Original Article

CONTRACEPTIVE PREVALENCE RATE, UNMET NEED FOR FAMILY PLANNING AND ITS ASSOCIATED FACTORS AMONG WOMEN OF REPRODUCTIVE AGE GROUP

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Abstract

Background: Family planning includes knowledge, services, attitude, policies and practices which enable individuals to decide whether they want to have child and allow them to avoid unwanted pregnancy. Pakistan with population of 195.390 million with estimated population growth rate as 1.89 is the sixth most populous country in the world. Our objectives were to assess the total demand of family planning, contraceptive prevalence rate, unmet need for family planning and factors associated with unmet need of family planning among women of reproductive age group.

Methods: We conducted this cross-sectional study on 355 females of reproductive age attending the out-patient department as patient or attendant. Data were collected using structured questionnaire after the participants' verbal consent.

Results: The prevalence of unmet need was 34%. The proportion of unmet need for spacing was 63.6% and for limiters it was found to be 36.3%. Contraceptive prevalence rate was 57%. Total demand for family planning was 92.1%. Almost all study participant had knowledge regarding at least one method of contraception. Unmet need of family planning was found to be significantly associated with age and education status of women. High unmet need was there in women with low education status ($p=0.047$) and older age group ($p=0.003$). Main reasons for not using contraceptive was family opposition both family and husband (66.9), and fear of side effects (17.3%).

Conclusion: More than one third females had unmet need which strongly points towards the strong influence of various socio demographic factors contributing towards the unmet need.

Keywords: Unmet need, contraceptive prevalence rate, total demand of family planning

Introduction

Family planning includes knowledge, services, attitude, policies and practices which enable individuals to decide whether they want to have child and allow them to avoid unwanted pregnancy. It is basic right of every individual to have access to family planning services and to decide about family size (1). Family planning can improve maternal and child health indicators and can reduce maternal deaths by maintaining health spacing (2).

Pakistan with population of 195.390 million with estimated population growth rate as 1.89 is the sixth most populous country in the world. Pakistan has poor demographic and family planning indicators as compare to our countries of region with highest child mortality rate

of 81.1 and infant mortality rate of 65.8 per 1000 live births. In order to improve current statistics there is dire need to improve family planning services (3).

Pakistan has made commitment during International Conference on Population and Development and signatory to The London Summit on family planning 2012. This meeting has inspired the Family planning 2020 agenda which aims to provide family planning services to additional 120 million women in 69 countries of world with gross national income less than \$ 2500 (4). According to FP 2020 commitment Pakistan need to increase contraceptive prevalence rate (CPR) to 50% while CPR during 2016 is reported to be 35.5 % (5).

Family planning can pave the way to successful

achievement of Sustainable Development Goals (SDGs). The impact of family planning in achievement of SDGs is well depicted from Statement of Global Health: Science and Practice as Investing in Family Planning: Key to achieving Sustainable Development Goals". Family planning can be effective strategy that can improve the progress towards five themes of SDGs namely Peace, prosperity, people, partnership and planet (6).

The success of achieving the targets of millennium development goals, sustainable developmental goal and FP 2020 can be measured by Contraceptive prevalence rates and unmet need of family planning (7). These two indicators are useful in mapping the success of universal access of reproductive health services in country. Sum of unmet needs and contraceptive prevalence rates points towards total demand of family planning (7).

Unmet need of family planning refers to women who are sexually active or fecund and don't want next pregnancy (Limit) or want to delay it (space) for at least two years but currently not using any contraceptive method. It indicates gap between fertility preferences and actual practices (8,9).

According to report of Pakistan Demographic and Health 2012-13 survey total 20% women has unmet need of planning, 9% for spacing and 11.5% for limiting. Unmet need is high in rural area (22%) as compared to 17% in urban area. Province wise data suggest that highest unmet need is Baluchistan (31%) and lowest in Islamabad (13%). It is highest in uneducated women (22%) and lowest in women with more than secondary education (15%) (10).

According to Contraceptive performance report of Pakistan Bureau of Statistics 2015-16 over all contraceptive prevalence rates is reported 35.5%. Its highest in Punjab (38.9%) and lowest in Baluchistan (13.8%) while in Sindh it is 25% and 46% in Khyber Pakhtunkhwa. When compared to year 2014-15, over all contraceptive prevalence rate has been increased by 8.6% during year 2015-16 (5).

Currently Government of Pakistan is main service provider for family planning (47%) while contribution of private sector is almost half (23%) (11). In spite of efforts of government of Pakistan we still not able to achieve the expected bench mark. Current situation could be really alarming for our country where approximately 61% population is living below US\$2 a day (12).

Aim of our study was to find current contraceptive prevalence, unmet need of family planning, total demand of fertility and the factors associated with unmet need of family planning. The most pressing issue is unmet need of family planning. Pakistan has strong family planning program yet there is considerable unmet need. Estimates of unmet need and contraceptive prevalence rate is vital index for monitoring the success of family planning program. Identifying the factors associated with unmet need of family planning can help the planners and

decision makers to overcome the gap between contraceptive preferences and actual practices. This would definitely help in improving maternal and child health indicators and reducing the burden on health care system.

Methodology

This cross sectional study was conducted at Union council of Basic Health Care Unit (BHU) Kot Hara. Data was collected from females attending the OPD as patient or attendant. Data was collected from June to December 2017. Inclusion criteria include all married females of reproductive age group (15-49 years) who are sexually active and fecund, willing to participate in study. Exclusion criteria includes unmarried females, not living with husbands, having reproductive health issue, infertile, women with menopause, those who have undergone hysterectomy, or early menopause.

Sample size was calculated using WHO calculator, in which prevalence is taken as 35.5% (10), margin of error as 5% and confidence interval 95%. On the basis of this sample size was calculated to be 349 which was inflated to 355. Study participants were enrolled by non probability convenient sampling.

Data was obtained by using structured questionnaire prepared by literature search and reviewing the questionnaires of Pakistan Demographic Health Survey. Data was collected by (lady health visitors) LHW's of union council. Questionnaire consists of two parts. First part was socio demographic variables and second part includes the variables related to reproductive history of participants. Data was taken from participants in local language by LHW's. Duration of each session was about 30-40 minutes. Ethical approval was obtained. Anonymity and confidentiality was maintained during data collection. Verbal consent was obtained from participants. Data was analyzed by using SPSS version 23. Descriptive statistics were calculated for continuous data as Mean and standard deviation. Chi square test was applied to find the association of socio demographic variables with met and unmet needs of family planning. p value less than 0.05 was taken as significant.

Results

The ages of study participants ranged between 18-49 years (women of reproductive age). Mean age recorded was 25.9±7.8. Maximum number of study participants were in between 25-34 years. Mean number of children per women in our study was 4.1. Maximum proportion of women had completed their education till primary level. More than half of participant were living in joint family system. Majority of the women were unemployed (77.7%). Details of socio demographic data is given in Table 1.

Table 1: Socio demographic Characteristics of study participants

Variable	Frequency	Percentage %
Age of Women (years)		
15-19	13	3.6
20-24	65	18.3
25-29	138	38.8
30-34	91	25.6
35-39	21	5.9
40-44	16	4.5
45-49	11	3.0
Education Status		
Un Educated	61	17.1
Primary	73	20.5
Middle	93	26.1
Matric	44	18.0
Intermediate	66	12.9
Graduation	11	3.1
Masters	5	1.4
Post Graduation	2	0.5
Family Structure		
Nuclear	167	47.0
Joint	188	52.9
Occupation		
Un employed	210	59.1
Working	145	40.8
Monthly family income		
≤25,000	108	30.4
25,000-50,000	121	34
>50,000	126	35.4

Out of 355 study participants 202(57%) were currently using contraception. Since the data was collected from Union council of Basic Health Unit almost all the study participants had heard about at least one method of contraception. Most commonly used contraceptive was intrauterine contraceptive devices. Contraceptive prevalence rate was 57% and total un met need was 34% excluding those who are currently pregnant, want conception and those who are in post partum period. Details are shown in Table 2.

Table 2: Current contraceptive practice

Variable	Frequency	Percentage
Have you heard about any contraception		
Yes	352	99.1
No	3	1.1
Females currently practicing contraception		
Yes	202	56.9=57
No	153	43
Types of contraceptives among females current family planning users	n=202(57%)	
MODERN METHODS		
Oral pills	16	7.9
Intrauterine contraceptive devices	65	32.1
Barrier method	32	15.8
Injectables	15	7.4
Tubal ligation	13	6.4
Total Modern Method	141	69.8
TRADITIONAL METHODS		
Safe period	27	13.3
Withdrawal	21	10.3
Lactation	13	6.4
Total(Modern + Traditional)		
Contraceptive prevalence rate	141+ 61=202	57
Not using contraception	153	43
Currently pregnant	3	1.96
Desiring next pregnancy	17	11.1
In post partum period	12	7.8
Total un met need for family planning	153-32=121	34

On inquiring the reason for not using any family planning method most common reason given by participants was family opposition (both mother in law and husband) after that there was fear of side effects (17.3%) including weight gain, excessive bleeding. Other issues include poor availability and administrative issues. Details of reasons for not using contraceptives are given in table 3.

Table 3: Reason for not using any contraceptive method (n=121)

Variable	Frequency	Percentage
Fear of side effects (excessive bleeding , weight gain	21	17.3
False beliefs (permanent infertility, false religious beliefs)	12	9.9
Husband opposition	42	34.7
Mother in law opposition	39	32.2
Poor availability, lack of accessibility (long distance)	2	1.6
Administrative issues		
❖ previous bad experience with the facility	2	1.6
❖ attitude of service provider	3	2.4
❖ lack of privacy	1	0.8

Table 4 shows the association of socio economic condition with met and unmet need of family planning. Age and education status of women is found to be significantly associated with unmet need of family planning.

Table 4: Association of socio demographic variables with met and unmet need of family planning

Variables	Met need (n=202)	Un met need (n=131)	P value
Variables	n	%	
Age(years)			
≤29(n=194)	113(55.9)	81(61.8)	0.047
30-39(n=112)	82(40.5)	30(22.9)	
≥40(n=27)	7(3.4)	20(15.2)	
Education Status			
Primary & below(n=134)	52(25.7)	82(62.5)	0.003
Secondary & Matric (n=115)	91(45)	24(18.3)	
Intermediate & Graduation (n=77)	52(25.6)	25(19)	
Masters & Post graduation (n=7)	7(3.4)	-	
Family structure			
Nuclear (157)	91(45)	66(50)	0.214
Joint(176)	111(54.9)	65(49.6)	
Occupation			
Working (n=141)	81(40)	60(45.8)	1.547
Un employed (192)	121(59.9)	71(54.1)	
Monthly family income			
≤ 20,000(112)	67(33.1)	45(34.3)	1.907
20,000-50,000(105)	70(34.6)	35(26.7)	
≥50,000(116)	65(32.1)	51(38.9)	

Figure 1 shows the details of current contraceptive prevalence, met, un met need and total demand of family planning

Figure 1: Flow chart showing met, unmet and total demand of family planning

Discussion

This study was conducted on the females attending Basic Health Care Unit where family planning services are available. Participants had knowledge and accessibility to contraceptives, yet the results suggest the considerable unmet need which strongly points towards the strong influence of various socio demographic factors contributing towards the unmet need.

In our study contraceptive prevalence rate (CPR) was found to be 57%. Another study conducted in Bangladesh reported the contraceptive prevalence rate as 61% (13). In our study mostly participants were using modern methods (69.8%) According to contraceptive performance report 2015-16, CPR in Pakistan based on modern method was 35.5% (5).

CPR is vital indicator used by Government and all stake holders to assess the progress towards Millennium Development goals, Sustainable development goals and Family planning vision 2020 hence varies considerably in different countries according to success of health policies (14). In our study data was collected from female patients attending Basic Health Care Unit where family planning services are available that might be the reason for comparatively better figures. It is interesting to note that CPR in our study is 57% which is almost equal to desired CPR as per Family planning vision 2020 (4).

Mean number of children per women in our study was

4.1. Pakistan Demographic Health Survey 2012-13 (PDHS) reported the total fertility rate (TFR) as 3.1 which mean that every Pakistani women on average give birth to 3.1 children during her reproductive years (10). According to this survey TFR in urban area is 3.2 while in rural areas it was 4.2 (10) which is comparable to our study and far beyond the targeted replacement level fertility of 2.1 as per millennium development goal. In recent study conducted in Lahore around 65% female desire for more than two children (15). Study conducted by Mustafa et al reported that desire for average number of children per family was four with preference of male child (16).

On inquiring about knowledge of contraception almost all the participants had heard about at least one method of contraception. This finding is interesting to note that in our study lady health visitors were the main source of information in locality. Previous evidence has also supported the effective role of LHV's on acceptors. They have strong influence on decision making. It is worthwhile to effectively utilize their services as advocates and promoters of family planning program (17,18).

Study conducted on women of rural Sindh reported that 80% of women have ever heard about at least one method of contraception and 26% of females were actually practicing contraception (18). Study conducted by Mansoor ul Hassan is in accordance with our study in which nearly all participants had knowledge regarding contraception (19). Similarly study conducted by Mustafa et al also reported that maximum number of participant had knowledge about at least one method of contraception (16). These findings are also concurrent with results of PDHS2012-13(10).

In our study most common method of contraception was intrauterine contraceptive devices which are concurrent with findings of present national data (20). However these findings are in contrast with PDHS which report condoms as most widely practice contraceptives (10). Study conducted by Mustafa et al also reported the condoms being most prevalent method of contraception (16). Study conducted by Mehwish et al is also in accordance with our study in which most common contraceptive used was intra uterine contraceptive devices (18). Study conducted in Peshawar reported injectable as most common method of contraception (21).

Various socio cultural factors like in laws opposition /husband opposition is also strong contributory factor un met need similar trend is also observed in previous research (10,16). IMPACT Survey conducted to analyze the factors limiting the effectiveness of family planning program highlighted that women intention to use family planning increase by 31% if husband approved to family planning (22). Previous studies have also documented the influence of husband and mother in laws in decision making regarding contraception (23,24). Study conducted on Punjabi women reported that women had

perception that with the use of contraceptives they would have conflict with their husband's attitude towards fertility and it is not accepted socially and culturally (25). Since in our study mostly women have access to family planning services and almost all of them have heard about at least one method but still there is considerable unmet need. Husband and mother in law opposition may be strong contributory factors. Previous evidence has also supported that fact that if man has strong sense of responsibility and has perception that family planning can improve the women health and vital for economic stability of family, they are more likely intended to use the modern contraceptives (26). Such strategies must be adapted in rural areas where there is still trend of preferring traditional methods as compared to modern contraceptives (27). Literature has supported the fact that females are more reliant on husband to make decision regarding family planning. This is complex issue and need to be addressed even protocol for female sterilization in our country requires the explicit permission from their husband (27).

Fear of side effects and false beliefs were also documented in 17.3% of participants in our study. Similar results are also reported from previous studies (28, 29). Similarly religious factors are also reported to be strong contributory factor for unmet need of family planning. Studies have reported that participants are in opinion that fertility is decided as per God's will (30, 31).

The results of our study indicated that contraceptive use decreases with age. This shows that as fertility decrease with progression in age trend of contraceptive usages also declines. Consistent increase in contraceptive usages in age between 20 -34 years indicates that women of reproductive age group are more concern to use contraceptives. This type of relationship between age and contraceptive use has been observed in previous studies (32, 33). The reason documented was that with advancing age rate of unintended pregnancies also decreases and another reason of decline is fear adverse health outcomes (34).

On finding the association of socio demographic variables with met and un met need of family planning. It was found that un met needs are higher in women with level of education till primary and below and women with better education status are more likely to use contraceptives. Reason being that better education provides more information and also improves accessibility to family planning services. Moreover previous evidence has also proved that women with better education status are more professionally engaged and trend of contraceptive usage is more as they want to limit family size because of their professional commitments (35).

There is an association between high level of education and small family size. Women education can reduce fertility rate by 0.3-0.5 children per women (36). Pakistan has low adult literacy rate. overall literacy rate reported by world data report is 56%. This is even low in rural area

which makes the scenario even more worse (37).

The study identified the strong need of improving women education status and empower the women which can definitely influence the decision making. Better education can alleviate the women confidence and promote mutual decision making which can reduce the family pressure and opposition. Existing family planning program should be improved. Services of Lady Health Visitors should be effectively utilize as advocates and promoters of family planning program. Well targeted behavior change programs involving husband can change the attitudes and encourage them to adopt family planning. Moreover, family planning programs should focus on addressing the apprehensions and fears related to side effects. It can be done by implementing comprehensive health education and counseling sessions.

Limitation of study was that data was only collected from females. So study only focuses on barriers perceived by females on contraceptive practices. More over data was collected from basic health unit where family planning services were available so this fact limits the generalizability of findings to rest of population which do not have easy accessibility to contraceptive. Since it was cross sectional survey so causal relationship was difficult to establish causal association.

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