



ORIGINAL ARTICLE

Awareness and practice of contraceptive measures among multiparous Pakistani women - A multicenter study.

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ABSTRACT... Objective: To determine contraceptive knowledge and practices among multiparous women. **Study Design:** Cross Sectional, Multicenter study. **Setting:** Gynae Unit I of Sir Ganga Ram Hospital, Lahore and Gynecology Department of Government Teaching Hospital, Shahdara. **Period:** 1st July 2019 to 31st December, 2019. **Material & Methods:** A total of 448 multiparous women were randomly selected from 2 tertiary care hospitals. A structured questionnaire was used to assess the knowledge of women attending antenatal and gynaecology clinics and indoor. **Results:** Out of 448 women, all were aware of at least one method of contraception and 272 (65%) had used one. The most commonly employed method was male condom (33%) followed by IUCD (24%), oral contraceptive pill (22%) and hormone based injectables (13%). In upper socioeconomic class, 95% were using birth control methods whereas 71% of middle class and 48% of lower class subjects had used any one method of birth control. In the highly educated subjects, 67% had employed a contraceptive method and among the illiterate, only 39% has used any method. Disapproval on part of the husband was the most common (28%) reason of refusing contraceptive services, followed by desire for more children (16%). Health care workers were the most common source of knowledge of contraception (69%) followed by family members (31%) and media (17%). **Conclusion:** All the subjects were aware of contraceptive methods. The most common used method is condoms followed by IUCD but practices were limited due to high illiteracy, lower socioeconomic status, partner refusal, desire for more issues and fear of side effects.

Key words: Awareness, Contraception, Knowledge, Multipara, Practices.

INTRODUCTION

Pakistan is the one of the most densely populated countries in the world with a current population of 220 million. The population is growing exponentially at a rate of 2.40%¹, which is much higher than other South Asian countries like India, China and Bangladesh.² If this population explosion is left uninhibited, the numbers are expected to rise to 338 million by the year 2050.³ Population control is integral to the development of a struggling third world country like Pakistan. Family planning is the first pillar of Safe Motherhood. Although maternal and child health indicators, like vaccination coverage and access to medical services, have improved in the recent years, the fertility rate has only taken a minor fall from 3.8% in 2013 to 3.6% in 2018⁴, and is

one of the highest in the region, ranking second only to Afghanistan. The modern contraceptive prevalence rate (CPR) has actually dropped from 26% in 2013 to 25% in 2018.⁴ Lack of contraceptive practice results in shorter inter-pregnancy interval and unwanted pregnancy. Short inter-pregnancy interval is associated with abortion, premature labor, postpartum hemorrhage, low birth weight babies, fetal loss and maternal death.⁵ Unwanted pregnancy may lead to induced abortion and increased maternal morbidity and mortality.⁶ This emphasizes the urgent need to improve and promote family planning awareness and services.

The objective of this study was to assess the awareness and practices of contraception amongst women of reproductive age, and to

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identify the reasons of non-usage of contraception. The study may aid better understanding of contraception awareness level in the women and factors associated with non-use of contraceptive methods so that we can rightly target demographic groups to improve awareness and implement contraceptive methods.

MATERIAL & METHODS

A cross-sectional, multicenter study was carried out in Department of Obstetrics and Gynecology Unit 1 of Sir Ganga Ram Hospital, Lahore and Gynecology Department of Government Teaching Hospital, Shahdara during the time period of 1st July to 2019 to 31st December, 2019. Both of these tertiary care hospitals are attached to Fatima Jinnah Medical University, Lahore. Permission was taken from ethical review board of institution on 31.01.2021 date and IRB No 03/Research Proposal/Anatomy/FJ/ERC. After written informed consent, a total of 448 women aged 18 to 45 years with any parity, presenting in the outdoor and indoor departments of Gynecology and Obstetrics, were included in study using convenient sampling technique. 228 subjects were selected from Sir Ganga Ram Hospital and 220 from Government Teaching Hospital, Shahdara. The women were interviewed, and their responses were recorded in a proforma. Confidentiality and anonymity were strictly observed. Data was collected regarding age, parity, socioeconomic status, knowledge and use of various contraceptive methods.

Quantitative variables were expressed in mean+SD and qualitative variable as percentages. This data was analyzed using SPSS version 22.

RESULTS

A total of 448 women were included in the study. The mean age +SD of subjects was 31+5 with range of 18-45 years. Majority (167) of women had age between 31 and 35 years. 329 (73%) women had parity between 3-5, 111 (25%) were higher than para 5, and 8 (2%) were less than para 2 (Table-I). Most of the subjects (37%, n166) were educated to primary level, 15% (n69) up to higher secondary level and 23% (n101) were illiterate (Table-I). Regarding socioeconomic

status, the highest number (51%, n231) of the patients belonged to middle class.

Age in Years	Number (%)
Mean +SD (31+5)	
Range 18-45	
18-20	15(3)
21-25	38(8)
26-30	136(30)
31-35	167(37)
36-40	77(17)
41-45	15(3)
Parity	Number (%)
1-2	8(2)
3-5	329(73)
6-9	98(22)
More than 10	13(3)
Education	Number (%)
Illiterate	101(23)
Primary	166(37)
Secondary	112(25)
Higher Secondary	69(15)
Socioeconomic class (PPP Rs per month)	Number (%)
Lower class (less than 20,000)	179(40)
Middle class (50,000 –100,000)	231(51)
Upper class (More than 100,000)	38(8)
Table-I. Sociodemographic characteristics	
Total No=448	

All the women included in study were aware of at least one contraceptive method (Table-II). Most (69%, n297) of women had obtained information from health care workers in hospitals and family planning centers, followed by family members (31%, n139) and media (17%, n86).

Male condom (50%, n226) was the most frequently known method followed by intrauterine contraceptive device (IUCD) (41%, n182), and oral contraceptive pills (32%, n145), whereas only 8 (2%) women were aware of vasectomy. The side effects of IUCD and oral contraceptive pills were known to 80 (18%) and 64 (15%) subjects, respectively (Table-II).

When asked about use of contraception, 272 (65%) had used a method of contraception. Condoms were most commonly used (33%, 90) followed by IUCD and oral contraceptive pills

in 65 (24%) and 61 (22%) women, respectively (Table-II).

Awareness of Contraception	Number (%)
Yes	448(100)
No	0(0)
Source of Awareness	Number (%)
Media	86(17)
Relatives	139(31)
Hospital	147(34)
Family planning center/Lady health workers	150(35)
Awareness of contraceptive method	Number (%)
Oral contraceptive pill	145(32)
Injectable	92(21)
IUCD	182(41)
Condom	226(50)
Sterilization	75(17)
Rhythm method	11(2)
Implant	17(4)
Vasectomy	8(2)
Awareness of side effects of method (%)	Number (%)
Oral contraceptive pill	64(15)
Injectable	40(9)
IUCD	80(18)
Condom	61(14)
Sterilization	24(5)
Rhythm method	6(1)
Implant	8(2)
Vasectomy	6(1)
Use of any method of contraception	Number (%)
Yes	272(65)
No	156(35)
Method of contraception used	Number (%)
Oral contraceptive pill	61(22)
Injectable	34(13)
IUCD	65(24)
Condom	90(33)
Implant	11(4)
Rhythm method	3(1)
Sterilization	8(3)
Vasectomy	0(0)
Reasons of refusal of contraception	Number (%)
Husband Disapproval	125(28)
In law problems	42(9)
Religious Concerns	44(10)
Cost Effectiveness	50(11)
Need more children	72(16)
Fear of side effects	104(23)
Table-II. Awareness and knowledge of Contraception. Total No=448	

Among the highly educated women, 15 (67%) had previously used a method of contraception or were currently using one, whereas 39 (39%) of the illiterate women had ever used any. When stratified according to socioeconomic groups, 95% (n36) of the upper class women had used a method of contraception regularly while among the lower class, only 48% (n86) had ever used any (Table-III).

The most common cause of refusal to use any contraceptive method was husband's disapproval (28%, n125) and fear of side effects (23%, n104) being the second most common cause (Table-II).

Education	Number of cases (%)	Used at least one contraceptive method (%)
Illiterate	101(23)	39(39)
Primary	166(37)	90(54)
Secondary	112(25)	73(65)
Higher Secondary	69(15)	46(67)
Socioeconomic class (PPP RS per day)	Number of cases (%)	Used at least one contraceptive method (%)
Lower class (<Rs 20,000)	179(40)	86(48)
Middle class (Rs 50,000-<Rs 100,000)	231(51)	165(71)
Upper class (>Rs 100,000)	38(8)	36(95)
Table-III. Stratification according to education and socioeconomic status		

DISCUSSION

Government and NGOs have launched many campaigns to educate people about the irrefutable importance, need and availability of contraceptive facilities to increase contraceptive prevalence rate (CPR) and decrease the unmet need of contraception. After the failure of achieving MDG goals in the past, the new Sustainable Development Goals are also linked with family planning. Goal 3 (insurance of healthy lives and promotion of wellbeing for all age groups) and Goal 5 (achievement of gender equality and female empowerment) are directly tied with ensuring access of all women to sexual health and reproductive rights. Despite these

efforts, the CPR is not rising satisfactorily. In this study, all the women interviewed had awareness of at least one method of contraception. This is consistent with the Pakistan Demographic and Health Survey (PDHS) 2017-2018, where 99% of all married Pakistani men and women knew about at least one method of birth control.⁴

Majority (50%) of women in our study had awareness of condom, followed by IUCD (41%) and contraceptive pills (32%). Most (18%) of the subjects knew about the side effects of IUCD and 15% about those of COC pills. This result is in congruence with another study conducted in Singapore in 2016 by Gosavi, A., Ma, Y., Wong, H., and Singh, K. which went on to conclude that 100% of the subjects were aware of male condoms and 89% of oral contraceptive pills.⁷

The majority (52%) attained awareness from doctors and lady health workers in hospitals and family planning centers, which shows that health department is playing its part well, however further improvement in the dissemination of information is required. The least proportion of participants (17%) cited media as their source of information, thus a stronger media campaign may be instrumental to raise awareness. In 2004, a study done in the same hospital, Sir Ganga Ram, showed that the major source of information for women regarding contraception was television.⁸ This shows that the effectiveness of media campaign has dwindled over the years. Now is the time to use television commercials and print media, once again, to alleviate superstitions and address reservations regarding use of contraceptives.

In our study 65% of women were practicing any one method of contraception. When compared to other regions, this rate is lower than CPR observed by researchers in Tehran, capital city of Iran, and northern India.^{9,10} Other researchers in a sub-metropolitan city of Nepal have also quoted higher contraception use rate at 70.8%.¹¹ However, according to PDHS of 2019 only 25% of married Pakistani women use a modern contraceptive method.⁴ This difference may be explained by the fact that our study was carried out in two major

Government Tertiary Care Hospitals of a well-developed urban area, whereas the PDHS survey included subjects of both rural and urban areas. Since there are ample educational and medical facilities available in a metropolis like Lahore, more people have awareness and access to the family planning services. These opportunities are lacking in far flung villages and districts.

The most commonly employed method of contraception was condom (33%) because it is cost effective and easy to use. This finding is comparable to other researches done India and Kashmir areas.^{10,12} However, this is in contrast to the PDH Survey of 2017-2018 which cites that hormone based injections (18%) and COCPs (26%) are most frequently employed contraceptives across country.⁴ This difference may be attributable to the fact that most (77%) of our participants were literate and therefore empowered enough to use a method that had the least amount of side effects to their own health. It is important to note the low use of implants despite having a lower failure rate than condoms. Since it is an effective and easy method of birth control, the reason of its limited use is probably the inability of health facilities to deliver this service. The same finding has been observed in Dharan city of Nepal in 2018 by Thapa P, Pokharel N and Shrestha M.¹¹

Only a few (2%) participants had awareness of vasectomy and none of the couples had ever practiced vasectomy. According to another study done in 2019 in Jhang city by Kamran, U., Mahmoud, H., Younus, H. and Maroof, S., 40.9% of the sample population considered vasectomy to be against their religious beliefs.¹³

However, it is important to note that Iran, despite being a conservative Islamic country, has freely incorporated vasectomy into its national birth control program and has found success with it.¹⁴ Therefore, religious leaders and clergymen should be taken into confidence regarding contraception so that their influence may be used to sway the general public's opinion towards birth control.

There seems to be a positive relationship between education and family planning. Countries with higher literacy rates have lower fertility rates due to family planning. Indian, Iranian and Chinese female literacy rate is 54.5%, 77.2%, and 90% respectively.¹⁵ Among our neighboring countries, India has a CPR of 52.2%¹⁶ whereas in Iran, it is 81.5%.¹⁷ In China, this rate is among the highest across the globe at 89%.¹⁸ According to our study, well-educated subjects showed preference for limiting family size (Table-III). The higher the educational level, more the inclination towards contraception. Only 49% of total Pakistani women are educated and according to Pakistan Social and Living Standards Measurement Survey of 2019, those women who live in rural areas have far lesser educational opportunities than those living in the cities.¹⁹ As a result, Pakistan has an overall lower rate of contraceptive prevalence than other regions of South Asia. Furthermore, addition of sex education and family planning methods to curriculum of secondary education level may also help the public make intelligent and independent decisions regarding family matters.

The wealthy have more access to family planning services. Our results show that higher Purchasing Power Parity (income) is directly related to higher use of contraceptive services (Table-III). This may be due to better access to health care facilities and higher education and therefore, the ability to make an independent decision. This finding is supported by another study done in Canada by Metcalfe, A., Talavlikar, R., and du Prey, B. in 2016 which concluded that better educational and social status results in less unintended pregnancies in women.²⁰

The leading cause of non-usage of contraception was husband's disapproval (28%) followed by fear of side effects (24%). Many men believe that use of modern birth control may negatively affect the reproductive potential of females and even render them infertile or impotent. This conclusion is supported by another study conducted in Pakistan by Agha, S. in 2010.²¹ This way of thinking may have been shaped from lack of information regarding family planning in the general population due the taboo nature of the topic

and its exclusion from educational curriculum. Moreover, many clergymen and spiritual leaders in Pakistani society also disapprove of family planning. However, this is not an issue faced only by our country because all over the globe where persons belonging to different religions and faiths do have reservations regarding family planning. Therefore, medical personnel should try their best to promote contraception without offending cultural and religious beliefs of their patients and help remove misunderstandings and social stigma associated with the issue.

LIMITATIONS

There were no limitations of this study.

CONCLUSION

All the subjects were aware of contraceptive methods. The most common used method is condoms followed by IUCD but practices were limited due to high illiteracy, lower socioeconomic status, partner refusal, desire for more issues and fear of side effects.

RECOMMENDATIONS

Addition of contraceptive practices to syllabus of Secondary level education may help remove misconceptions and sway the public opinion towards it. Media having the irrefutable power of changing people's opinion, it should be used to enhance and disseminate awareness about safety and importance of contraceptive methods.

Media awareness campaigns should focus on men as well as women.

Improving literacy rate may also improve public opinion on contraception.






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5	Uzma Hussain	Data collection, Analysis, Literature review.	
6	Shamsa Hamyun	Data collection, Analysis.	