

Exploring the knowledge, attitude, and practice of family planning services among healthcare workers in Khyber Pakhtunkhwa: Cross-sectional online survey-based research

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A B S T R A C T

Introduction: Family planning services have a pivotal role in encouraging reproductive health and ensuring the well-being of individuals, families, and communities worldwide. This current research aims to investigate the knowledge, attitudes, and practices (KAP) regarding family planning services.

Methodology: An online survey among female health workers was conducted in Khyber Pakhtunkhwa from March 1st to July 31st, 2023, for 5 months. The survey questionnaire was designed to assess KAP regarding family planning methods, implementation, and associated variables.

Results: Among the 319 participants, 15% had primary education, 21% were diploma holders, and 64% were graduates. Most participants (65.5%) had a monthly household income of less than Rs. 50,000, and 71.2% were married. Regarding family size, 61.3% had two or more children. All participants were familiar with family planning methods, with 89.5% receiving information from trainers and 9.5% through self-study. Over 85% provided correct information on family planning methods, with high accuracy across different types of contraceptive methods. Regarding attitudes, 80% of participants had a positive attitude towards family planning, 82% reported regular practice, and 94.3% advocated for an appropriate gap between childbirth. Additionally, 77.3% encouraged others to use family planning, and 82.6% believed it improved living standards.

Conclusion: The study concludes that attitudes and practices are influenced by knowledge of family planning methods. While awareness and positive attitudes were evident, utilization remained lower than desired. Factors such as education level, income, marital status, family size, and participation in training were highly associated with knowledge, attitude, and practice scores.

Keywords: Family planning, Female workers, Training, Healthcare professionals.

Introduction

Family planning services have a pivotal role in encouraging reproductive health and ensuring the well-being of individuals, families, and communities worldwide. Access to comprehensive family planning services not only empowers individuals to make informed decisions about their reproductive lives but also contributes to achieving

broader public health goals, such as reducing maternal and infant mortality rates, alleviating poverty, and promoting gender equality.¹ Central to the effective delivery of family planning services are healthcare workers, who serve as frontline providers of information, counseling, and contraceptive methods.² The KAP of healthcare workers

regarding family planning services are critical determinants of the quality and accessibility of these services. Healthcare workers' understanding of various contraceptive methods, their attitudes towards family planning, and their ability to effectively counsel and support clients significantly influence individuals' utilization of family planning services and their adherence to chosen contraceptive methods.³ Despite the recognized importance of healthcare workers in the delivery of family planning services, there remains a need for comprehensive assessments of their knowledge, attitudes, and practices to identify gaps and inform targeted interventions for improvement.⁴

The current work seeks to report this gap by investigating the KAP parameters of family planning services among healthcare workers conducted through an online survey-based questionnaire. By exploring healthcare workers' understanding of contraceptive methods, their attitudes concerning family planning, and their practices in delivering concerned services, this research proposes to deliver important insights into the factors influencing the provision of quality family planning services.^{5,6} The conclusions of current research have the potential to contribute to the existing knowledge but also inform evidence-based strategies to enhance the capacity of healthcare workers and improve the delivery of family planning services, ultimately advancing reproductive health outcomes, and supporting sustainable development goals.^{7,8}

Methodology

An online survey was conducted recruiting women health workers of Khyber Pakhtunkhwa from 1st March 2023 to 31st July 2023. The relevant questions were designed to study the KAPs analysis concerning methods of Family planning, their implementation, and the relevant factors associated with it. The collected data was transformed on an Excel sheet and interpreted using software SPSS version 23. The results of sociodemographic and KAP variables were presented in percentages using statistically significant when $p < 0.05$ (if applicable).

Among 319 participants of an online survey, about 15% passed only primary education, 21% were diploma holders

and 64% were graduated females. The household income per month of 65.5% i.e. majority of the participants was less than Rs. 50,000 while 34.5% had more than Rs. 50,000. The mean age of the female recruited in the online survey was 32.4 ± 3.7 years. Of the whole participants, 71.2% of the females were married, and 28.8% were not married. By considering the size or the number of family members, 61.3% of participants have two or more children while app. 39% had one child in the family (Table 1).

Table 1: Sociodemographic variables of respondents: (n=319)

Characteristic	Number of Participants (Percentage)
Education Level	
Primary	48 (15)
Diploma Holders	67 (21)
Graduated	204 (64)
Monthly Household Income	
< Rs 50,000	209 (65.5)
≥ Rs 50,000	110 (34.5)
Marital Status	
Single	92 (28.8)
Married	227 (71.2)
Family Size	
One child	123 (38.7)
Two or more children	196 (61.3)

All the participants of the survey were completely familiar with the family planning and adoptive methods. According to the observations, the main guidelines and information (89.5%) were provided by trainers during training conducted in different healthcare facilities in different time frames, and the rest of the people 9.5% studied the information through booklets and social media. Among the total participants of the survey, more than 85% gave correct information regarding the methods adopted for family planning and all associated factors while very few had wrong/false information. If we analyzed procedure or method-based responses, 77.9% recorded positive attitudes toward the short-term utilization of hormonal contraceptive methods. While 83.3% and 92.4% recorded positive attitudes toward the utilization of long-term hormonal contraception and permanent methods

respectively. The traditional family planning methods were adopted by 72.5% of the participants (Table 2).

Table 2: Awareness of participants regarding family planning methods

Knowledge Status	Number of Participants (Percentage)
Heard about FP Methods	100
Sources of Information	
Trainers	286 (89.5)
Self-study	33 (10.5)
Awareness of Family Planning Methods	
Correct responses	273 (85.7)
Wrong responses	46 (14.3)
Types of Family Planning Methods	
Short-Term Hormonal Contraceptive	248 (77.9)
Long-Term Hormonal Contraceptive	266 (83.3)
Permanent Contraception	295 (92.4)
Traditional Methods	231 (72.5)

The perception of the adaption of family planning was analyzed in the current study. 80% of the participants had a positive attitude towards family planning while 82% reported regularly practicing these methods in their relationships. 61% of participants talked about their husbands' cooperation and their optimistic behavior regarding family planning, that's why 94.3% of the participants supported having an appropriate break between 2 consecutive childbirths.

77% of participants reported that they encourage, guide, and educate the other females either from their family, surroundings, or in nearby areas. Around 82.6% of respondents think that adopting these methods and planning is having an impact on raising their family's standard of living (Table 3). During this survey, the variables were included in current research related to the actual procedures experienced for the methods of family planning. So, out of 319, 212 participants (66%) adopted medical procedures for the gap between children in terms of family planning. The condoms were used by 38.4% of respondents as a secure method while 22.6% of participants proposed to utilize it as a secure family planning method in the future (Table 4).

Table 3: Attitude of participants regarding family planning methods

Attitude Towards Family Planning	Number of Participants (Percentage)
Positive Attitude (Self)	255 (80.1)
Positive Attitude from Husbands	195 (61.2)
Adopted Family Planning	261 (82)
Encourage the Gap between Childbirth	301 (94.3)
Encourage Others to FP	247 (77.3)
Believe FP Raises Standard of Living	
Yes	263 (82.6)
No effect	56 (17.4)

Table 4: Actual practice for adaptation of family planning methods

Practice on Family Planning	Number of Participants (Percentage)
Status of Family Planning	
Currently Practicing	247 (77.4)
Intended to use in future	72 (22.6)
Practiced Family Planning	
By Awareness	239 (75)
Motivated by Doctor	170 (53.2)
Procedures	
Medical	212 (66.4)
By using condoms	123 (38.4)

Almost 239 respondents that is 2/3 part of current research adopted more than one method of family planning by itself awareness. Almost half of the participants were motivated by a physician, any gynecological doctors, or health care professionals for better advice and consultations. If we analyzed the perception, then 76.3% showed that these appropriate methods lead to healthier brought up of children in terms of attention, finances, and resources as well.

Discussion

The National family planning programs in Pakistan have been active since 1971 at primary and secondary care levels. Major efforts have been made to enhance the coverage, accessibility, and awareness of the population from time to time with the involvement of healthcare workers and trainers.⁷ But the program to this extent is not enough to educate the couples or families regarding adequate knowledge towards correct practice of family planning methods. A favorable positive attitude and consistent behavior play an important role in taking care of the family as per their need, financial status, and requirements.⁸ It is key to success that the health care workers and primary care physicians along with gynecologists educate the females about the activities and factors associated with family planning, especially for couples living in underdeveloped or slum areas.⁹

This online survey questionnaire-based Study was conducted in Khyber Pakhtunkhwa to find the knowledge, attitude, and practice of the health workers regarding family planning, adoptive methods, and family's perception regarding the actual practices. The results of the current survey showed that all of the respondents were completely familiar with the concerned methods and all their relevant sources of information were workshops, conferences and trainings conducted in primary and secondary care facilities.^{9,10} Many of the recruited persons had an optimistic attitude towards the adaptation of family planning. This frequency and the respective percentages were less as compared to the research executed in other areas of Jamm shuru and another study done in Rohtak because they only involved couples and married females or males.^{11,12} Some already reported data depicted the significant differences in family planning care provided by non-specialized primary or community health centers compared with the specialized district or secondary health centers having family planning organizations, such as programmed courses and training related to Parenthood, scheduled meetings with a health care professional and their education-based training.^{13,14} Childbirth-based mother and childcare health care services are anticipated to offer the proper training-based family planning services. Interviews with the administrators of various programs highlighted that organizations based on women's health

demonstrated greater adaptability to family planning methods.^{15,16}

Approximately 60.3% of participants of the current study were adopting methods for family planning, a proportion comparable to a survey conducted in Cambodia and greater than those in studies conducted in rural parts of Jordan and India.¹⁷ However, it was less than the research conducted in Ethiopia, urban slum communities of India, and Sikkim, where family planning utilization rates ranged from 62 to 64%.¹⁸ This difference may be attributed that participants who resided in above mentioned areas were relatively developed areas, potentially facilitating better access to family planning services compared to the current study setting. The most common contraceptive method used in this study was condoms (47.6%), which aligns with a previous study where condoms were also the predominant method, followed by oral contraceptive pills (23.8%) and intrauterine contraceptive devices (15.8%).¹⁹ Among sociodemographic factors, family type and monthly income were highly linked with knowledge scores, while marital status and duration after marriage were associated with the scores calculated after attitude scores. Additionally, age group, marital status, length of married life, family type, number of children, and participation in training sessions were significantly associated with practice scores.²⁰ Furthermore, the study indicated that although there was a weak correlation, knowledge, and attitude of the volunteers towards family planning were linked to its application.

In contrast to women's health organizations, primary care organizations participating in current research faced significant operational challenges when initiating family planning programs as beginner recipients of family planning contracts.²¹ These organizations have to organize training for the staff and workers on addressing sexual and reproductive health-related morbidities and problems that were reported by the females while visiting the premises. In charge or trainers had to restructure care delivery and devise strategies to simplify the provision of services and instructions related to family planning. Some participants faced challenges during training and viewed the opportunity to provide comprehensive attention to female participants positively and struggled to integrate family planning into their model of care.²² The reported reasons

such as women perceived no need for contraception, competing service priorities, and belief in couples to initiate discussions about the adaptation of contraception. These barriers align with reports from primary care providers regarding obstacles to contraceptive care.²³

The observations of the current survey explored that even with funds sources specifically designated for family planning, some community health centers and public health agencies may not immediately offer particular training. Moreover, the lack of proper training of primary care physicians, clinicians, and their helpers/attendants was just one of the main problems in starting a programmed and scheduled service related to family planning.²⁴ Even after training, not all providers felt comfortable offering highly effective methods like IUDs and implants. Some organizations had operating procedures for providing methodologies that were not evidence-based and imposed burdensome requirements, potentially hindering women's access to timely contraception.²⁵

Conclusion

It is concluded based on the study observation that attitudes and practice depend upon the knowledge of family planning methods. However, knowledge, attitudes towards family planning, and consequently, the utilization of effective methods for family planning were also less as compared to similar studies. However, factors such as age, marriage status, duration after marriage, family structure, number of children, and participation in the courses/training sessions were knowingly linked with scores on family planning practices. To address this, health workers must provide comprehensive education to the community regarding family planning practices. By increasing awareness and fostering a positive attitude towards family planning, the utilization of these methods can be enhanced. Additionally, further studies are warranted to delve into the reasons behind the underutilization of these methods and to develop strategies to address these issues effectively.

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