done it twice. 394 (72.8%) had knowledge of family planning methods and only 102 (19.5%) women were using family Planning methods currently.

Conclusion: Miscellaneous challenges are involved to increase involvement of the women and their families in the use of family planning services. Health education campaigns at community level to increase awareness regarding different family planning methods are highly needed. Government needs to improve the LHWs services to increase the use of family planning methods and combat induced abortions as a method of contraception. Controlling population through sterilization after attaining a large family size should not be the preferred method of family Planning.

Keywords: *Family planning methods, woman literacy, knowledge.*

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Introduction

Global population stands over 6 billion. Uncontrolled population expansion is the main obstacle in national development. Pakistan is the 6th populous country in the world with a population of 210 million according 2018 censes and expecting to reach 335 million in the year 2050. Over population in Pakistan is the main burning problem which is a major cause of poverty, illiteracy, decrease economic growth and ill health. An estimated 890,000 induced abortions occur annually according to survey by population council, 196000 women are treated each year for complications resulting from unsafe abortions [1]. There are important negative consequences for health related to high fertility, impacting maternal and child morbidity and mortality, as well as economic development. High fertility also increases the number of times a woman is exposed to the risks of child bearing, e.g. unsafe abortions, anemia, and maternal death from complications [2, 3]. Family planning has been defined

(WHO, 2015) as "Family planning allows people to attain their desired number of children and determine the spacing of pregnancies. It is achieved through use of contraceptive methods and the treatment of infertility" [4]. While the previous definition focuses on limiting the size of the family, the 2009 Collins English Dictionary, specifies the use of contraceptives when defining family planning as "the control of the number of children in a family and the intervals between them, especially by the use of contraceptives" [5].

According to the Contraceptive Performance Report released by the government of Pakistan, Pakistan has the sixth position in the world population ranking with over 164 million people. This ranking is expected to rise by the year 2050 when Pakistan is likely to rank in 5th place. This rapid growth poses several problems like food insecurity, economic instability, increase need for health and energy resources and law and order situations. Therefore, the government of Pakistan prioritizes the need for expansion of Family Planning services throughout the country [6].

The Lady Health Workers' Program, National Program for Family Planning and Primary Health care was launched in 1994 by the government of Pakistan. Through training of Lady Health workers (LHWs), the coverage of essential health services including family planning services extended to most parts of the country covering up to 60-70% of the population. The impact of this program has been such that there has been an increase in the Contraceptive Prevalence rate (CPR) in those communities being served by the LHWs [7]. On the other hand, there are also studies which show that rates of contraceptive discontinuation are also high due to several reasons including side-effects, health concerns, accessibility etc. [8, 9].

Nurpur Shahan is a semi-urban community located about 15 km from the city center of Islamabad with a population of around 50,000. This community is gradually expanding as it is a convenient facility for refugees and internally displaced persons. Low literacy rate and poor health status are remarkable challenges of this vulnerable population. Primary and secondary schools are very few with no colleges in the area. As this area is not catered to by any government facility like a basic health unit or rural health center most of the health care is provided by private enterprises. Therefore, there have been no appointed LHWs working in the area. As a result, there is no systematically documented data regarding the needs and prevalence of utilization of family planning services within this area.

Methodology

This community based cross sectional survey was done among 550 married women of reproductive age group in Nurpur Shahan, a semi-urban community of Islamabad. A semi-urban community is a community located between urban and rural areas and having minimum facilities as compared to urban areas. This area does not have any health care facility by the government and the nearest hospital is at a distance of about 15 KM, although some private clinics are working.

Sampling was done using two stage sampling, including cluster sampling and consecutive sampling techniques. WHO sample size calculator was used with 95% CI, 3% (0.03) absolute precision, and P (ref) of 16% (0.16). The sample size thus calculated was 574 rounded off to 550. Mapping was done and several major Mohallas were identified for collection of data. A sample of proportionate sample from each mohalla was taken to achieve our sample size. In each Mohalla, the first street was taken as the starting point. In case of refusal by a household, the next one was selected. In case there were more than one married eligible woman in the house, the first one was selected for the study after informed consent. A self-constructed questionnaire comprising of 51 questions was used as a tool after informed consent was taken. Women of reproductive age (15-45 years) living with their husbands, not diagnosed with case of infertility and permanent residents of Nurpur Shahan were included in the study.

The key variables of interest are women education status, family size, number of children, number of abortions and knowledge and use of contraceptive methods.

The data was stored and analyzed using Statistical package for social sciences (SPSS) version 21. Descriptive statistics were calculated for the quantitative variables. The chi square was applied to find the association between women education and knowledge about contraception and induced abortions.

Ethical approval of the study was taken from Institutional Review Board and Ethics committee of Shifa International Hospital before starting the study.

Results

Age of women included in study were between 16 to 49 years with the mean age of 31.64 years. Majority of the women were currently married 497(94.7%) while 43 (7.8%) widowed, 8 (1.5 %) divorced and 2 (0.4%) were separated. Of all the women included in the study, 322 (59.9 %) were literate while 216 (40.1%) were illiterate. Literacy percentage was better in their husbands with 460 (84.6 %) literate while 84(15.4 %) illiterate.

Of the 550 women who were included in the study, 72 (13.2%) women were currently pregnant. Of the 72 women, who were currently pregnant, only 62 (11.3%) had a planned pregnancy while 34(6.2%) did not want to get pregnant and 454(82.5%) did not answer the question. Majority of women 309(56.4%) had 3 live children, 153(27.8%) had more than 3 while 86(15.7%) had no children. Preference regarding gender of the baby, 88 (31.5%) wanted a boy, 36 (12.9%) wanted a girl and 155 (55.6%) had no choice. Of all the women 9 (1.8%) had practiced (through a LHV/Dai) induced abortion once, 21 (4.1%) had done it twice while 477 (86.7%) had never practiced it.

Table 1: Demographic Variables

Demographic variables	Responses	Frequency (n=550)
Women education level	Primary	112 (34.8 %)
	Secondary	152 (47.2 %)
	Higher secondary	31 (9.6 %)
	Graduate	18 (5.6 %)
	Postgraduate	9 (2.8%)
Husband's education Level	Primary	118 (25.7 %)
	Secondary	218 (47.4 %)
	Higher Secondary	62 (13.5 %)
	Graduate	45 (9.8 %)
	Postgraduate	17 (3.7 %)
Women employment Status	Housewife	492 (89.5%)
	Government job	1 (0.2 %)
	Private job	12 (2.2%)
	Business	18 (3.3%)
	Other	27 (4.9%)
Husband's employment Status	Unemployed	40 (7.9%)
	Government job	109 (21.5%)
	Private job	168 (33.1%)
	Business	74 (14.6%)
	Laborer	117 (23%)
Women Income (Pak Rupee)	None	439 (80%)
	< 10,000	58 (10.6%)
	10,000 - 20,000	8 (1.9%)
	> 20,000	42 (7.7%)
Husband Income (Pak Rupee)	None	40 (8%)
	< 10,000	198 (39 %)
	10,000 - 20,000	163 (32.8%)
	> 20,000	100 (20.1%)

Maximum women 377(71.5%) had the knowledge that birth interval is good for health of the mother and child, 9 (1.7%) had the concept that's it's done to control the population, 43(8%) thought that it should be practiced due to financial reasons while 109 (20.3%) had other reasons.

The source of current family planning methods in use was government hospital 80(39.2%), family planning clinic 34(16.7%), private hospital/clinic 15(7.3%), others 31(15.2%) while 44 (21.6%) did not knew.

Strong association was found between women education and knowledge of family planning ($P<0.05$). There was no association between women literacy and induced abortions.

Table 2: Family Planning Methods Knowledge

Family Planning methods	Responses	Frequency
Knowledge of family planning methods	Yes	394 (72.8%)
	No	147 (27.2%)
Source of family planning methods	Govt. Hospital	120(22 %)
	Private clinic	99 (19.1%)
	Others	51 (9.6%)
	Don't Know	159 (30.6%)
Use of Family planning methods in past	Yes	208 (38.5%)
	No	331 (61.55%)

Decision maker for Family planning methods (first time)	Women	111 (55.8%)
	Husband	44 (22.1%)
	In-laws	9 (4.5%)
	Health worker	15 (7.5%)
	Others	20 (10.1%)
Duration of Family planning methods use in years	Less than 2	58 (55.2%)
	2- 4 years	11 (10.5%)
	More than 4	36 (34.3%)
Reason for stopping family planning	Wanted another child	29 (27.1%)
	Wanted a son	2 (1.5%)
	Afraid of side effects	5 (3.8%)
	Opposed by husband	17(6.8%)
	Relatives/in-laws opposed	7 (2.8%)
	Health reasons	26 (14.5%)
	Others	56(43.5%)

Table 3: Family Planning Methods Practices

Family Planning Methods Practices	Responses	Frequency (n=550)
Currently using any FP method	Yes	102 (19.5%)
	No	422 (80.5%)
Type of family planning method used in past	Condoms	54 (25.6%)
	Pills	47(22.3%)
	Injectables	23(10.9%)
	IUCD	33(15.6%)
	Implant	12 (5.7%)
	Female sterilization	30 (14.2%)
	Others	12 (5.7%)
Preferred method of Family Planning	Condoms	48 (17%)
	Oral pills	59 (20.8%)
	Injectables	31 (11%)
	IUCD	14 (4.9%)
	Implants	2 (0.7%)
	Sterilization	77 (27.2%)
	Others	31 (11%)
	Don't know	21 (7.4%)
Future plans of FP use	Yes	245(47.6%)
	No	218 (42.3%)
	Not sure	52 (10.1%)

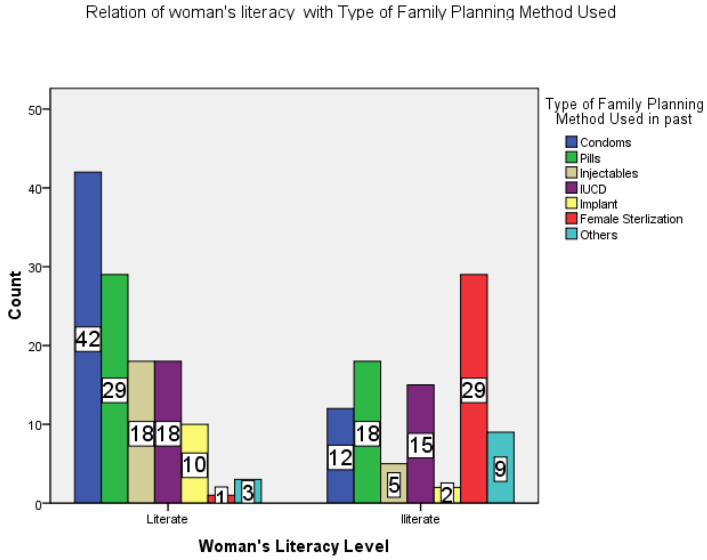

Figure 1: Association between women literacy and the type of family planning methods used in the past

Condoms were the most common type of family planning methods used by the literate women (42) while female sterilization (29) was the most preferred method of family planning among illiterate women.

Discussion

Rapidly increasing population in Pakistan needs to be addressed as it's the key to control all the problems including scarcity of resources, poverty, ill health and illiteracy. The mean age of our participants was 31.64 years compared to 27.2 Years in a study from Karachi. Literacy rate in our study was low 322 (59.9%) which was better compared to the literacy rate 30% in the same study from Karachi and 60% in a study from rural area of Faisalabad. Of these women only 112 (34.8%) had primary education compared to 76 (17.7%) women and 31 (9.6%) had higher secondary education compared to 12 (2.8%) in a study from Karachi [1]. Husbands literacy rate was much better 84% compared to the women but this does not define higher education as we define that any person who can write his name is a literate or even has attended school below primary level.

In our study, the number of women who had experienced abortions (spontaneous + induced) was 197 (36.1%) while the number of induced abortions practiced by women with help of Dai/LHV was 9 (1.8%) once and 21 (4.1%) twice. When we compare our results with another study the number of abortions is 78 (26%) one to two times and 05(1.6%) three to five times, which is almost same like our results but the frequency of induced abortions is not mentioned in that study [10].

The preferred family planning methods in our study were condoms 48 (17%), oral pills 59 (20.8%), Injectables 31 (11%), implants 2 (0.7%), IUCD 14 (4.9%), sterilization 77 (27.2%), others 31 (11%) and 21 (7.4%) did not knew. Barrier method 88 (20.46%) was the most preferred method in a study from Karachi while emergency contraception was practiced by 12 (2.8%) [1]. In a study from India, approximately 40% women were currently using one or the other method of contraception. Barrier method was the most commonly used (64%) followed by oral pills (25%). A study in China showed the condoms to be the common method adopted by women for contraception because of awareness for using condoms as the safest method of contraception [11]. A study in Malaysia showed that Depo-Provera is the most preferred method followed by Oral contraceptive pills and injectables [12]. Injection was the preferred method of choice used by majority (59%) of the women in another study from Pakistan [13].

In our study, the results of duration of use of any of the above modern contraceptive methods was less than 2 years 58 (55.2%), 2-4 years 11 (10.5%) and more than 4 years 36 (34.3%). In a study from Faisalabad the results of duration of use for less than 2 years was 215 (71.6%), 2-4 years 37 (12.3%) and more than 4 years 48 (16.2%). So, it shows that there is need of proper counseling and awareness about contraceptive methods so that the duration of use can be increased to have a good birth spacing.

Results regarding benefits of contraception in our study were that maximum women 377 (71.5%) had the knowledge that birth interval is good for health of the mother and child, 9 (1.7%) had the concept that it is done to control the population, 43 (8%) thought that it should be practiced due to financial reasons while 109 (20.3%) had other reasons. In the study from Faisalabad, the results were for better health of mother and child 107 (35.6%), better upbringing and education of the child 39 (13%), better well-being 110 (36.6%) and 44 (14.6%) did not knew [7]. In another study from Nigeria television and radio messages were the associated with highest use of family planning methods [14]. In our study 394 (72.8%) of the participant women had knowledge of family planning methods compared to 89% (249/280), of respondents in a study from Ghana [15].

Main source of family planning services in our study was government hospitals 120 (22%), family planning clinics 91 (17.5%), private clinics 99 (19.1%), others 51 (9.6%) and 159 (30.6%) did not have any idea. In a study from India, the main source of knowledge was media followed by healthcare workers & social circle [16]. LHW/Nurse was the most common resource 90 (30%) while Neighbors/friend 89 (29.6%), Doctor 56 (18.6%) media 12 (4%), husband 21 (7%), mother/sister 11 (2.6%) and none 21 (7%) in the Faisalabad study [10].

According to our study, overall women using contraception currently was 102 (19.5%) compared to a study from India where 40% women were currently using contraception [15] and 27% in another study from Delhi [17].

Conclusion

Miscellaneous challenges are involved to increase involvement of the women and their families in the use of family planning services. Health education campaigns at community level to increase awareness regarding different family planning methods are highly needed. These endeavors can best be achieved by private organizations working in the area including Shifa College of Medicine from where this study was initiated. The Government needs to improve the coverage of LHWs services within this area to increase the use of family planning methods and combat induced abortions as a method of contraception. With the new government taking over recently it is hoped that this objective may be achieved considering the area's close proximity to the Prime Minister's secretariat. Controlling population through sterilization after attaining a large family size should not be the preferred method of family planning as identified in our study.

References

1. Rashid S, Sohail S, Munim TF. Family Planning Methods; Knowledge, Perceptions, and ever Use of Modern Family Planning Methods Among Childbearing Women in Tertiary Care Hospital. Professional Medical Journal. 2017 Aug 1; 24(8).
2. Stover J, Ross J. How increased contraceptive use has reduced maternal mortality. Maternal and child health journal. 2010 Sep 1; 14(5): 687-95.
3. Al JF. Grandmultiparity: a potential risk factor for adverse pregnancy outcomes. The Journal of reproductive medicine. 2012; 57(1-2): 53-7.
4. WHO (2015) Family planning. Available from: http://www.who.int/topics/family_planning/en/ Accessed on 3rd June 2018
5. Collons W, Family Planning, Collins English Dictionary. 10th ed. London: Harper Collins Publishers; 2009
6. Pakistan Bureau of Statistics. Contraceptive Performance Report 2011-2012. Statictics Devision. May 19, 2018 Available from: http://www.pbs.gov.pk/sites/default/files/industry_mining_and_energy/qim/Conraceptive-Performance-Report-2011-2012_A.pdf
7. Wazir MS, Shaikh BT, Ahmed A. National program for family planning and primary health care Pakistan: a SWOT analysis. Reproductive health. 2013 Dec; 10(1): 60.
8. Rizvi F, Irfan G. Reasons for discontinuation of contraceptive methods among couples with different family size and educational status. Journal of Ayub Medical College Abbottabad. 2012 Mar 1; 24(1): 101-4.
9. CBS M. Kenya Demographic and Health Survey 2003. Central Bureau of Statistics (CBS), Ministry of Health and ORC Macro. Calverton, Maryland USA.
10. Sadiq S, Farrukh U, Imam HS. Preference of Contraceptive Methods Among Married Women of Rural Area of Faisalabad. Parity.; 1(3): 4-6.
11. Wu L. A survey on the knowledge, attitude, and behavior regarding contraception use among pregnant teenagers in Beijing, China. Clinical Nursing Research. 2010 Nov; 19(4): 403-15.
12. Shiely F, Saifuddin MS. Contraceptive choice and acceptability: The future for STI risk in Kelantan, Malaysia. International journal of STD & AIDS. 2014 Mar; 25(3): 219-27.
13. Akhtar T, Khan MS, Ahmad I, Hussain I. Family Planning Methods and Gender Distribution of Children in a Defined Rural Community of Peshewar. Journal of Postgraduate Medical Institute (Peshawar-Pakistan). 2011 Dec 12; 25(4).
14. Ajaero CK, Odimegwu C, Ajaero ID, Nwachukwu CA. Access to mass media messages, and use of family planning in Nigeria: a spatio-demographic analysis from the 2013 DHS. BMC public health. 2016 Dec; 16(1): 427.
15. Apanga PA, Adam MA. Factors influencing the uptake of family planning services in the Talensi District, Ghana. Pan African Medical Journal. 2015; 20(1).
16. Kaur H, Parveen Mohan D, Pathak N, Manocha A. Knowledge, attitude, practices and behavior of women towards contraceptive use-a study of women attending north Indian rural hospital. Indian Journal of Obstetrics and Gynecology Research Vol. 2014 Oct; 1(1).
17. Devasenapathy N, Jerath SG, Allen E, Sharma S, Shankar AH, Zodpey S. Reproductive healthcare utilization in urban poor settlements of Delhi: Baseline survey of ANCHUL (Ante Natal and Child Health care in Urban Slums) project. BMC pregnancy and childbirth. 2015 Dec; 15(1): 212.