

**Original Research Article****KNOWLEDGE, ATTITUDE AND PRACTICES (KAP) REGARDING FAMILY  
PLANNING SERVICES AMONG MARRIED WOMEN OF QUETTA PAKISTAN**

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**ABSTRACT**

**Aims:** This study was conducted to investigate the knowledge, attitude and practices (KAP) regarding family planning services among married women of Quetta Pakistan.

**Methodology:** A cross sectional study was conducted in obstetrics & gynecology department from public sector hospitals of Quetta. Data was collected from February-September 2016 from 503 Females who were sexually active, willing to participate and able to understand Urdu and local languages. Knowledge, attitude and practices on family planning were assessed with the help of predesigned questionnaire. Statistical analysis was done by using SPSS version 20. Result showed that out of 503 women, majority of them were 41.2% were uneducated, house wife (79.1%), Pashtun 40.6%, 89.7% were belongs to urban area and 43.7% were have married life span of 6-10 years. 500 (99.4%) had knowledge about family planning and their methods and it was mainly obtained from TV/Radio (28.8%) followed by health care personal (22.7%). 497(98.8%) believed that use of family planning methods is beneficial, while (62.0%) health care providers encourage them on the use of family planning services. 430 (85.5%) women were practicing family planning methods out of which most of them were using condom (39.4%) followed by Oral Contraceptive (20.3%). The relationship between Knowledge and Attitude was investigated using Pearson product-moment correlation coefficient. There was a small, positive correlation between Knowledge-Attitude [r=0.83, p=0.064], Knowledge-Practice [r=0.119, p=0.008] and Attitude-Practice [r=0.119,

29 p=0.001] was observed. Study concluded that overall knowledge attitude and practice was  
30 good among women towards contraception. Husband being the dominant member plays the  
31 pivotal role in approving the family size and contraceptive practices. Contraceptive  
32 knowledge and practice was influenced by media exposure and partner opposition. Women  
33 education and counseling of couples can play an important role to adopt family planning  
34 methods. There is a need to improve the educational status of the females to improve their  
35 understanding and uptake of modern contraceptives.

## 36 **KEYWORDS**

37 Family planning, methods of contraceptives, KAP,

## 38 **1.Introduction**

39 Reproduction is a mutual commitment where the contribution of men is equivalent to the  
40 contribution of women, but it is so often considered to be completely a women's  
41 responsibility [1]. Among the worries of a poor, one of them is a large number of children  
42 who will be dependent on them [2]. In the matters of family planning and reproduction,  
43 women are always influenced by the opinions of her husband [3]. The opinions of the woman  
44 are never taken into consideration [3].

45 The communication between the spouses on the matters of reproduction and family planning  
46 is absolutely vital in having a prosperous family and individual life [4].

47 The best way to ensure the optimal growth of each family member and achieve the number of  
48 children desired is surely proper family planning [5]. The basic purpose of family planning is  
49 to help couples avoid the unwanted births and let the wanted births occur, regulate the  
50 intervals between pregnancies, for controlling the birth of a child in relation to the age of  
51 parents or ~~for~~ determining the number of children **a family** wants [6]. Family planning

52 education is considered to have a great effect on the spouses in case of family planning  
53 acceptance and fertility [7].

54 Family planning is not based on a single method, there are a number of methods available for  
55 the willing couples. These methods are divided on the bases of their criteria, such like the  
56 format, could be traditional/modern, it may be natural/artificial, in terms of duration it could  
57 be temporary/permanent, specific for male/female or the mode of usage could be  
58 oral/injectable/IUCDs [8].

59 The objective of the concept of deliberate prevention of impregnation is; firstly, to have the  
60 desired number of children and secondly, to have proper spacing between pregnancies [9]. By  
61 saying that family planning is a mutual commitment, it is meant that the men's participation  
62 in family planning should not be limited to periodic abstinence or usage of condoms, but it is  
63 meant to have a better understanding with their wives to allow them to use other methods  
64 too[10]. The concept of deliberate prevention of impregnation among the currently married  
65 women varies clearly by education, religion, caste, socioeconomic status, the type of family  
66 and etc[11].

67 Being one of the populous countries of the world Pakistan is currently declining in case of  
68 providing land, water and food resources to its citizens [12]. The population growth of  
69 Pakistan is increasing drastically and has reached to 3% per year which is eating away the  
70 economic gain of the country [12]. An alarm for the country is that, the ratio of avoiding the  
71 concept of family planning in families is increasing rapidly rather than slowing [13].

72 It is recommended that for improving the concept of family planning and the concept of  
73 deliberate prevention of impregnation in Pakistan we need to use different media resources  
74 [14]. It is also noted that health of males is better than females, which is alarming situations  
75 for the female in Pakistan [15]. The need of the hour is to educate all the couples and their

76 parents about the benefits of family planning, and try to create awareness among women that  
77 they also have rights to have their own opinions about the size of family [14]. Therefore this  
78 study aimed to assess knowledge, attitude and practices (KAP) regarding family planning  
79 services among married women of Quetta Pakistan.

## 80 **2. METHODOLOGY**

### 81 **2.1 Study Design, Setting and Duration**

82 The cross-sectional study was designed to analyze the knowledge, attitude and practice  
83 (KAP) of family planning among married women attending tertiary care hospitals in Quetta,  
84 Balochistan, Pakistan. This study was conducted in Sandeman Provisional Hospital and  
85 Bolan Medical Complex Hospital, which are public-sector hospitals in Quetta, Pakistan.  
86 Duration of whole study was from February to September 2016 however, convenient  
87 sampling technique was used based on availability of female patients attended  
88 gynecology department of Sandeman provisional Hospital and Bolan Medical Complex  
89 Quetta during April to July 2016.

### 90 **2.2 PARTICIPANTS**

#### 91 **2.2.1. Inclusion Criteria**

92 Females who were sexually active, willing to participate in this study and able to understand  
93 national language of Pakistan (Urdu) and local languages (Pashto, Balochi)

#### 94 **2.2.2. Exclusion Criteria**

95 Females who were widow, menopausal and were not willing to participate in this study.

### 96 **2.3 STUDY TOOL**

97 The **knowledge,attitude** and practice on family planning assessed by using questionnaire, the  
98 primary version of questionnaire was developed **byDanget**[16]. It underwent some  
99 modifications according to the population from which data had to be collected under the  
100 process of validation in which the questionnaire went through a face and content validation  
101 by experts from Department of Pharmacy Practice, Faculty of Pharmacy, University of  
102 Baluchistan, Quetta. The English version was later translated into Urdu by using standard  
103 **forwardbackward-forward translating method** [17]and approved by Faculty of Pharmacy  
104 expert committee. The questionnaire was composed of five domains:

- 105 1. Demographics
- 106 2. Knowledge
- 107 3. Attitude
- 108 4. Practice
- 109 5. Source of knowledge

#### 110 **2.4. PROCEDURE**

111 The questionnaire was distributed for data collection. Patients who were educated filled the  
112 questionnaire by their own but as majority respondents were uneducated so patients were  
113 interviewed from questionnaire in their local languages. Sampling population was all those  
114 sexually active female patients attending different tertiary care hospitals. During 3 months of  
115 data collection 503 questionnaires were filled.

#### 116 **2.5. ETHICAL CONSIDERATION**

117 The study was performed according to National Bioethics Committee Pakistan's guidelines  
118 [18]and study approved by Department of Pharmacy Practice, Faculty of Pharmacy,  
119 University of Balochistan, Quetta, Pakistan. According to the standards, written consent was

120 taken from patients prior to data collection. Before conducting the survey proper permission  
121 from Medical superintendent (MS) of each hospital was taken in the form of approval letters.  
122 Informed consent was presented to the patient and their willingness was given priority prior  
123 to data collection.

## 124 2.6. DATA ANALYSIS

125 Collected data was entered in SPSS(PSW) version 20. Descriptive statistics were used to  
126 demonstrate the characteristics of the study population. Categorical variables were measured  
127 as frequency and percentage where continuous variables were expressed as mean  $\pm$  standard  
128 deviation. Inferential statistics (Mann–Whitney U test and Kruskal Wallis tests  $p < 0.05$ ) were  
129 used to assess significance among study variables. Correlations among Knowledge-Attitude,  
130 Knowledge-Practice and Attitude-Practice were interpreted using the following criteria [19].  
131  $r = 0.10$  to  $0.29$  or  $r = -0.10$  to  $-0.29$  small correlation,  $r = 0.30$  to  $0.49$  or  $r = -0.30$  to  $-0.49$   
132 medium correlation and  $r = 0.50$  to  $1.0$  or  $r = -0.50$  to  $-1.0$  large correlation.

## 133 3. RESULTS

### 134 3.1. Demographics

135 Demographic characteristics are shown in table 1, in which majority of respondents 136  
136 (27.0%) were have age ranges between 28 to 32 years. Majority of respondents 207 (41.2%)  
137 were uneducated. Majority of respondents 398 (79.1%) were house wife. Majority of  
138 respondents 204 (40.6%) were Pashtun. Mainstream of respondents 451 (89.7%) were belongs  
139 from urban area. Most of participants 220 (43.7%) were have married life span of 6-10 years.  
140 Most of the respondents 252 (50.1%) were have 1- 3 children.

141

142 **Table 1: Demographic characteristics of respondents**

<b>Description</b>	<b>Frequency (n=503)</b>	<b>Percentage %</b>	143
<b>Age</b>			144
13-17 years	08	1.6	145
18-22 years	54	10.7	
23-27 years	130	25.8	146
28-32 years	136	27.0	
33-37 years	86	17.1	
38-42 years	89	17.7	147
<b>Number of children</b>			
1-3 children	252	50.1	148
4-6 children	173	34.4	
7-9 children	55	10.9	
10-12 children	22	4.4	149
13- 15 children	1	0.2	
<b>Married life span</b>			150
1-5 years	175	34.8	
6-10 years	220	43.7	
11-15 years	60	11.9	151
16-20 years	22	4.4	
21-25 years	26	5.2	
<b>Education</b>			
Primary	68	13.5	
Secondary	35	7.0	
Matric	69	13.7	
Intermediate	65	12.9	
Graduate	22	4.4	
Uneducated	207	41.2	
other	37	7.4	
<b>Occupation</b>			
Student	11	2.2	
Employee	91	18.1	
House wife	398	79.1	
Other	3	.6	
<b>Ethnicity</b>			
Pashtun	204	40.6	
Baloch	144	28.6	
Panjabi	62	12.3	
Urdu	47	9.3	
Sindhi	27	5.4	
Other	19	3.8	
<b>Locality</b>			
Rural	52	10.3	
Urban	451	89.7	

### 152 3.2. Knowledge Attitude and Practice of Family Planning Services

153 Knowledge attitude and practice of the family planning services shown in table 2. Majority of  
 154 respondents 500 (99.4%) heard about family planning. Majority of respondents 500 (99.4%)  
 155 knew about family planning methods. Majority of respondents 480 (95.4%) think natural  
 156 family planning is an appropriate method. Mainstream of respondents 430 (85.5%) were used  
 157 condom to prevent from sexually transmitted **diseases.Majority** of respondents 497 (98.8%)  
 158 agreed family planning is beneficial. Majority of respondents 453 (90.1%) were encourage by  
 159 elder people in their community about family planning **servicesMajority** of respondents 430  
 160 (85.5%) used family planning methods. Majority of respondents 430 (85.5%) had attend  
 161 family planning services in their life time.

**Tale 2: Knowledge, Attitude and Practice of Family Planning Service**

Questions	Yes	No	Don't know
<b>KNOWLEDGE</b>			
Have you heard about family planning	500(99.4%)	3(.6%)	0 (0%)



Do you know methods of family planning	500(99.4%)	3(.6%)	0(0%)
Natural family planning is one method which is used without using any pills. Do you think it is appropriate method for family planning	480(95.4%)	11(2.2%)	12(2.4%)
Condom is used for prevention of HIV/AIDS. Do you think it can prevent you from getting pregnant	430(85.5%)	47(9.3%)	26(5.2%)
<b>ATTITUDE</b>			
Use of family planning methods is beneficial	497(98.8%)	5(1.0%)	1(.2%)
Do elderly people in your community encourage you on the use of family planning services	453(90.1%)	50(9.9%)	0(0%)

Do your parents encourage you on the use of family planning services	426(84.7%)	77(15.3%)	0((0%)
Do your friends encourage you on the use of family planning services	374(74.4%)	129(25.6%)	0(0%)
Do your religious leader encourage you on the use of family planning services	67(13.3%)	436(86.7%)	0(0%)
Do your health care providers encourage you on the use of family planning services	312(62.0%)	191(38.0%)	0(0%)
<b>PRACTICE</b>			

Have you ever used family planning methods	430(85.5%)	73(14.5%)	0(0%)
Have you ever attended family planning services in your lifetime	430(85.5%)	73(14.5%)	0(0%)

162

163

### 164 3.3. Family Planning Services Taken

165 Table 3 showed family planning services taken. Majority of respondents 429 (85.5%) were  
 166 taken family planning. **Majority** of respondents 204 (40.6%) get services from hospital. **Most**  
 167 of respondents 186 (36.7%) frequently seek the family planning services every time when  
 168 they want to have sex with their partner

169

### 170 Table 3: Family Planning Services Taken

Questions	Frequency	Percentage
<b>Family planning services taken</b>		
Yes	429	85.5%
No	74	14.7%
<b>Family planning services taken from</b>		
Hospital	204	40.6%
Health center	113	22.5%
Dispensary	8	1.6%
Pharmacy	26	5.2%
Others	83	16.5%
<b>Frequency of family planning services</b>		

<b>Every time I want to sex with my partner</b>			171
Yes	185	36.8%	172
No	249	49.5%	
<b>Every week</b>			173
Yes	128	25.4%	
No	306	60.8%	174
<b>Every 2 weeks</b>			175
Yes	32	6.4%	
No	402	79.9%	176
<b>Monthly</b>			
Yes	104	20.7%	177
No	330	65.6%	
<b>Yearly</b>			178
Yes	5	1.0%	
No	429	85.3%	179
<b>5-10 years</b>			180
Yes	37	7.4%	
No	397	78.9%	
<b>In future</b>			181
Yes	5	1.0%	
No	429	85.3%	
<b>Long lasting</b>			
Yes	16	32%	
No	418	83.1%	

182 **3.4. Methods of Family Planning**

183 Table 4 showed methods used for family planning. There are 12 methods of family planning  
 184 but **majority** of respondents 200 (39.4%) have used male **condom Majority** of respondents  
 185 used contraceptive method for the purpose to prevent the unwanted birth

186

187 **Table 4: Methods of family planning**

Question	Frequency	Percentage
<b>Methods Used for Family Planning</b>		
Oral contraceptives	103	20.3%
Male condom	200	39.4%
Injectable contraceptives	87	17.2%
Loop contraceptives	34	6.7%
Tube ligation	18	3.6%
Other	65	12.8%
<b>Reason for Using Contraceptives</b>		
Having a child when required	75	15.2%
Spacing of birth	136	27.6%
Prevention of unwanted birth	177	35.9%
Prevention of sexually transmitted disease	37	7.5%
Improvement of health	68	13.5%

188

189 **3.5. Source of Knowledge**

190 Table 5 showed the source of knowledge. **Most** of respondents 267(31.5%) get knowledge  
 191 from Family Planning Services.

192

193 **Table 5: Source of knowledge**

Source	Frequency	Percentage
T.V/radio	244	28.8%
Friends/relatives	144	17.0%
Health personnel	192	22.7%
Family Planning Services	267	31.5%

194

195 **3.6. Knowledge Attitude and practice level of Family Planning**

196 Table 6 showed Knowledge attitude and practice level. Majority of respondents 498(99.0)  
 197 have adequate knowledge about family **planning**. Most of respondents 381(75.7%) have  
 198 adequate attitude about family planning. Most of respondents 431 (85.7%) were used the  
 199 family planning services.

200

201 **Table 6: Knowledge, attitude and practice level of family planning**

	Frequency	Percentage
<b>Knowledge level</b>		
Adequate knowledge	498	99.0%
Poor knowledge	5	1.0%
<b>Attitude level</b>		
Adequate attitude	381	75.7%
Poor attitude	122	24.3%
<b>Practice level</b>		
People who are using these services	431	85.7%

202

203

204 **3.7. Mean Comparison of Knowledge, Attitude and Practice Score**

205 In table 7 mean comparison of individual demographics characteristics were taken and mean  
 206 comparison is calculated and determining of p-value have been done which shows that some  
 207 of the p-values are exceeding than 0.05 that show no significance over study  
 208 particularly there is no statistical significant difference in the knowledge score of Age groups,  
 209 Number of children, Married life span, Occupation, Ethnicity and locality. Comparison Of  
 210 Mean Attitude Score, the individual demographics characteristics were taken and mean  
 211 comparison is calculated and determining of p-value have been done which shows that some  
 212 of the p-values are exceeding than 0.05 that show no significance over study

213 particularly there is no statistical significant difference in the attitude score of number of  
 214 children ,married life span, Ethnicity and locality while some of demographics shows there is  
 215 statistically significant difference among age group ( $p < 0.026$ ), Education ( $p < 0.003$ ) which  
 216 shows statistically significant difference in the attitude score. Comparison of mean practice ,  
 217 the individual demographics characteristics were taken and mean comparison is calculated  
 218 and determining of p- value have been done which shows that some of the p-values are  
 219 exceeding than 0.05 that show no significance over study particularly there is no statistical  
 220 significant difference in the practice of Age groups ,number of children ,education  
 221 ,occupation and locality while some of demographics shows there is statistically significant  
 222 difference among married life span ( $p < .000$ ) and Ethnicity ( $p < 0.025$ ), which  
 223 shows statistically significant difference in the practice.

224

225 **Table 7: Comparison of mean knowledge, attitude, and practice score**

226

Description	Frequency n=503	Mean knowledge $\pm$ SD	P value	Mean attitude $\pm$ SD	P value	Mean practice $\pm$ SD	P value
<b>Age *</b>							
13-17 years	08	3.75 $\pm$ 0.707	0.703	3.75 $\pm$ 0.707	<b>0.026</b>	3.75 $\pm$ 0.707	0.816
18-22 years	54	3.80 $\pm$ 0.407		3.87 $\pm$ 1.229		0.81 $\pm$ 0.392	
23-27 years	130	3.82 $\pm$ 0.445		4.11 $\pm$ 1.259		0.85 $\pm$ 0.355	
28-32 years	136	3.74 $\pm$ 0.609		4.45 $\pm$ 1.191		0.84 $\pm$ 0.370	
33-37 years	86	3.86 $\pm$ 0.349		4.29 $\pm$ 1.291		0.90 $\pm$ 0.308	
38-42 years	89	3.85 $\pm$ 0.386		4.27 $\pm$ 1.250		0.87 $\pm$ 0.343	
<b>Number of children *</b>							
1-3 children	252	3.80 $\pm$ 0.473	0.741	4.21 $\pm$ 1.260	0.801	0.80 $\pm$ 0.403	0.008
4-6 children	173	3.80 $\pm$ 0.427		4.23 $\pm$ 1.230		0.91 $\pm$ 0.282	
7-9 children	55	3.84 $\pm$ 0.601		4.33 $\pm$ 1.218		0.93 $\pm$ 0.262	
10-12children	22	3.82 $\pm$ 0.501		4.45 $\pm$ 1.226		0.86 $\pm$ 0.351	
13-15children	1	4.00 $\pm$ .		4.00 $\pm$ .		1.00 $\pm$ .	
<b>Married life span *</b>							
1-5 years	175	3.80 $\pm$ 0.467	0.203	3.99 $\pm$ 1.320	0.201	0.76 $\pm$ 0.428	<b>.001</b>
6-10 years	220	3.80 $\pm$ 0.499		4.35 $\pm$ 1.175		0.93 $\pm$ 0.260	
11-15 years	60	3.73 $\pm$ 0.516		4.42 $\pm$ 1.239		0.88 $\pm$ 0.324	
16-20 years	22	3.95 $\pm$ 0.213		4.41 $\pm$ 1.141		0.77 $\pm$ 0.429	
21-25 years	26	3.92 $\pm$ 0.272		4.38 $\pm$ 1.169		0.88 $\pm$ 0.326	
<b>Education *</b>							

Primary	68	3.68+0.609		4.46+1.12		0.84+0.371	
Secondary	35	3.77+0.426		4.51+1.222		0.89+0.323	
Matric	69	3.80+0.405		4.30+1.154		0.87+0.339	
Intermediate	65	3.89+0.312		4.15+1.215		0.78+0.414	
Graduate	22	3.86+0.351	0.108	4.09+1.192	<b>0.003</b>	0.86+0.351	0.707
Uneducated	207	3.83+0.496		4.03+1.334		0.87+0.333	
other	37	3.76+0.490		4.84+0.916		0.84+0.370	
<b>Occupation</b>							
Student	11	3.82±0.405		3.91±1.044		0.73±0.467	
Employee	91	3.82±0.411		4.45±1.186		0.81±0.392	
House wife	398	3.80±0.490	0.866	4.20±1.256	0.225	0.87±0.337	0.237
Other	3	4.00±0.000		4.33±1.528		0.67±0.577	
<b>Ethnicity *</b>							
Pashtun	204	3.81±0.501		4.05±1.367		0.85±0.360	
Baloch	144	3.80±0.452		4.37±1.102		0.86±0.347	
Panjabi	62	3.77±0.422		4.19±1.265		0.74±0.441	
Urdu	47	3.74±0.607		4.49±1.140		0.89±0.312	
Sindhi	27	3.89±0.320	0.497	4.44±1.050	0.160	0.96±0.192	<b>0.025</b>
Other	19	3.95±0.229		4.53±1.020		1.00±0.000	
<b>Locality **</b>							
Rural	52	3.60±0.799		4.15±1.513		0.77±0.425	
Urban	451	3.83±0.414	0.11	4.25±1.202	0.886	0.86±0.342	0.064

227 \* Kruskal Wallis Test

228 \*\* Mann-Whitney U test

229 Sig <0.05

230

### 231 3.8. Correlation between knowledge, attitude and practice

232 Correlations were interpreted using the following criteria [19].  $r = 0.10$  to  $0.29$  or  $r = -0.10$  to  $-$

233  $0.29$  small correlation,  $r = 0.30$  to  $0.49$  or  $r = -0.30$  to  $-0.49$  medium correlation and  $r = 0.50$  to

234  $1.0$  or  $r = -0.50$  to  $-1.0$  large correlation.

235 The relationship between Knowledge and Attitude was investigated using Pearson product-

236 moment correlation coefficient shown in table 8. There was a small, positive correlation

237 between Knowledge-Attitude [ $r = 0.83$ ,  $p = 0.064$ ], Knowledge-Practice [ $r = 0.119$ ,  $p = 0.008$ ] and

238 Attitude-Practice [ $r = 0.119$ ,  $p = 0.001$ ] was observed.

239

240 **Table 8. Correlation between knowledge, attitude and practice**

Variable	Correlation coefficient	P Value
Knowledge-Attitude	0.083	0.064
Knowledge-Practice	0.119	<b>0.008</b>



Attitude-Practice	0.235	0.001
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241 **Reference**242 Cohen, J. (1992). A power primer. *Psychological bulletin*, 112(1), 155.

243

244 **DISCUSSION**

245 The adoption of modern contraceptives in recent decades and the use of safer and more  
 246 effective preventive measures of preventing pregnancy have helped people around the world  
 247 choose and make decisions. They are responsible for reproducing and benefiting from family  
 248 planning services and methods.

249 Knowledge of any modern contraceptive method among respondents was found to be  
 250 extremely high in this study as shown in results. It is showed that methods of family planning  
 251 such as Oral contraceptives, Male condom, Injectable contraceptives, Loop contraceptives,  
 252 Tube ligation all are known to married females and showed their practices towards family  
 253 planning services this is parallel with The Cambodia Demographic and Health Survey 2005  
 254 which showed similar results that 99% of married women knew of at least one method of  
 255 modern contraceptive [20]

256 Family planning is observed in all ethnic classes. Most of people are practicing family  
 257 planning services all over the groups Study finding showed that family planning is  
 258 proceeding similar results were obtained in a study conducted in Karachi [13]. Family  
 259 planning services are used by respondents which is similar with study conducted by Handady  
 260 et al., they highlighted that Family planning services in country are still developing [21]

261 It is showed in this study that Condom is used for prevention of HIV/AIDS and can prevent  
 262 respondents on getting pregnant which is supported by the argument that evidence shows that  
 263 more than half of the respondents understand that condom usage can be an effective

264 contraceptive, this is consistent with study findings, whereas previously condoms were  
265 viewed only as a method for preventing HIV transmission [20].

266 It is shown in results, the respondents who take family planning services from any means is  
267 high among respondents and they know various means of getting family planning services,  
268 which is similar to findings of study that respondents know where to receive family planning  
269 information and services was high among respondents, and they knew at least one place to  
270 obtain family planning information and one place to access family planning services [20]

271 Similarly, this study also reported that Women illiteracy is one of the factor that affects the  
272 knowledge regarding contraception their effects and consequences. However, knowledge was  
273 found greatly high and it showed the need and practice of all groups of respondents. Pakistan  
274 has low literacy rate, even lower in rural areas [13] This is also reflected in the study where  
275 illiteracy level was 41.2% in contrast to 90% in Karachi 78% in India and 62% in another  
276 study of same province.[13]. Literacy level among the women emphasizes the need for  
277 education as a key component to combat overpopulation and will encourage the use of  
278 contraceptive[13]. It was also reported that illiteracy rate was same in the previous study  
279 [22].Similarly, study was reported that knowledge of family planning methods are the  
280 exposure of messages through media. Electronic media play an important role in a society  
281 where literacy level is low. Fikree et al. stated that women were more likely to use  
282 contraceptives when messages of family planning were delivered through media [23-26].

283 Similarly, study also reported an exposure to electronic media messages as the main factor  
284 for use of family planning methods among women [27]. similarly ,a study was reported that  
285 majority of respondents had gained information from media [24, 28]. In contrast another  
286 study reported as relatives and friends being the major source of information[29]. An  
287 Ethiopian study showed that health personnel contributed in providing information regarding

288 contraception, which is opposite to the results [30]. In the present study majority of the  
289 interviewed women were practicing family planning methods, whereas other studies in  
290 different provinces of Pakistan showed lower contraceptive prevalence rates[31, 32]. High  
291 level of awareness about contraceptive use has also been reported in previous study [21]. It is  
292 also shown in study that knowledge relating to sources of information had increased by 29%  
293 and knowledge relating to family planning facilities had increased twofold. The local health  
294 center is the main source of family planning services and information [20].

295 It is showed in results that reason for using contraceptives was for the purpose to prevent the  
296 unwanted birth this is in line with findings that It is likely that family planning programs  
297 increased respondents' awareness about being able to have control over their own fertility,  
298 spacing out the births of their children and reducing the chance of unwanted pregnancies. It  
299 can be inferred from this study's findings that women are likely to desire a smaller family  
300 size in order to stay healthy, with more time to look after their children and to participate in  
301 the workforce [20].

302 Regarding the usage of family planning methods, an important dimension is the type of  
303 contraception used. Condom was the most common chosen method used by couples as shown  
304 in other studies as well [21, 24, 28, 33-36]. Women not practicing contraception was lower as  
305 compared to other studies of Pakistan [13]. Fear of side-effects also emerged as an important  
306 impediment to contraceptive use which is also a recurrent theme in many studies conducted  
307 in developing countries including Pakistan, India, Bangladesh, and Ethiopia [21, 37, 38].

## 308 **5. CONCLUSION**

309 Study concluded that overall knowledge attitude and practice was good among women  
310 towards contraception. **Husband being the dominant member plays the pivotal role in**  
311 **approving the family size and contraceptive practices.** Contraceptive knowledge and practice

312 was influenced by media exposure and partner opposition. Women education and counseling  
313 of couples can play an important role to adopt family planning methods. There is a need to  
314 improve the educational status of the females to improve their understanding and uptake of  
315 modern contraceptives.

## 316 **6. LIMITATION**

317 This study had several limitations, the sample size was small, and women answered to the  
318 questions as to what they perceived. This could affect the responses although every possible  
319 effort was made to obtain correct information. Further studies with larger sample size should  
320 be done to get more accurate knowledge on the use and awareness of Contraception

321

## 322 **DECLARATIONS**

### 323 **Ethics approval and consent to participate**

324 The study was performed according to National Bioethics Committee Pakistan's guidelines.  
325 and study approved by Department of Pharmacy Practice, Faculty of Pharmacy, University of  
326 Balochistan, Quetta, Pakistan. According to the standards, written consent was taken from  
327 patients prior to data collection

### 328 **Competing interests**

329 The authors declare that they have no competing interests

330

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