

## KNOWLEDGE, ATTITUDE & PRACTICES REGARDING FAMILY PLANNING AMONG THE WOMEN OF RURAL AREAS, LAHORE

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### Keywords

Family Planning; Contraceptive Use; Knowledge-Attitude-Practice (KAP); Rural Married Women

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### Abstract

**Background:** Family planning is a voluntary approach through which individuals and couples make informed decisions to limit or space births using contraceptive methods. It is strongly influenced by knowledge, attitudes, and responsible reproductive intentions.

**Objective:** To assess the knowledge, attitude, and practices regarding family planning among married women living in rural areas of Lahore.

**Materials & Methods:** A cross-sectional study was conducted in the gynecology/obstetric OPD of Services Hospital, Lahore, over six weeks. A total of 128 married women aged 15–49 years were recruited using a self-constructed questionnaire covering socio-demographics and KAP indicators.

**Results:** The mean age of participants was  $26.22 \pm 8.2$  years. The contraceptive prevalence rate was 23.43%. Only 29.68% had good knowledge, while 54.68% showed a positive attitude toward family planning. Practices remained low, with 28.12% using OCPs and 71.87% not using any method. Significant associations were found between demographic variables and KAP ( $p < 0.05$ ).

**Conclusion:** Strengthening community health programs is essential to enhance knowledge, attitudes, and adoption of family planning practices among rural married women.

### INTRODUCTION

Pakistan's population continues to grow rapidly, with a national count of 229.4 million recorded in June 2022 and a growth rate close to 2% (United Nations Population Estimates & Projections, 2022). As the global population moves toward an estimated 9 billion by 2050, effective family planning has become increasingly critical. Family planning, defined as a voluntary process enabling couples to limit or space births using contraceptive methods, remains strongly influenced by societal norms in Pakistan, where reproductive decisions are often viewed as a woman's sole responsibility. However, extensive evidence highlights men's dominant influence over fertility choices, birth spacing, and contraceptive uptake, making their involvement essential to improving reproductive outcomes.

The devolution brought by the 18th Constitutional Amendment in 2010 shifted population welfare responsibilities to provincial departments, enabling Punjab to establish an integrated framework emphasizing inter-sectoral collaboration. The Punjab Population Policy 2017 introduced major initiatives such as free contraceptive provision, expansion of Family Welfare Centres, reactivation of Mobile Service Units, establishment of Adolescent Health Centers, and development of the Contraceptive Logistics Management Information System (CLMIS). These efforts align with international commitments, particularly UNFPA's rights-based family planning framework, which highlights the importance of addressing unmet

need, improving service delivery, and empowering women and girls (UNFPA, 2020).

Despite these investments, Pakistan continues to struggle with high unmet need, low modern contraceptive prevalence, and slow fertility decline. Studies show modern contraceptive use remains low among rural and less-educated women (Azmat et al., 2015), while 20% of married women still have unmet need (PDHS 2012–13). Persistent barriers include lack of knowledge, fear of side effects, cultural and religious misconceptions, limited spousal communication, and inadequate service quality (CHAUDHRY et al., 2015; WHO, 2018; Sedgh et al., 2016). Although Islam permits reversible contraception within marriage, misinterpretations of religious texts continue to discourage contraceptive use in many communities (Ali Abdullah Yusuf, 2018). As a result, unintended pregnancies, high maternal morbidity, and unsafe abortions remain widespread concerns (Mustafa et al., 2015; Guttmacher Institute, 2017).

Given these challenges, understanding the knowledge, attitude, and practices (KAP) of married women—especially in underserved rural settings—is crucial for designing effective interventions. Evidence shows substantial gaps between awareness and actual contraceptive use in Pakistan, driven by misinformation, limited autonomy, and structural inequalities. Rural Lahore lacks sufficient local evidence, making it difficult for policymakers to design targeted programs. Therefore, this study aims to assess the prevalence of contraceptive use and examine KAP regarding family planning among married women in rural areas of Lahore, generating evidence that may support the Government of Punjab in implementing strategies to manage population growth effectively.

## 1. Materials and Methods

### 2.1 Research Design

A cross-sectional study was conducted in the gynecology/obstetric outpatient department of Services Hospital, Lahore, over a period of six weeks. The study aimed to assess the knowledge, attitude, and practices (KAP) regarding family

planning among married women from rural areas of Lahore.

### 2.2 Population and Sample

A total of 128 married women aged 15–49 years, visiting the gynae/obstetric OPD during the study period, were included. The sample size was calculated using the standard formula for finite populations, yielding  $n = 128$ .

### 2.3 Inclusion and Exclusion Criteria

#### Inclusion:

Married women aged 15–49 years.

Visitors of the gynae/obstetric OPD of Services Hospital, Lahore.

Women who provided written informed consent.

#### Exclusion:

Women not meeting the above criteria.

Visitors of departments other than gynae/obstetric OPD.

Individuals who declined participation or refused consent.

### 2.4 Data Collection

Data were collected using a structured questionnaire covering socio-demographic characteristics and items assessing knowledge, attitude, and practices related to family planning.

### 2.5 Ethical Considerations

Participants were informed about the study's purpose, and written informed consent was obtained. Confidentiality was ensured by avoiding personal identifiers. All information was used solely for research purposes.

### 2.6 Data Analysis

Data were analyzed using SPSS version 21. Descriptive statistics (frequencies, percentages, mean  $\pm$  SD) summarized the findings. Chi-square ( $\chi^2$ ) tests assessed associations between variables, with significance set at  $p < 0.05$ . Graphical representations were used to illustrate major results.

## Results

Table 1. Summary statistics for continuous and categorical variable

Variables	Frequency	%ge
<b>Age (Years)</b>		
15-19	21	16.41
20-24	32	25.00
25-29	35	27.34
30-34	33	25.78
35-49	7	5.47
<b>Total</b>	<b>128</b>	<b>100.00</b>
<b>Mean Value: X = 26.22</b>	<b>Standard deviation ± 8.2</b>	
<b>Qualification</b>		
Illiterate	33	25.78
Primary	39	30.47
Secondary	26	20.31
Higher	23	17.97
Graduate	3	2.34
Master	4	3.13
<b>Total</b>	<b>128</b>	<b>100.00</b>
<b>Mean Value: X = 21.33</b>	<b>Standard deviation ± 23.28</b>	
<b>Place of residence</b>		
Rural	128	100.00
Urban	0	0.00
<b>Total</b>	<b>128</b>	<b>100.00</b>
<b>Mean Value: X = 000</b>	<b>Standard deviation ± 0000</b>	
<b>No. of children</b>		
One child	21	16.41
Two child	32	25.00
Three child	68	53.13
>3 child	7	5.47
<b>Total</b>	<b>128</b>	<b>100.00</b>
<b>Mean Value: X = 32.00</b>	<b>Standard deviation ± 17.43</b>	
<b>Religion</b>		
Muslim	126	98.44
Non-Muslim	2	1.56
<b>Total</b>	<b>128</b>	<b>100.00</b>
<b>Mean Value: X = 64.00</b>	<b>Standard deviation ± 11.14</b>	
<b>Wealth Index</b>		
Poor	53	41.41
Medium	68	53.13
Rich	7	5.47
<b>Total</b>	<b>128</b>	<b>100.00</b>
<b>Mean Value: X = 42.67</b>	<b>Standard deviation ± 13.65</b>	

The study included 128 married women of reproductive age from rural areas of Lahore. The

mean age of respondents was 26.22 ± 8.2 years, with most women falling within the 25–29 (27.34%) and

20-24 (25.00%) age groups. A smaller proportion (5.47%) were aged 35-49 years.

Educational attainment varied, with 30.47% having primary education and 25.78% being illiterate. Only 2.34% were graduates and 3.13% held a master's degree, indicating generally low educational levels among participants.

All respondents (100%) belonged to rural communities. Regarding family size, more than half

(53.13%) had three children, while 25% had two children. The mean number of children was relatively high.

A large majority were Muslims (98.44%), with only 1.56% belonging to non-Muslim groups. Based on the wealth index, 53.13% fell into the medium category, 41.41% were poor, and only 5.47% were classified as rich.

**Table 2. Summary of knowledge related responses of family planning (n=128)**

Sr. #.	Statements	Responses			
		Yes	No	Don't know	Mean
<b>Scoring</b>		1	2	3	
<b>Knowledge related questions of family planning</b>					
1	Have you ever heard of contraceptive?	30 (23.44%)	65 (50.78%)	33 (25.78%)	3
2	Birth control pills are effective even if a woman misses taking them for two or three days in a row.	26 (20.31%)	55 (42.97%)	47 (36.72%)	3
3	Female sterilization is one way to avoid pregnancy.	37 (28.91%)	45 (35.16%)	46 (35.94%)	3
4	Health education is important for women who want to use contraception.	45 (35.16%)	59 (46.09%)	24 (18.75%)	3
5	Contraceptive pills do not guarantee 100% protection.	45 (35.16%)	54 (42.19%)	29 (22.66%)	3
6	Condoms prevent STIs.	32 (25.00%)	33 (25.78%)	63 (49.22%)	3
7	Common side effects of contraceptive pills include mood swings and weight gain.	34 (26.56%)	57 (44.53%)	37 (28.91%)	3
8	There is an increased risk of breast cancer in women taking estrogen- containing contraceptives.	65 (50.78%)	30 (23.44%)	33 (25.78%)	3
9	Women using the birth control shot must get an injection every three months.	33 (25.78%)	39 (30.47%)	56 (43.75%)	3

10	If a woman is having side effects of one kind of contraceptive pill, switching to another type might help.	23 (17.97%)	66 (51.56%)	39 (30.47%)	3
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Knowledge about family planning among the 128 participants was generally low across most indicators. Only 23.44% had ever heard of contraceptives, while the majority either had no knowledge (50.78%) or were unsure (25.78%). Misconceptions about contraceptive effectiveness were common; 42.97% correctly responded that birth control pills are not effective if missed for several days, yet 36.72% reported not knowing this. Awareness about specific methods was limited. Only 28.91% knew that female sterilization prevents pregnancy, and less than half (35.16%) understood the importance of health education for contraceptive use. Similarly, 35.16% correctly

identified that contraceptive pills do not provide 100% protection.

Knowledge of condom protection against STIs was especially low, with only 25% answering correctly and nearly half (49.22%) unaware. Understanding of side effects and medical risks was mixed: 26.56% recognized common side effects of pills, while 50.78% believed estrogen-containing contraceptives increase breast cancer risk. Additionally, only 25.78% knew that birth control injections are required every three months, and just 17.97% understood that switching pill types can reduce side effects.

Table 3. Summary of attitude related responses of family planning

Sr. #.	Statements	Responses			
		Yes	No	Don't know	Mean
<b>Scoring</b>		1	2	3	
<b>Attitude related questions of family planning</b>					
1	Contraceptives should be used to limit my number of children.	33 (25.78%)	29 (22.66%)	66 (51.56%)	3
2	Contraceptives should be used to increase the time interval between my childbirths.	34 (26.56%)	54 (42.19%)	40 (31.25%)	3
3	Spacing will allow a child to be healthier.	45 (35.16%)	32 (25.00%)	51 (39.84%)	3
4	The ideal age of having a first child is 20-30.	34 (26.56%)	21 (16.41%)	73 (57.03%)	3
5	The ideal number of children should be between 3-5	19 (14.84%)	67 (52.34%)	42 (32.81%)	3
6	Contraceptives provide a sense of safety.	29 (22.66%)	66 (51.56%)	33 (25.78%)	3
7	The method of contraception I am using is adequate.	34 (26.56%)	23 (17.97%)	71 (55.47%)	3
8	Contraceptives benefit males too.	33 (25.78%)	65 (50.78%)	30 (23.44%)	3

9	Discussion about contraception with spouse is embarrassing.	65 (50.78%)	33 (25.78%)	30 (23.44%)	3
10	My husband does not approve my use of contraceptives.	65 (50.78%)	31 (24.22%)	32 (25.00%)	3
11	Contraceptive methods can protect the health of family and community.	34 (26.56%)	34 (26.56%)	60 (46.88%)	3
12	Religious beliefs can prevent women from using contraceptives.	45 (35.16%)	31 (24.22%)	52 (40.63%)	3
13	Cultural beliefs can prevent women from using contraceptives.	54 (42.19%)	34 (26.56%)	40 (31.25%)	3

Overall, the participants demonstrated mixed and often uncertain attitudes toward family planning. Only a quarter (25.78%) agreed that contraceptives should be used to limit the number of children, while more than half (51.56%) were unsure. Similarly, just 26.56% supported using contraceptives to increase birth spacing, whereas 42.19% disagreed.

Although 35.16% believed spacing leads to healthier children, a large proportion (39.84%) were unsure. The majority also lacked clarity regarding ideal reproductive norms, with 57.03% uncertain about the ideal age (20–30 years) for the first child and 52.34% disagreeing that a family of 3–5 children is ideal.

Perceptions of contraceptive benefits were generally low. Only 22.66% felt contraceptives provide a sense of safety, and over half (55.47%) were unsure whether their current method was adequate. Attitudes toward male involvement were also weak, with only 25.78% agreeing that contraceptives benefit men.

Social barriers were evident: 50.78% felt that discussing contraception with their spouse was embarrassing, and an equal proportion stated that their husbands disapproved of contraceptive use. Cultural and religious constraints were acknowledged by many participants; 42.19% believed cultural beliefs could prevent contraceptive use, while 35.16% recognized religious influence.

Table 4. Summary of practices related responses of family planning

Sr. #.	Statements	Responses		Mean
		Yes	No	
<b>Scoring</b>		1	2	
<b>Practice related questions of family planning</b>				
1	Do you visit a health center for family planning services?	33 (25.78%)	95 (74.22%)	1.5
2	Do you use contraceptives to prevent unplanned pregnancy?	45 (35.16%)	83 (64.84%)	1.5

3	Have you ever had any unplanned pregnancy due to lack of contraceptive use?	55 (42.97%)	73 (57.03%)	1.5
4	Do you use contraceptives every time when you do not intend to get pregnant?	33 (25.78%)	95 (74.22%)	1.5
5	I use different types of contraceptives.	45 (35.16%)	83 (64.84%)	1.5
6	My current method of contraceptive changes from time to time.	55 (42.97%)	73 (57.03%)	1.5
7	Do you practice any traditional contraceptive methods including withdrawal, infertility period, herbal and breast feeding if you were not using any contraceptives?	43 (33.59%)	85 (66.41%)	1.5
<b>Overall scoring</b>		<b>21</b>		

The results reveal generally poor family planning practices among the participants. Only 25.78% reported visiting a health center for family planning services, while a large majority (74.22%) did not. Contraceptive use to prevent unplanned pregnancy was also low, with just 35.16% using any method and 64.84% not using contraceptives. Unplanned pregnancies were common: 42.97% acknowledged experiencing an unplanned pregnancy due to lack of contraceptive use. Consistent contraceptive use was particularly weak, as only 25.78% used methods every time they wanted to avoid pregnancy.

Variety and continuity of contraceptive methods were limited. Only 35.16% used different types of contraceptives, and 42.97% reported switching methods over time, suggesting inconsistent usage patterns. Traditional methods such as withdrawal or breastfeeding were practiced by 33.59% of respondents, whereas 66.41% did not rely on these methods.

Table 5. Association of demographic variables with knowledge, attitude and practices of family planning

Variables	Knowledge		Attitude		Practices	
	Satisfactor y	Unsatisfactor y	Positiv e	Negativ e	Adequat e	Inadequat e
15-19	4	17	9	12	5	16
20-24	9	23	26	6	8	24
25-29	7	28	12	23	23	12
30-34	12	21	18	15	23	10
35-49	6	1	5	2	5	2
$X^2= 1.00; p\text{-value}= 0.01$			$X^2= 1.00; p\text{-value}= 0.00$		$X^2= 1.00; p\text{-value}= 0.00$	
<b>Qualification</b>						
Illiterate	3	30	15	18	3	30
Primary	6	33	15	24	11	28
Secondary	2	24	13	13	6	20
Higher	7	16	6	17	9	14
Graduate	3	0	3	0	3	0
Master	4	0	4	0	4	0
$X^2= 1.00; p\text{-value}= 0.00$			$X^2= 1.00; p\text{-value}= 0.03$		$X^2= 1.00; p\text{-value}= 0.00$	
<b>No. of children</b>						
One child	7	14	13	8	3	18
Two child	10	22	16	16	8	24
Three child	20	48	30	38	20	48
>3 child	2	5	3	4	3	4
$X^2= 1.00; p\text{-value}= 0.00$			$X^2= 1.00; p\text{-value}= 0.04$		$X^2= 1.00; p\text{-value}= 0.00$	
<b>Wealth Index</b>						

Poor	11	42	26	27	7	46
Medium	20	48	33	35	9	59
Rich	7	0	7	0	2	5
$X^2= 1.00$ ; p-value= 0.00			$X^2= 1.00$ ; p-value= 0.00		$X^2= 1.00$ ; p-value= 0.00	
<b>Husband's education</b>						
Educated	23	30	40	13	22	31
Not-educated	6	69	34	41	11	64
$X^2= 0.99$ ; p-value= 0.00			$X^2= 0.92$ ; p-value= 0.01		$X^2= 0.93$ ; p-value= 0.01	
<b>Media exposure</b>						
No exposure	11	61	23	49	9	63
Exposure to at least one form of media	21	35	43	13	24	32
$X^2= 0.84$ ; p-value= 0.04			$X^2= 1.00$ ; p-value= 0.00		$X^2= 0.97$ ; p-value= 0.00	
<b>Occupation</b>						
Employed	15	15	28	2	10	20
House wife	11	87	48	50	9	89
$X^2= 0.99$ ; p-value= 0.00			$X^2= 0.99$ ; p-value= 0.00		$X^2= 0.91$ ; p-value= 0.01	

The chi-square results showed significant associations across all demographic variables—age, education, number of children, wealth index, husband’s education, media exposure, and occupation—indicating that these factors strongly influence women’s knowledge, attitudes, and practices related to family planning ( $p < 0.05$  for all).

**Age:** Younger women (15–24 years) exhibited predominantly unsatisfactory knowledge, negative attitudes, and inadequate practices. Improved KAP was observed with increasing age, particularly

among women aged 30–34 and 35–49 years, suggesting that maturity and life experience contribute to better understanding and adoption of family planning.

**Education:** Education had a strong positive effect on all three KAP components. Illiterate and primary-educated women showed poor knowledge and inadequate practices, whereas women with higher education (graduate/master) consistently demonstrated satisfactory knowledge, positive attitudes, and adequate practices ( $p = 0.00$ – $0.03$ ).

**Number of Children:** Women with three children—the largest group—mostly had unsatisfactory knowledge, negative attitudes, and inadequate practices. However, women with more than three children showed slightly better KAP, likely due to increased exposure to reproductive experiences and counseling.

**Wealth Index:** Family wealth showed a statistically significant impact, with poor and middle-income women having markedly lower knowledge and practices compared to high-income (rich) respondents. All rich participants showed satisfactory knowledge and positive attitudes, reflecting better access to information and services.

**Husband's Education:** Husband's educational status had a strong positive association with women's KAP. Women with educated husbands exhibited higher knowledge (40 satisfactory), more positive attitudes, and more adequate practices, compared to those whose husbands were uneducated ( $p = 0.00-0.01$ ). This highlights male influence in decision-making and contraceptive support.

**Media Exposure:** Women exposed to at least one form of media had significantly better KAP outcomes than those with no exposure. Media exposure enhanced awareness, attitudes, and adoption of family planning methods, supporting its role as a critical source of health information.

**Occupation:** Employed women demonstrated notably better KAP than housewives. Employment likely contributed to greater autonomy, interaction, and access to information. Housewives, forming the majority, reported poor knowledge, negative attitudes, and inadequate practices ( $p < 0.05$ ).

## 2. Discussion

The present study assessed the knowledge, attitude, and practices of family planning among 128 married women from rural Lahore and found overall low contraceptive awareness and use. Only

29.68% exhibited good knowledge, consistent with findings from Ghulam Mustafa et al. (2015), who also reported limited awareness and low contraceptive use due to negative perceptions, religious concerns, in-laws' disapproval, and inadequate access to quality services. Consistent with Ayub et al. (2015) and Alameer et al. (2022), our findings also showed that oral contraceptive pills (OCPs) were the most commonly used method. Similarly, Singh et al. (2016) emphasized that socio-demographic differences lead to KAP gaps, aligning with our results showing that lower education, younger age, and limited exposure contributed to poor knowledge and practices. Although attitudes were relatively better—as supported by S. Khan (2021)—knowledge deficits remained substantial, reflecting the strong influence of behavioral, social, and environmental determinants on family planning acceptance.

Our findings revealed that family planning practices were inadequate, with only 35.16% reporting contraceptive use and 74.22% never visiting a health facility for FP services. This mirrors the conclusions of Thapa et al. (2018), who found low contraceptive practice associated with limited counselling and misinformation. Chi-square analysis demonstrated significant associations between demographic factors and KAP outcomes; older, more educated, employed women and those with educated husbands had better knowledge, positive attitudes, and adequate practices. These associations reaffirm earlier evidence by Hameed et al. (2019), who noted the importance of partner support and media exposure, and Sultan et al. (2018), who found fear of side effects and male opposition as key barriers. Participants in our study also cited similar reasons—fear of side effects, cultural restrictions, religious misconceptions, and husband/in-laws' disapproval—all contributing to low uptake.

Despite the availability of free contraceptives at Family Welfare Centers and outreach activities by Lady Health Workers, poor contraceptive uptake persists. This raises critical questions regarding the effectiveness, coverage, and quality of FP programs. Given Pakistan's low literacy levels, especially among women, and the dominant role of men in reproductive decision-making,

interventions must prioritize community-based counselling, male engagement, and accurate dissemination of FP messages through electronic media. International and national evidence consistently highlights inadequate knowledge, yet meaningful change requires stronger leadership, policy implementation, and investment in skilled workforce—particularly nurses and community health workers who play a trusted role in rural communities. Therefore, strengthening health communication strategies, enhancing male involvement, improving service quality, and reinforcing the role of Population Welfare Department and partners like Marie Stopes Society are essential for improving contraceptive uptake and addressing persistent KAP gaps in Pakistan.

### 3. Conclusion

The study revealed a low contraceptive prevalence rate of 23.43% among 128 married women of reproductive age in rural Lahore, with the majority

lacking adequate knowledge of family planning despite a comparatively better attitude profile. Only 29.68% demonstrated good knowledge, while 71.87% were not using any contraceptive method and relied primarily on oral pills when they did. These findings highlight the urgent need for strengthened family planning education and service delivery. To address these gaps, electronic media and communication platforms should be strategically utilized to disseminate accurate FP information, while national and international NGOs must expand awareness initiatives across underserved areas. Health care staff require comprehensive training to improve counselling quality, and stronger monitoring mechanisms are needed to ensure effective functioning of Family Welfare Centres. Furthermore, meaningful involvement of men through targeted educational approaches is essential, alongside collective responsibility from citizens to support responsible reproductive health practices.

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