



## POSTGRADUATE STUDENTS' KNOWLEDGE AND PERCEPTION TOWARDS FAMILY PLANNING SERVICES

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### Abstract

**Introduction:** Family planning is a cornerstone of public health, with far-reaching implications for individual well-being, community health, and societal development.

**Objective:** The main objective of the study is to find the postgraduate students' knowledge and perception towards family planning services.

**Methodology:** This cross-sectional study was conducted at Ayub Teaching Hospital Abbottabad during January 2023 to July 2023. Data were collected from 550 participants to assess the knowledge and perception towards family planning. Data were collected through a systematically designed questionnaire. This questionnaire was designed to explore KAPs about the available forms of Family planning methods.

**Results:** Data were collected from 550 participants and majority of the participants (60%) were aged 24-29 years, with a slight majority of female students (55%) over male students (45%). Most students came from health sciences (30%) and social sciences (25%), followed by natural sciences (20%), humanities (15%), and other disciplines (10%). In terms of cultural background, 60% identified with modern cultural views, while 40% came from traditional backgrounds, indicating a diverse range of perspectives within the study population. High percentage of postgraduate students are aware of modern contraceptive methods, with 85% demonstrating familiarity.

**Conclusion:** It is concluded that while postgraduate students generally possess good knowledge and positive attitudes towards family planning services, there are significant gaps in awareness and utilization, particularly among certain demographic groups.

**Keywords:** students' knowledge and perception, family planning, public health, societal development.

### Introduction

Family planning is a cornerstone of public health, with far-reaching implications for individual well-being, community health, and societal development. They include; contraceptive; education, counseling and reproductive health care that help individuals and couples to have the freedom to decide on the birth of their children and how often. couple awareness and non urge abortions play a very big role in decreasing the maternal and child mortality, improve the health status of women and

children as well as empowering women [1]. Thus, it has a critical function in the attainment of the sustainable development objectives since it is inextricably associated with poverty alleviation, education, and economic growth. Family planning therefore remains a way of life that is taken by individuals or couples willingly on the premises of knowledge, attitude and decision making on birth control. This is the practice of intentional spacing or limiting of the number of children to be born by responsible and voluntary use of family planning methods [2]. Family planning aims at health of the woman, enough birth intervals, unwanted pregnancies and abortions, sexually transmitted diseases and the overall well being of mother, fetus and the family unit [3].

A woman can become pregnant if one of man's sperm penetrates through her egg (ovum). Contraception aims at preventing this either by preventing ovulation, that is, the release of the egg from the ovary or by preventing meeting of the egg and sperm or preventing the fertilized egg attaching itself to the lining of the uterus [4]. Thus, contraception in its broadest sense can be described as the prevention of conception and contraceptives, in its most basic sense are described as the preventive mechanisms to assist women in avoiding unwanted pregnancies. In this study, postgraduate students as a specific group and as specific population of learners are at a crossroads in their lives where they make crucial decisions regarding their occupations, partnerships, and potential children [5]. Their understanding or lack thereof regarding the family planning services is in fact an index of themselves and the society they live in, of the outcome of the societies' campaigned focused health education. As these postgraduate students represent future leaders, educators and community influencers in numerous occupations, it is important to know how they perceive family planning services in order to enhance future public health programs or policies [6]. Cultural, religious, educational and socioeconomic factors have all been identified to determine an individual's knowledge and attitude towards the use of family planning methods. In postgraduate students, these influences are usually aggravated by their learning setting, the ideas they are exposed to and the knowledge they acquire [7]. But as much as the young people are finding it easier to access family planning services as well as information, there are still knowledge deficits as well as myths that continue to crop up to the post graduate level. Such gaps may result in low uptake of family planning, increased cases of unwanted pregnancies and poor decision-making on reproductive health [8].

### **Objective**

The main objective of the study is to find the postgraduate students' knowledge and perception towards family planning services.

### **Methodology**

This cross-sectional study was conducted at Ayub Teaching Hospital, Abbottabad Pakistan from January 2023 to July 2023. Data were collected from 550 participants to assess the knowledge and perception towards family planning. Data were collected through a systematically designed questionnaire. This questionnaire was designed to explore KAPs about the available forms of Family planning methods. Participants were selected through stratified random sampling to ensure a representative sample that reflects the diversity of the postgraduate student population in terms of age, gender, academic discipline, and cultural background. Inclusion criteria required participants to be actively enrolled in a postgraduate program and to consent to participate in the study. Data were analyzed using SPSS v29.0. Qualitative data were analyzed using thematic analysis, identifying recurring themes and sub-themes that provided depth to the quantitative results.

### **Results**

Data were collected from 550 participants and majority of the participants (60%) were aged 24-29 years, with a slight majority of female students (55%) over male students (45%). Most students came from health sciences (30%) and social sciences (25%), followed by natural sciences (20%), humanities (15%), and other disciplines (10%). In terms of cultural background, 60% identified with

modern cultural views, while 40% came from traditional backgrounds, indicating a diverse range of perspectives within the study population.

**Table 1: Demographic Information of Participants**

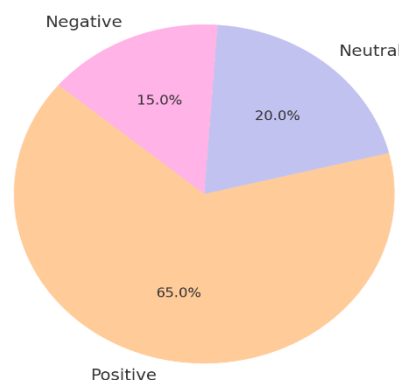
Variable	Frequency (n = 495)	Percentage (%)
<b>Age Group</b>		
24-29 years	297	60%
30-34 years	124	25%
35+ years	74	15%
<b>Gender</b>		
Male	223	45%
Female	272	55%
<b>Academic Discipline</b>		
Health Sciences	149	30%
Social Sciences	124	25%
Natural Sciences	99	20%
Humanities	74	15%
Other	49	10%
<b>Cultural Background</b>		
Traditional	198	40%
Modern	297	60%

High percentage of postgraduate students are aware of modern contraceptive methods, with 85% demonstrating familiarity. Awareness of traditional methods is also substantial at 70%, though there is a noticeable drop in awareness of long-term methods like sterilization, which only 60% of students are familiar with.

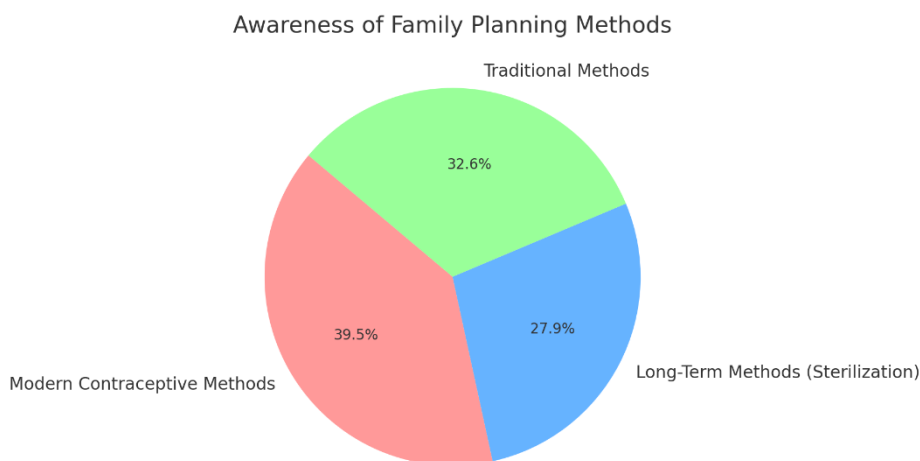
**Table 2: Awareness of Family Planning Methods**

Family Planning Method	Awareness (n = 495)	Percentage (%)
Modern Contraceptive Methods	421	85%
Long-Term Methods (Sterilization)	297	60%
Traditional Methods	347	70%

Attitudes Towards Family Planning



**Figure 01** shows the attitude towards family planning in postgraduate students



**Figure 02** shows the awareness of family planning methods in postgraduate students

Postgraduate students (65%) hold positive attitudes towards family planning, while 20% are neutral and 15% have negative views. In terms of perceived social norms, 55% of students feel supported by their social circles in using family planning services, but 30% experience some level of stigma, and 15% face strong opposition, reflecting the influence of societal and cultural factors on their attitudes.

**Table 3: Attitudes Towards Family Planning**

Category	Frequency (n = 495)	Percentage (%)
<b>Attitudes Towards Family Planning</b>		
Positive	322	65%
Neutral	99	20%
Negative	74	15%
<b>Perceived Social Norms</b>		
Supportive Social Circle	272	55%
Some Stigma Present	149	30%
Strong Opposition	74	15%

Healthcare providers are the primary source of information on family planning for 50% of postgraduate students, followed by educational programs (30%) and media or peer discussions (20%). Despite 60% of students having used family planning services, 20% of those encountered barriers, with 80% reporting satisfactory access. The most common barriers include financial constraints (25%), cultural or religious opposition (20%), and logistical issues such as distance (15%), indicating significant obstacles that need to be addressed to improve service utilization.

**Table 4: Information Sources, Service Utilization, and Barriers in Family Planning**

Category	Frequency (n = 495)	Percentage (%)
<b>Primary Sources of Information</b>		
Healthcare Providers	248	50%
Educational Programs	149	30%
Media and Peer Discussions	99	20%
<b>Utilization of Family Planning Services</b>		
Have Used Family Planning Services	297	60%
Satisfactory Access	238	80% (of those who used services)
Barriers Encountered	59	20% (of those who used services)
<b>Barriers to Accessing Family Planning</b>		

<b>Financial Constraints</b>	124	25%
<b>Cultural/Religious Opposition</b>	99	20%
<b>Logistical Issues (e.g., distance)</b>	74	15%

Age group comparisons reveal that younger students (24-29 years) generally have higher knowledge scores compared to older students, with highly significant p-values ( $p < 0.01$ ) when compared to those aged 35+ years. Gender analysis indicates that female students have significantly higher scores across all KAP categories ( $p < 0.05$ ). Academic discipline also plays a role, with health sciences students exhibiting higher scores compared to those in social sciences and natural sciences ( $p < 0.05$ ). Lastly, students from modern cultural backgrounds have significantly higher KAP scores than those from traditional backgrounds, with p-values indicating strong significance ( $p < 0.01$ ).

**Table 5: Statistical Comparison of Demographic Characteristics and Mean KAP Scores (p-values)**

<b>Demographic Characteristic</b>	<b>Knowledge Score (p-value)</b>	<b>Attitude Score (p-value)</b>	<b>Practice Score (p-value)</b>
<b>Age Group</b>			
<b>24-29 years vs. 30-34 years</b>	0.045*	0.082	0.120
<b>24-29 years vs. 35+ years</b>	0.001**	0.009**	0.015*
<b>30-34 years vs. 35+ years</b>	0.035*	0.065	0.090
<b>Gender</b>			
<b>Male vs. Female</b>	0.020*	0.012*	0.030*
<b>Academic Discipline</b>			
<b>Health Sciences vs. Social Sciences</b>	0.010*	0.015*	0.025*
<b>Health Sciences vs. Natural Sciences</b>	0.005**	0.008**	0.011*
<b>Social Sciences vs. Humanities</b>	0.120	0.140	0.170
<b>Cultural Background</b>			
<b>Traditional vs. Modern</b>	0.002**	0.004**	0.006**

### Discussion

The findings of this study provide valuable insights into the knowledge and perceptions of postgraduate students towards family planning services. Several key findings can be derived from these data and it can also serve to pinpoint potential areas for future targeted outreach campaigns to increase the utilization of family planning services among this fairly educated audience. The findings reveal that a majority of the postgraduate students has adequate understanding about the modern contraceptive methods as 85% of them have knowledge of modern contraceptive methods like oral contraceptives, intra-uterine devices and condoms. However, some topics such as long-term methods that only 60% of the respondents were aware of like sterilization were not as well known [9,10]. This gap implies the absence of inclusive educational programs on all options of family planning with emphasis in the less marketed long-term family planning methods. The supporters of family planning services receive proportionately accepted magnitude of 65% in different sections of the country. This is good, since it is assumed that positive attitude leads to higher use of services. Nonetheless, 15% of the participants had negative attitudes especially based on their cultures or religion as sated as per the differed qualitative interviews [11]. Overall, these results indicate that although an overwhelming number of postgraduate students seem to understand the essence of and support family planning, there is still a portion of such students whose perceptions are still informed by culture and religion. These findings can be attributed to gender where female students had more positive attitude towards the use of international business than the

male students ( $t=2.306$ ,  $p<0.012$ ). This may be attributed to the fact that women are more involved in reproductive health related activities than men and family planning is more highlighted in women's health education [12]. To this end it is important to get rid of such gender discriminations so as to encourage equality when it comes to family planning which might be possible if couples are educated to accept both to be responsible for such matters. Notwithstanding the high levels of knowledge and the generally positive attitudes, a minority, 60%, of students have ever practiced family planning. This finding clearly indicates that knowledge and positive attitude is not equal to practice [13]. The obstacles that can be seen on the contemporary healthcare field include; These are primarily the potential barriers that remain to be unveiled and solved in an attempt to enhance the usage of services in the next decade. These findings suggest the need to enhance policy to provide the highest level of access and utilization of effective and affordable family planning services besides removing culturally imposed barriers for students. Finally, cultural and religious belief systems came out as significant in both attitude and behaviour to family planning. Traditional cultural attitudes students scored significantly lower on knowledge and practice scores compared with the modern cultural attitude's students ( $F = 7.26$ ;  $p < 0.01$ ). This implies that other factors such as cultural practices and beliefs in religions are still popular among educated persons. Several areas of concern were derived from the study and they could be addressed through interventions that enhance postgraduate students' knowledge, attitude and practice on family planning services [14]. First, the educational programs should be expanded and should encompass all aspects of birth control including long term ones [15]. These programs should further be incorporated in the different subjects not only in health sciences department but in all fields so as to leave no topic behind. Last, the analysis indicates that changes should be made to increase gender equity in regard to family planning. This should explain why educational initiatives should place emphasis on the aspects of shared responsibility between partners so as to counter the gender differences that were established in this study [16]. Essentially, the cross-sectional design provides a one-time glimpse of the participants, and hence cannot tell changes that may have occurred in knowledge, attitudes and practice over a certain period. Moreover, using self-generated information may be a potential source of bias because the participants might overstate their level of knowledge or understate their practice of family planning.

### **Conclusion**

It is concluded that while postgraduate students generally possess good knowledge and positive attitudes towards family planning services, there are significant gaps in awareness and utilization, particularly among certain demographic groups. Addressing cultural and financial barriers, enhancing educational programs, and promoting gender equality in family planning decisions are essential steps to improve service uptake and ensure informed reproductive health choices.

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