

## Male Readiness for Contraception and its Determinants: A Cross-Sectional Study

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### ABSTRACT

**Objective:** To identify the socio-economic determinants for male readiness for contraception and predictors of contraceptive prevalence among the male population.

**Study Design:** Cross-sectional study.

**Place and Duration of Study:** Family Planning Clinic at a Tertiary Care hospital, Rawalpindi Pakistan, from Jun 2020 to Feb 2021.

**Methodology:** A total of 328 participants, recruited through purposive sampling and assessed through a semi-structured validated questionnaire regarding male readiness for contraception. Mean and SD was calculated for the quantitative variable while frequency distribution for the qualitative variables. Chi-square test was used to measure association, and regression analysis was done to analyze the most significant predictor of male contraceptive behavior.

**Results:** A total of 328 male participants were included in the study, out of which 177(53.9%) had never used any family planning method whereas 155(43.9%) had used contraception at some point in their life. Knowledge about female contraceptives, social network participation regarding family planning methods, and knowledge about male contraceptives methods were statistically significant predictors of male contraceptive practices ( $p < 0.001$ ), whereas other determinants including media exposure regarding family planning and decision regarding the number of children were insignificant predictors of male contraceptive behavior.

**Conclusion:** We found that majority of males had never used contraceptives. Lower level of literacy rate, lack of spousal communication regarding family, and failure of electronic and social media to play its role in awareness regarding family planning are important factors contributing to low contraceptive prevalence rate in Pakistan.

**Key Words:** Family Planning, Male Contraception, Reproductive Health, Reproductive Health Services.

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### INTRODUCTION

Globally, the fertility rate has decreased from 3.2 live births in 1994 to 2.5 in 2019, however, in 2020 Pakistan had the highest fertility rate among Southeast Asia. Pakistan had an average of 3.39 live births per woman while India had 2.18 and Bangladesh 1.99. In developing countries, women are dominated by men and most decisions are made by male members regarding family and reproductive health.<sup>1</sup> For decades, a majority of family planning and reproductive health programs and practices have been targeted towards women, while the active participation of males was not considered of much relevance.<sup>2,3</sup>

Family planning refers to practices or methods used to prevent pregnancies and control family size by

using contraception.<sup>4</sup> Family planning offers women the opportunity to control the timing and spacing of pregnancies, which can reduce maternal and neonatal deaths.<sup>5</sup> Along with this family planning is considered most crucial to achieving Sustainable Development Goals.<sup>6</sup> In Pakistan, there is an increase in awareness regarding family planning and contraceptives but it is mostly associated with females.<sup>3,7</sup> Though world demographic health surveys (DHS) have provided comprehensive data on family and reproductive health and practices, mostly only women have been interviewed and studied, except for the Pakistan DHS (PDHS) 1990-1991, which had a special module for males.<sup>8,9</sup> Still, males' active role in contraception and its determinants remain under-researched domain in developing countries especially in Pakistan.<sup>10</sup> Hence, this study aimed to identify socio-economic factors around male participation in contraception. It also aimed to identify the significant predictors of contraceptive use among the male population.

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## METHODOLOGY

This cross-sectional study was conducted between June 2020 and February 2021 in the Family Planning Center at a Tertiary Care Hospital in Rawalpindi, Pakistan, after obtaining approval from the Institutional Ethical Review Committee.

**Inclusion Criteria:** Adult male aged between 20 to 49 years married, and living with their spouse were included.

**Exclusion Criteria:** Individuals without any live issue or married for less than two years were excluded.

Using Rao soft calculator, a sample size of 328 was obtained, using standard prevalence of contraceptive use. Participants were recruited using purposive sampling and data was collected through a predesigned, semi-structured, and validated questionnaire. Informed consent was taken by the researcher ensuring the participant's confidentiality and anonymity. Pre testing of questionnaire was done on 5% of total sample size calculated and checked for its clarity in obtaining the data what it was aimed for. The questionnaire was reformatted based on the input.

Data was analyzed using Statistical Package for Social Sciences (SPSS) version 21. Mean and SD was calculated for quantitative variable while frequency and percentages were used to represent qualitative variables. Chi-square test and regression analysis were performed, with a  $p$ -value  $\leq 0.05$  being considered statistically significant.

## RESULTS

Data was taken from 328 adult males of reproductive age. Their mean age was 26.51 years  $\pm$  4.30. This study showed that most of the participants had never used family planning methods 177(53.9%). There was considerable variability in educational standards attainments among participants. While 16(4.7%) participants had never received any formal education, 22(6.7%) of the participants were graduates. Demographic characteristics of participants are shown in Table-I.

Statistically significant differences were found in terms of ages of male participants and contraceptive use, as participants of ages between 40-49 years were found adopting contraception more than the participants in other age groups. A higher level of education attained by males was also found a statistically significant factor towards the readiness of males for contraception. Knowledge about male and female contraceptive methods, spousal communi-

cation, and social network participation regarding family planning was found as statistically significant factors in the readiness of males for contraception. Media exposure was however found statistically insignificantly associated with the male's contraceptive use and readiness towards family planning (Table-II).

**Table-I: Demographic Profile of Participants (n=328)**

Variables		n (%)
Use of Family Planning Methods	Yes	151(44.4)
	No	177(52.1)
Age of Participants	20 - 29 years	50(14.7)
	30 - 39 years	123(36.2)
	40 - 49 years	165(48.5)
Education of Participants	Uneducated	16(4.7)
	Primary	58(17.1)
	Secondary	103(30.3)
	Higher Secondary	71(20.9)
	Graduation and above	90(26.5)
Occupation	Skilled Job	107(32.6)
	Unskilled Job	97(29.6)
	Govt employee	124(37.8)

In this study, analysis showed the significant determinants of male readiness for contraception. By keeping the predicted variable (ever used family planning method) constant, the following predictor variables were entered in the model including spousal communication regarding family planning, media exposure about family planning, social network participation related to family planning, knowledge about male family planning methods, knowledge about female family planning methods, and decisions regarding the number of children and correlations were tested (Table-III).

Correlations of these variables were a stronger predictor of readiness in terms of family planning and contraceptives. Results showed that these predictor variables were able to account for (53.6%) ( $r=0.287$ ,  $p<0.001$ ) of the variance in male contraceptive practice. Results showed that spousal communication regarding family planning methods and knowledge about male contraceptive methods were more statistically significant predictors of male contraceptives in comparison to the knowledge about female contraceptive methods, as the value of significance was lower than 0.001.

Regression analysis also showed that media exposure regarding family planning, social network participation related to family planning, and decisions

## Male Readiness for Contraception

**Table-II: Bivariate Analysis for Contraception Practices Among Males (n=328)**

Variables		Ever used Contraceptives	
		Yes n (%)	No n (%)
Age	20 - 29 years	23(7)	26(7.9)
	30 - 39 years	55(16.8)	63(19.2)
	40 - 49 years	73(22.3)	88(26.8)
$\lambda^2 = 0.63, df=2, p<0.001$			
Education	Uneducated	4(1.2)	12(3.7)
	Primary	20(6.1)	35(10.7)
	Secondary	38(11.6)	61(18.6)
	Higher Secondary	40(12.2)	31(9.5)
	Graduation and above	49(14.9)	38(11.6)
$\lambda^2=13.99, df=4, p<0.005$			
Knowledge about male Family Planning methods	Yes	138(42.1)	96(29.3)
	No	13(4)	81(24.7)
$\lambda^2=55.01, df=1, p<0.001$			
Knowledge about female Family Planning methods	Yes	130(39.6)	80 (24.4)
	No	21(6.4)	97 (29.6)
$\lambda^2 = 59.16, df= 1, p<0.001$			
Spousal Communication regarding family planning	Yes	103(31.4)	66 (20.1)
	No	44(13.4)	109(33.2)
$\lambda^2 = 34.53, df= 2, p<0.001$			
Media Exposure regarding family planning	Yes	122(37.2)	118(36)
	No	28(8.5)	59(18)
$\lambda^2 = 10.11, df= 2, p>0.005$			
Social Network Participation regarding family planning	Yes	72(22.2)	45(13.8)
	No	78(24)	130(40)
$\lambda^2 = 17.41, df= 1, p<0.001$			

\*df: Degree of Freedom

**Table-III: Multiple Regression Analysis of Determinants for Readiness of Males for Contraception Participant's use of Contraception (n= 328)**

Coefficients <sup>a</sup>						
		Unstandardized		Standardized	t	p
		B	Std. Error	Beta		
1	(Constant)	0.475	0.116		4.100	<0.001
	Spousal Communication regarding family planning	0.155	0.046	0.166	3.332	<0.001
	Media Exposure regarding family planning	-0.005	0.054	-0.004	-0.084	0.933
	Talked with social network regarding family planning	0.060	0.053	0.058	1.122	0.263
	Knowledge about male FP methods	0.266	0.059	0.240	4.488	<0.001
	Knowledge about female FP methods	0.293	0.056	0.281	5.196	<0.001

a. Dependent Variable: Ever used any FP method

regarding the number of children were statistically insignificant predictors of male contraceptive practice.

### DISCUSSION

This study has attempted to examine the factors commonly considered as important determinants for assessing the readiness of male partners for family planning.<sup>11</sup> The findings showed that spousal communication regarding family planning methods and knowledge about male and female contraceptive methods were significant predictors of male readiness for contraceptive use. This finding of the current study was consistent with the literature. According to

Pakistan DHS 2012-2013 findings, knowledge about male contraceptive use is the most effective factor of contraceptive practice among males.<sup>12,13</sup> It was also found that males' involvement in family planning and reproductive health is considerably higher among male who regularly communicated with their spouse regarding contraception and reproductive health than those who had poor spousal communication regarding this matter.<sup>14</sup> Spousal communication motivates the men to practice contraception which is also evident by internationally used interventions.<sup>15,16</sup> In one study, it was presented that men who had no education had a low degree of contraceptive awareness and were less

likely to use modern contraceptives and follow family and reproductive health.<sup>17</sup> Low literacy rate in developing countries is one of the main causes due to which they lag far behind developed nation in family planning.<sup>18</sup> Analysis suggested that interpersonal communication and knowledge about male contraceptives have positive effects. In our study, it was also found that media exposure regarding family planning was a statistically insignificant factor of male contraceptive behavior. This finding was consistent with the literature, which shows that media exposure is a significant determinant of the readiness of males for contraception.<sup>14</sup> Pakistan is one of the success stories of COVID-19 by aggressive media campaign as a national strategy for community engagement by disseminating preventive and awareness material to the general population.<sup>19,20</sup> Same strategies need to be taken for reproductive health and family planning as Pakistan has pledged to reach a contraceptive prevalence rate of 50% in its commitment to family planning 2020 which can only be achieved by serious national policies in this regard.<sup>21</sup> Evidence has proven that print, electronic and social media are effective modes of engaging a wide range of individuals and has the power to influence social norms as well, which produce a positive impact in the use of family planning and increase communication among spouses about contraception.<sup>22</sup> The benefits of family planning cannot be overlooked as it is an important contributor to a sustainable environment by stabilizing the growth rate of the population.<sup>23</sup> This will allow Pakistan to move forward in achieving not only the health-related targets of sustainable development goals but it contributes to all 17 targets as evident by the Figure.<sup>24</sup>

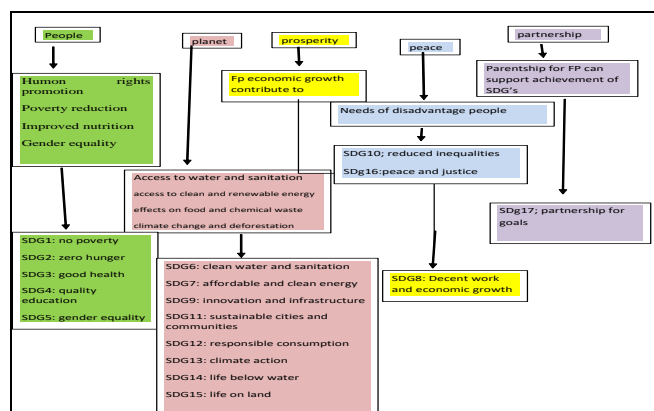


Figure: How Improving Family Planning Can Help in Achieving Sdgs. A Linkage of Sdgs with Family Planning

Contributions to the health of the population will have a better social and economic impact in general.

Control of population growth rate also helps in reducing poverty, considered the mother of all evils today, which makes family planning more vital and required to be kept high in governmental policies. This study has appraised the factors that confer to male contraceptive use. Keeping in view that men’s involvement in reproductive health and family planning has more beneficial outcomes than women alone, it is recommended that some crucial steps must be taken by the government. Active participation from diverse arrays of media technology is required to boost male participation in reproductive health and family planning. A social and cultural boost should be provided by print and electronic media campaigns. Institutions and facilities managing medical and educational aspects for the common public should advise men, especially those accompanying pregnant wives in antenatal visits, to obtain knowledge and education regarding reproductive health and family planning.

**CONCLUSION**

We found that majority of males had never used contraceptives. Lower level of literacy rate, lack of spousal communication regarding family, and failure of electronic and social media to play its role in awareness regarding family planning are important factors contributing to low contraceptive prevalence rate in Pakistan.

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**Authors’ Contribution**

The following authors have made substantial contributions to the manuscript as under:

SI & NA: Conception, study design, drafting the manuscript, approval of the final version to be published.

SM & SI: Data acquisition, data analysis, data interpretation, critical review, approval of the final version to be published.

SR & NS: Conception, data acquisition, drafting the manuscript, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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