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Knowledge and practice of family planning methods in women of childbearing age

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ABSTRACT

Background: Increase in the human population entails implementing family planning and contraceptive methods. Globally, modern contraception had risen from 54% in 1990 to 57.4% in 2015. Overpopulation has an adverse effects both on the society and on the environment which may lead to several hurdles, including shortage of food, diseases, and contamination of the environment. **Methods:** A cross-sectional study was conducted on the females who were visiting the gynecology-OPD or admitted in gynecology wards of Ayub Teaching Hospital. A total of 200 women patients were interviewed and data was collected by using a structured questionnaire. The data was analyzed using SPSS 16.0. **Results:** Among 200 females, 64% were from rural areas and 65% were educated. The husband unemployment was as low as 4% and most of the female's i.e. 97% were housewives. Approximately, 71.5% of females were aware of family planning and their major source of information was lady health workers 32%. A 63.5% agreed that family planning is good for mother's health while only 37% knew about family planning methods and 35.5% knew about various techniques of contraception. The 17% female were using male condoms as a method of contraception due to its convenience while only 10.5% knew about least adverse effects. About 22% of females knew that contraception methods can stop unwanted pregnancy while 40.5% of females were aware of the negative effects of OCPs. **Conclusion:** We concluded that most females were aware of family planning methods, its effects on health, its risk of failure, convenient way, permanent techniques and adverse effects of contraceptive pills.

Keywords: Family planning, Contraceptive pills, Cross-sectional study, Marriage, Pregnancy

INTRODUCTION

Family planning is one of the ten great public health achievements in the 20th century [1]. The availability of family planning services allows individuals to achieve desired birth spacing and family size and contributes to improved health outcomes for infants, children, women, and families [1-3]. Family planning controls the number of children and the interval between their births. However, contemporary notions of family planning tend to place a woman and her childbearing decisions at the center of the discussion, as notion of women's empowerment and reproductive autonomy have gained traction in many parts of the world. Family planning may involve considering the number of children a woman wishes to have, including the choice to have no

children and the age at which she hopes to have them. These matters are influenced by external factors such as marital situation, career considerations, financial position, and any disabilities that may affect their ability to have children and raise them. If sexually active, family planning may involve contraception [4-5] and other techniques to control the timing of reproduction. Other methods commonly used include sexual education [2-3], prevention and management of sexually transmitted infections, preconception counselling and management, and infertility management [1-2].

Family planning is sometimes used as a synonym or euphemism for access to and the use of contraception. However, it often involves methods and practices in addition to contraception. Additionally, many might wish to use contraception but are not, necessarily, planning a family (e.g., unmarried adolescents, young married couples delaying childbearing while building a career). Family planning has become a catch-all phrase for much of the work undertaken in this realm. It is most usually applied to a female-male couple who wish to limit the number of children they have to control the timing of pregnancy (also known as spacing children). Family planning may encompass to make the partner sterile as well as abortion [4]. Family planning services are defined as "educational, comprehensive medical or social activities which enable individuals including minors, to determine the number and spacing of their children freely and to select how this may be achieved [5].

Family planning services include the use of contraceptive services, pregnancy testing and counselling, pregnancy-achieving services including preconception health services, and basic infertility services. The knowledge of sexually transmitted diseases, breast and pelvic examinations, breast and cervical cancer screening, and human immunodeficiency virus (HIV) prevention education, counselling, testing, and referral can also be classified as the family planning procedures [4-6].

The United Nations Fund for Population Activities (UNFPA) has reported that future population trends would hinge on the fertility decisions of today's men and women aged 15–24 years and on their ability and freedom to act on those decisions [7]. Many contraceptive methods are available to prevent unwanted pregnancy. There are natural methods and various chemical-based methods i.e. contraceptive methods, each with particular advantages and disadvantages. To avoid pregnancy, behavioral methods such as ejaculation outside the vagina and calendar-based methods are also safe and successful. Long-acting reversible contraceptive methods, such as intrauterine device (IUD) implant are highly effective and convenient, requiring little user action but do come with risks. When failure costs are included, IUDs and vasectomy are less costly than other methods. In addition to birth control methods, male and female condoms are also available providing protection against STDs. Condoms may be used alone or in combination to other methods as backup. Surgical methods (tubal ligation, vasectomy) provide long-term contraception for those who have completed their families [8].

Family planning is cost-effective among all health interventions. The cost savings stem from a reduction in unintended pregnancy as well as a reduction in STDs [9]. UNFPA states that "The lifetime opportunity cost related to adolescent pregnancy – a measure of the annual income a young mother misses out on over her lifetime – ranges from 1 per cent of annual gross domestic product in a large country such as China to 30 per cent of yearly GDP in a small economy such as Uganda. If adolescent girls in Brazil and India could wait until their early twenties to have children, the increased economic productivity would equal more than \$3.5 billion and \$7.7 billion, respectively [10]. This study aims to determine how much people practice family planning, make people aware of family planning and introduce new contraception methods. To make proper use of already used contraceptive methods. It also tells people about the significance of family planning. To find out the outcome of family planning among those who practice family planning. Many studies have been conducted worldwide to study contraception's knowledge, attitude, and practice in adolescents and young adults. A survey conducted among 991 senior students (15–17 years) in North Gondar in 1995 showed the level of knowledge of contraception to be 75% [11]. In 1998 in randomly selected 971 males and females aged 18–24 years in a Nigerian tertiary institution showed that 97.7% of males and 98.4% females respectively knew at least one method of contraception [12]. Two studies were conducted in 1995 and 1999 and reviewed contraception in 498 Nigerian Tertiary School Girls-228 from the Medical Discipline of study and 270 from the non-medical discipline in 1995 and 314 Nigerian teenage school girls comprising 128 students at secondary and 186 at tertiary levels of the institution in 1999. The overall mean awareness of contraception was 70.9% in the first group. However, the mean level of contraceptive awareness for the various methods of contraception was 38.2% for the second survey group: 22.6% for the secondary school girls and 54.4% for the tertiary school girls [13-14]. Two such studies have been carried out in Delhi and Ludhiana in India. In Delhi surveyed 500 undergraduate students of the medical colleges of Delhi and reported the knowledge regarding contraception to be 83.5% [15] which was

comparable to the study conducted in Ludhiana showed that among 527 senior secondary school children, where 87% were aware of contraception [16]. Similar results were reported from Nigeria, where a survey of 2388 Nigerian undergraduate students showed the contraceptive knowledge level to be 87.5% [17]. In the USA, it was reported that 68% of 283 unmarried school students (at average 19 years of age) had experienced sex, and 44% had used contraception, which was the highest among all the studies documented so far [18]. The United Nations Fund for Population Activities (UNFPA) notes that future population trends will hinge on the fertility decisions of today's men and women aged 15–24 years and on their ability and freedom to act on those decisions [19]. Concern about adolescent fertility arises from its health implications both for the mother and the child, its demographic implications in societies with rapid population growth and its social development implications. Because of the young age structure of India's population, the reproductive attitude and behavior of teenagers were likely to have an important impact on overall reproductive health, demographic and social outcomes. Adolescent sex and exposure to the risk of pregnancy had attracted considerable research attention to understand its magnitude and address it as a problem. Studies in developed countries have shown a high level of such exposure [20-23] such as in Latin America [24,25], China [26] and some African countries like Uganda and Nigeria [27-31], South Africa [32-34] and India [35]. This study aims to find out how much people were practicing family planning, to determine their level of awareness about family planning, introduce new methods of contraception, and make sure the use of already introduced contraceptive methods. To find out the outcome of family planning among those who practice family planning.

MATERIALS AND METHODS

Study methodology

A cross-sectional study was conducted at the outpatient department (OPD) and gynaecology ward in Ayub Teaching Hospital (ATH), Abbottabad, from 15th March 2017 to 15th June 2017. Both pregnant and non-pregnant women of age more than seventeen years were included in the study because the age limit for marriage in Pakistan is 16 years for female. The notion to give birth to a child before marriage is not present in Pakistan, since it is against the social and ethical rules. All the subjects in our study gave informed consent either by themselves or by their guardian. Women admitted in or visited ATH were included while those below the age of legal right to marriage or interviewed outside ATH who were not willing to participate in the survey were excluded from the study.

RESULTS

Table 1. population distribution into groups with total sample size of 200.

Classification of groups	N	Minimum	Maximum	Mean	Std. Deviation
Age (years)	200	17	45	28.21	6.393
Years of Marriage	200	1	28	9.42	6.729
Family Average monthly income in PKR	200	1000	230000	19115.00	19601.604
No of children	200	0	10	2.66	1.833
Age of last child born	200	.00	300.00	28.8375	44.07208
Valid N (list wise)	200				

Descriptive Statistics of Table 1.

On the base of life style women population was divided into urban, rural and semi-urban population as shwn in table 2.

Table 2. The frequency and distribution of Urban Rural, and semi-urban individuals

Area of living	Frequency	Percentage
Urban	57	28.5
Rural	128	64.0
Semi-urban	15	7.5
Total	200	100.0

In table 2. Among 200 individuals, 57 (28.5%) were from urban, 128 (64%) were from rural area and 15 (07.5%) were from semi-urban areas.

Table 1. The interviewed population ranged from illiterate to masters and madrasa qualified

Education level	Frequency	Percentage
Uneducated	70	35.0
Madrasa education	11	5.5
Primary	38	19.0
Matric	48	24.0
Undergraduates	17	8.5
Masters	7	3.5
Others	9	4.5
Total	200	100.0

On the base of education the interviewed patients were also divided into various groups on the base of their education. as shown in table 3. Among 200 individuals, 70 (35%) had uneducation, 11 (5.5%) were from madrasa, 38 (19%) were with the certificates from primary school, 48(24%) were matriculates, 17 (8.5%) were undergraduates 09 (3.5%) were graduates, and 09 (02.5%) were others.

Table 2. Women distribution on the basis of Husband occupation

Occupation of husband	Frequency	Percent
Unemployed	8	4.0
Self employed	70	35.0
Govt. Employ	28	14.0
Private employed	61	30.5
Others	33	16.5
Total	200	100.0

Women were also divided on the base of employment of their husband's e.g. unemployed, self-employed, government employ, and private employ as shown in table 4. Among the total of 200 individuals, 8(04%) were unemployed, 70(35. %) were Self-employed, 28(14%) were government servants, 61(30.5%) had private jobs, and 33(16.5%) were others.

Table 3. Women distribution on the basis of occupation.

Occupation	Frequency	Percent
Housewife	194	97.0
Working lady	6	3.0
Total	200	100.0

Women were also divided on the base of their own occupation. Some of the women were housewife which is more in Pakistan due to cultural and Islamic norms as shown in table 5.

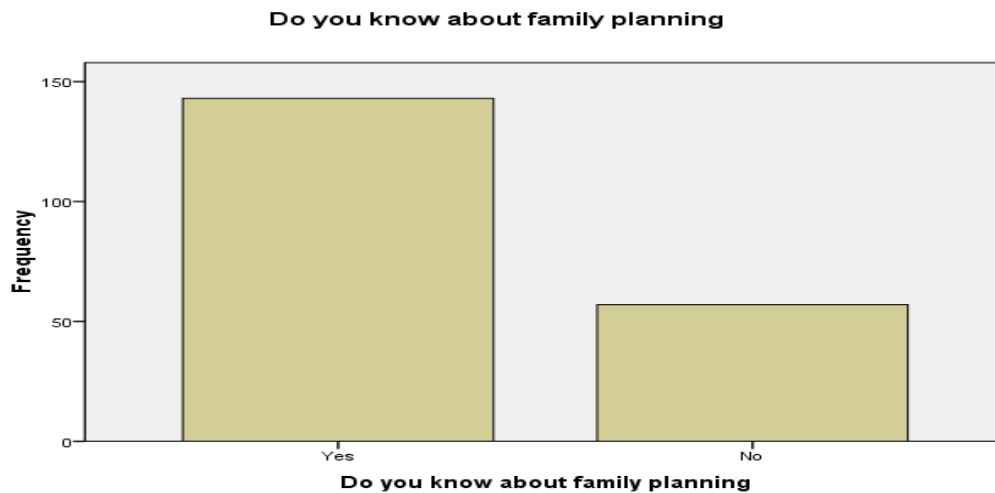


Figure 1. Among 200 individuals, 143 (71.5%) were aware while 57 (28.5%) were unaware about family planning

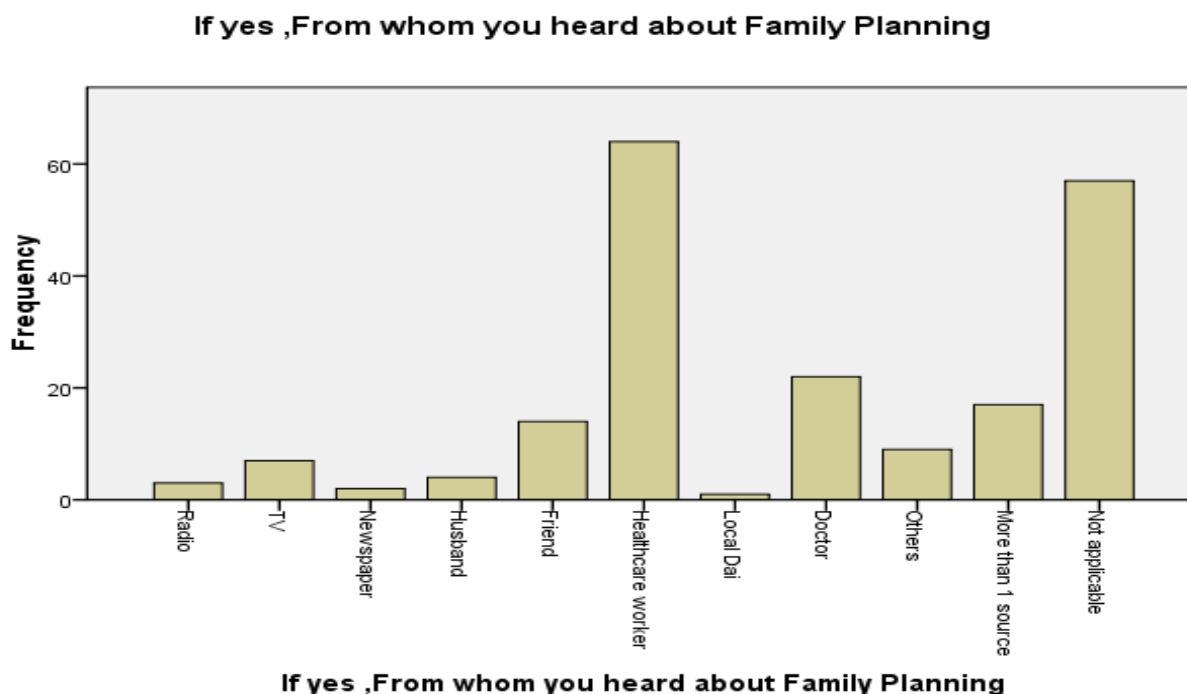


Figure 2 shows that among 200 individuals 03 (1.5%) had heard from radio, 07 (3.5%) from TV, 02 (01%) from newspaper, 04 (2%) from husband, 14 (07%) from friends, 64 (32%) from health care workers, 01 (0.5%) from dai, 22 (11%) from doctors, 09 (4.5%) from other source, 17 (8.5%) from more than 01 sources and 57 (28.5%) were not applicable.

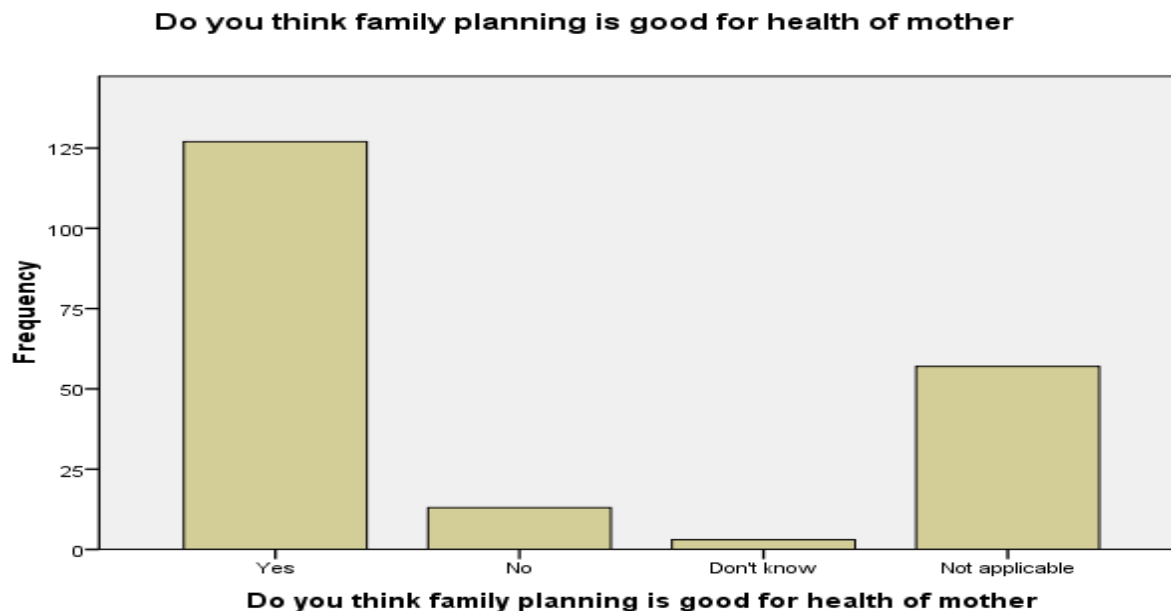


Figure 3. Shows that among 200 individuals, 127 (63.5%) said that family planning is good for health, 13 (6.5%) said not good for health, 03 (1.5%) said that they did not know, and 57 (28.5%) were not applicable.



Figure 4. Shows that among 200 individuals, 74 (37%) were practising family planning methods, 69 (34.5%) were not practicing family planning methods, and 57 (28.5%) were not applicable.

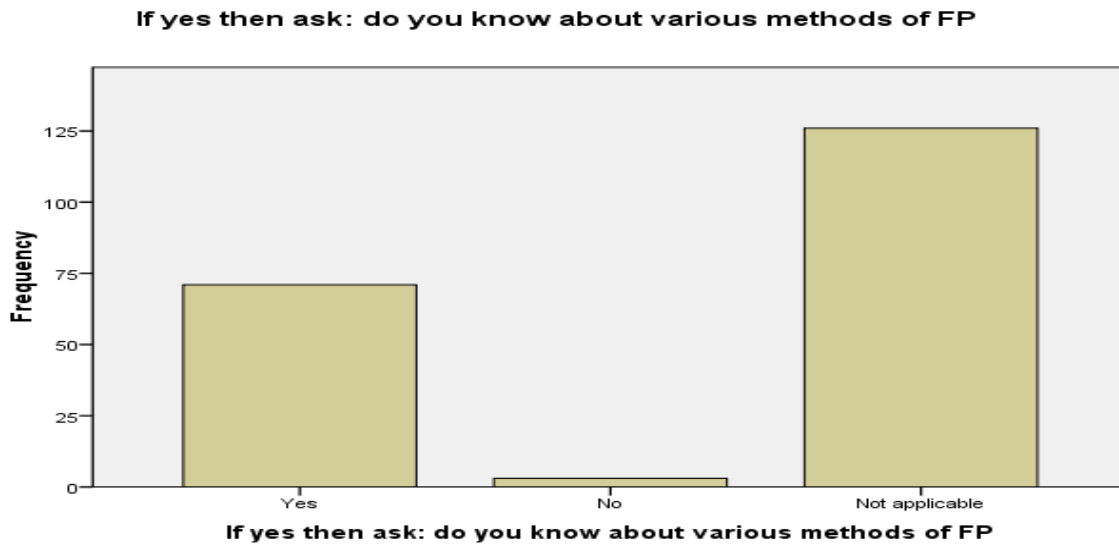


Figure 5. shows that among 200 individuals who were practising family planning methods, 71 (35.5%) knew about family planning methods, 03 (01.5%) did not know about the family planning methods, and 126 (63%) were not applicable.

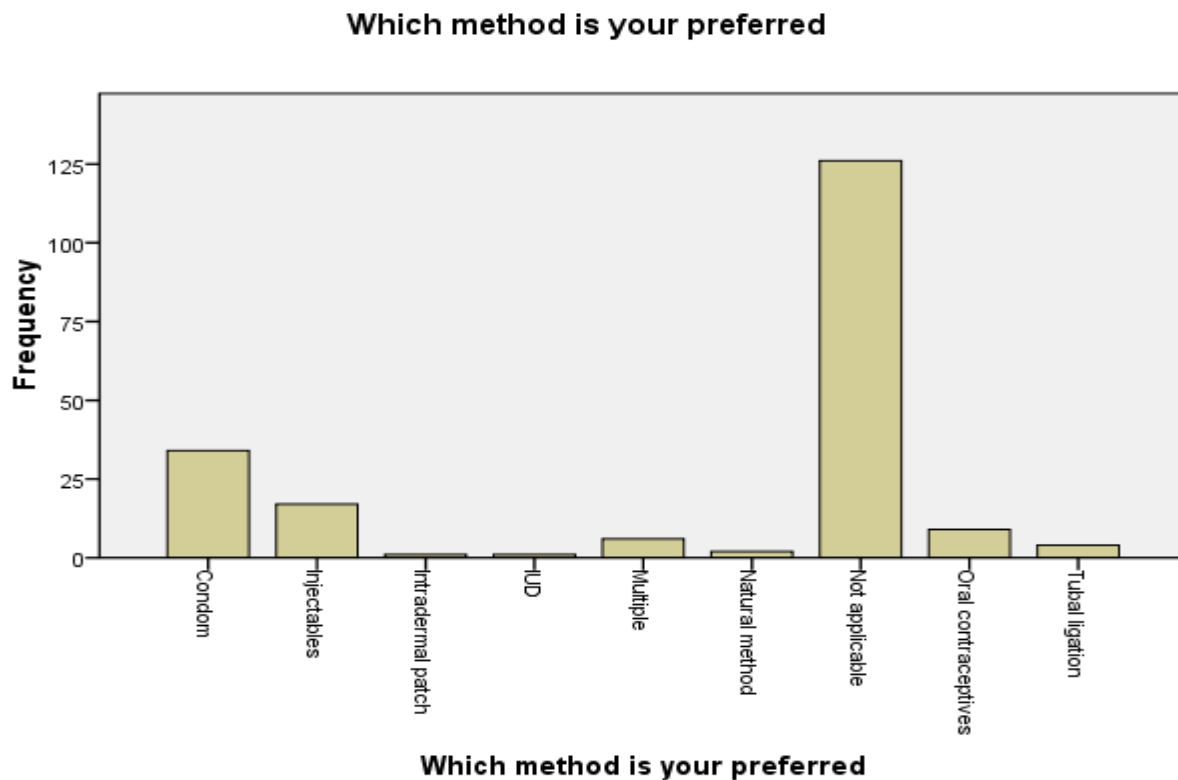


Figure 6: The (figure 6) shows that among 200 individuals 74 (37%) were practicing family planning methods, preferred method was condom 34 (17%), injectable 17 (08.5%), intradermal patches 01(0.5%), IUCD 01(0.5%), multiple 06 (03%), natural methods 02 (01%), not applicable 126(63%), oral contraceptives 09 (4.5%) and 04(02%) were tubal ligation.

DISCUSSION

The research was conducted in Ayub Medical Complex, Abbottabad, by students from Ayub Medical College, Abbottabad, in the OPD and ward of Gynaecology from 15th March 2017 to 15th June 2017. A sample of 200 patients in gynaecology OPD and ward were randomly selected and the number of questions were asked from the patients to rule out the awareness of contraceptive methods used by women of childbearing age in the premises of Ayub Medical Complex, Abbottabad. The aim of the study was to collect data and keep a statistical record for further research investigations. As far Ayub Medical Complex, Abbottabad is concerned, it is one of the most privileged and largest of all tertiary hospitals in the KPK. This hospital holds an excellent position in treating the patients of Hazara Division and Gilgit Baltistan province; that makes it obvious that the samples under consideration were standard and reflecting the problem over the large course of the area. Family planning controls the number of children as well as the intervals between their children births particularly, utilizing contraception or voluntary sterilization. This can be accomplished through follow-up and education. The results of family planning research carried out in Ayub Medical Complex, Abbottabad, coincided with the research carried out in Washington, United States of America. Here we sampled out 200 females, and it was found out that many females belonging to the urban areas were 28.5% of the total sample population while 64% were from rural areas. No such data is available from previous studies. The education status showed that 35% of the total sample population were uneducated while the rest of the population was somewhat educated in which most of the females, about 24% had secondary school certificates. Still, no association between education and family planning was available in previous research. The unemployment ratio among the husbands of the female was very low and was calculated to be only 4% and this data is also not available in previous studies. Female or mother's occupation was studied, and it showed that almost all women were housewives and only 3% were working ladies and this phenomena was also left unstudied in previous reports. The Knowledge about family planning was assessed and it was found that 71.5% of females already knew about family planning. However, a research that was done in South Africa demonstrated that 90% of women knew about family planning. Thus, it makes a quite a good association with previous research that most females were aware of family planning. When the source of their knowledge was studied, it was found out that our healthcare workers are doing a great job in spreading family planning awareness among the females, and 32% of females got the awareness from the healthcare workers while the doctors helped only 11% in this regard, no such data is available in any previous research studies. On a question asked whether family planning is good for the health of women/mothers, many women agreed by saying yes, 63.5%, there is no evidence of such studies in the past. 37% of females used family planning methods, while 66.7% in America used family planning methods from studies [10]. It refers that this area lags behind the modern world by a significantly big lead. They were asked why not use the family planning methods. Most of them were not applicable to answer the question, which stood out to be 65.5% of the total sample population. While from studies in South Africa, many females 37.3% said that they did not want to use modern contraceptive methods [36]. When the female were asked about the modern contraceptive methods only 35.5% of females were aware of the modern techniques. No such study was carried out elsewhere in the world. The preferred method of contraception among the females was condoms 17%; injectable 8.5%, and OCPs 4.5%. The last survey carried out by the Office of National Statistics (ONS) to determine the use of contraceptives in 2008-9 showed that 75% of women aged 16-49 years used some type of contraception. 25% of women use the combined oral contraceptive pill (COCP) while 25% of women relied on using male condoms. In women aged 18-29 years, similar numbers of women use the COCP as they used condoms (the most frequent method). Approximately one-third of women aged 16-19 years used contraceptives, half of them were using condoms and a half were taking the COCP. A woman or partner has also been reported to make sterile in 17% of subjects. Making the partner sterile is more frequent in women over 30 years [37]. The reason behind the use of a particular type of contraception was convenience 10.5% and least adverse effects 10.5%. Studies carried out by the Office for National Statistics in 2008-09 showed that easy availability of condoms made this method a preferred contraceptive approach and that's why it is used by 25% of people as the favourite contraceptive methods. The risk of failure of the method of contraception was inquired and the answer was it does not result in unwanted pregnancy by 11% of women while 22% said it might not work. The effectiveness depends upon taking the pill as instructed and is typically associated with a pregnancy rate of 90 per 1,000 women per year [37]. Only 29% of females were

aware of tubal ligation, and 7.5% of vasectomy; no such record is present in previous research. About adverse effects of OCPs, 40.5% of females reported negative effects on health. While studies of South Africa showed, 37.3% reported the harmful effects of OCPs [36], which is almost appealing to our data statistics. To summarize, our data discovered that most of the females using contraception were from rural areas and were mostly educated and their husbands were employed, however, the female were mostly housewives. They had knowledge of family planning and the major source of awareness was the healthcare centre and they thought it's good for health and the preferred method was condoms, and the reason for the use of condoms was its convenience and least adverse effects. Knowledge about tubal ligation and vasectomy was rarely used and most of them were aware of the adverse effects of OCPs.

Conclusions

We concluded that most of the females are aware of the family planning, methods of contraception, its effects on health, its risk of failure, convenient method, permanent techniques and adverse effects of contraceptive pills.

Limitations of the Study:

This study did not consider the women outside the Ayub Medical Complex campus, natural methods of contraception, health-seeking behaviour or any lifestyle or dietary modification, co-existing morbidities, infertility, and women with chromosomal and genetic defects. A sample might not be the true representative of the general population. Data collection was strictly according to the questionnaire, but due to the involvement of more than one collector, some error/bias might be there. All other human errors are possible.

Recommendations

Many important factors were seen in women coming here in gynaecology OPD and ward of Ayub teaching hospital; still we have the number of women in our surroundings who were not included in the study. Moreover, we were unable to survey more than one hospital; therefore, a multicentre study should be carried out, including various districts and women at their homes. The detailed analytical study suggests assessing the knowledge and practice of family planning methods in childbearing age women to validate their causal relationship. A longitudinal study should be conducted to see the outcome of this condition. Many females are unaware of family planning and its practice, so it is essential to educate the people for regular check-up at antenatal clinics and the government should designed policies to give awareness to female about family planning.

CONFLICT OF INTEREST

The author declares no conflict of interest which can affect the current submission.

AUTHOR CONTRIBUTION

All author have significantly contributed to be authored.

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