International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2024: 7.101

A Prospective Study on Utilization of Contraceptives among Women in Reproductive Age Group

Dr. Oviya T.[1], Dr. Jikki Kalaiselvi[2], Dr. Vijayalakshmi Gnanasekaran[3]

[1]Department of Obstetrics and Gynaecology, ACS Medical College and Hospital, Poonamalle High Road, Velappanchavadi, Chennai -600077
Email: *16oviya[at]gmail.com*

[2]Head of Department, Department of Obstetrics and Gynaecology, ACS Medical College and Hospital, Poonamalle High Road, Velappanchavadi, Chennai -600077

[3]Professor and Chief, Department of Obstetrics and Gynaecology, ACS Medical College and Hospital, Poonamalle High Road, Velappanchavadi, Chennai -600077

Abstract: ***Introduction**: Contraceptives prevents the unintended pregnancies and has greatly evolved with growing time to avail safer and more effective means of pregnancy and STD prevention (Festin, 2020). The growing necessitation for family planning has greatly impacted on the overall health benefits of women, this includes with minimising the maternalillnesses and also from the gyenocological perspectives pertaining to pregnancy-related fatalities, pregnancy delays among the older women and also in young adults, and minimizing need towards unsafe abortions and HIV transmissions (Teal & Edelman, 2021; Rehnström Loi, 2020). This paper explores and assesses the management practices and knowledge related to the contraceptive usage among the women within the reproductive age can help identify gaps and inform strategies to improve reproductive health services. **Aim**: The paper aims to investigate contraceptives usage among women within the reproductive age group. **Objectives**: 1) To assess the overall prevalence on usage of contraceptive among the study group of reproductive women group among sample population within the reproductive age group. 2) To identify on the types of contraceptives that are employed and overall frequency of usage among the reproductive age group of study population. 3) To explore the sociodemographic factors that influences contraceptive use among the study population. **Materials and Methods**: **Study Place**: This study had conducted in the Department of Obstetrics and Gynaecology at A.C.S. Medical College and Hospital. **Sample Size**: A total of100 women in their reproductive age are included in the study. **Study Design**: Prospective study design investigation was employed. **Method**: The study employed a pre-tested semi-structured questionnaire employed for data collection regarding the contraceptive usage and its awareness. The study questionnaire covered sociodemographic profile, knowledge on contraceptive usage, and the patterns of usage, and factors that impact on contraceptive use. The questionnaire survey design was developed in accordance from the previous study conducted by Hemanth et al., (2023). Participants were from the women in reproductive age group (within the age group of 18-49 years), who consented with participation in research. Collected data had been gathered and entered in Excel spreadsheet and further transferred to SPSS version 28 for analysis. In addition, descriptive statistics had been employed for describing the study population. In addition, Chi-square test had been employed for testing the association between dependent and independent variables (contraceptive & its usage, choice and discontinuation). In addition, the p-value had been set at ≤ 0.05, which is referred as statistically significant. **Inclusion Criteria**: 1) Study population comprising of women within the age group between 15-49 years. 2) Women attending the outpatient department of Obstetrics and Gynaecology. 3) Women who gave informed consent to participate in the study. Women using contraceptives. **Exclusion Criteria**: 1) Women with a history of sterilization. 2) Women who had been pregnant or planning to conceive within the study period. 3) Women with medical conditions contraindicating contraceptive use. **Conclusion**: Various socio-demographic factors influencing contraceptive use among married women are pointed out by the study. Employment (especially in the government sector), younger age, lower education levels, middle-income levels and nuclear family structure are in association with higher use of contraceptive. These findings emphasize the need for targeted public health strategies to address the diverse needs and perceptions of different demographic groups.*

Keywords: contraceptive use, reproductive health, family planning, sociodemographic factors, women's health

1. Introduction

Contraceptives play a crucial role in preventing unintended pregnancies and have significantly evolved over time, becoming safer and more effective (Sitruk-Ware et al., 2013). The growing importance of contraceptive and its usage has resulted in substantial health benefits, including reducing maternal illness, decreasing pregnancy-related fatalities, delaying pregnancies in both older women and young adults, and minimizing the need for unsafe abortions and HIV transmission (Burkman et al., 2004; Cleland et al., 2012). These benefits are underscored by the advancements in contraceptive methods, which have provided women with more reliable and varied options for managing their reproductive health (Yaya et al., 2018).

Global Context of Contraceptive Use

There is a variation in the use of contraceptives widely all across different demographics and regions. In the USA, data from 2018 pointed out that female permanent contraception (28%), male condoms, intrauterine devices (IUDs) (both 13%) and pills (21%) had been the most commonly used contraceptives(womenshealth.gov). In particular, permanent contraception has been prevalent among women who is in the age group of 40-49, middle-aged women with low education levels or low income or married women with children (Marnicio, 2015). Young and middle-aged women, in relationships as well as single and particularly in the age 15-35 years use pills primarily. Commonly, individuals with children use more IUDs and they have been less common

among the individuals with higher incomes (womenshealth.gov).

Contraceptive Use in India

The unmet need is a significant challenge for family planning among young as well as low-parity couples in India (Garg et al., 2024). In spite of a progress in recent years, there is a substantial number of young couples who continue to lack access to modern face barriers or contraception methods to effectively utilizing them (Ghule et al., 2015). In addition, this unmet need can be having far-reaching consequences, that includes the increased health risks for mothers as well as children, that contributes to impeding efforts, population growth and straining limited resources for the improvement of the overall life quality (Faryniarz et al., 2024).

Factors Influencing Contraceptive Use

Contraceptive use is influenced by many different factors among women in the reproductive age group. It has been shown by studies that gaps are existed in the available methods' understanding, correct usage and their effectiveness, while most of the young couples in India have been aware of contraception (Subramanian et al., 2018). Fears, misconceptions and myths are often led by limited knowledge about contraception and hindering its adoption. There is a variation in attitudes towards contraception with some couples in order to recognize its importance for maternal and child health, personal well-being as well as economic stability. Yet, attitudes can be impacted negatively and contraceptive use can be impacted by cultural and social factors namely family pressure, gender norms and traditional beliefs (Grove et al., 2011).

Factors namely privacy concerns, fear of side effects, accessibility and cost influence contraception perceptions. In addition, decision-making can be affected by misconceptions in regards to the contraception impact on the overall health and fertility. Due to lack of awareness about different methods, limited access to quality services, sociocultural barriers and inadequate counselling, the use of contraception is suboptimal among young couples (Yadav et al.,2011). In addition, non-use or inconsistent use of contraception are contributed by concerns about the discontinuation rates, method effectiveness and side effects.

Efforts to Improve Contraceptive Use

Through various initiatives, efforts are made for addressing these challenges. For enhancing knowledge and dispelling myths surrounding contraception, Comprehensive Sexuality Education programs are introduced. In addition, these programs are aiming for providing accurate information and also fostering positive attitudes towards family planning. In addition, initiatives improving the access to quality and affordable reproductive healthcare services, that includes many contraceptive methods that are implemented (Woolweaver et al 2023).

Another crucial strategy has been engaging men as partners in their decision-making as well as family planning discussions. Reproductive choices and contraceptive use can be impacted significantly by men's involvement in family planning. The likelihood of contraceptive use is increased, the risk of unintended pregnancies is reduced and effective and consistent method use is encouraged, when men are involved in it actively. In addition, women's access to providing logistical, financial and emotional support and access to reproductive healthcare services are influenced by the support of men (Shattuck et al., 2011).

Addressing Sociocultural Barriers

In order to improve contraceptive use, addressing sociocultural barriers remains essential in India. Most frequently, family planning decisions are influenced by cultural norms and traditional beliefs and education and community engagement is required by overcoming these barriers (Occhako et al., 2017). In addition, programs leveraging local cultural frameworks and involving community leaders which can promote positive attitudes towards contraception. In addition, changing societal perceptions are aided by increasing awareness in regards to the benefits of dispelling myths and family planning in association with contraceptive use.

Role of Healthcare Providers

To promote contraceptive use, healthcare providers play a pivotal role. Use of contraceptives and choices of women can be influence significantly by healthcare professional providing education as well as effective counselling. It is crucial for training healthcare providers in order to offer comprehensive, accurate and non-judgemental family planning services. In addition, healthcare facilities are accessible and well-equipped in meeting the contraceptive women needs in reproductive age.

Study Aim and Objectives

This paper aims to investigate contraceptive usage among women within the reproductive age group. The specific objectives are:

- To assess the overall prevalence of contraceptive use among the study group of reproductive-age women.
- To identify the types of contraceptives employed and their overall frequency of use among the reproductive-age group in the study population.
- To explore the sociodemographic factors that influence contraceptive use among the study population.

The present study is to inform strategies for improving the reproductive health services and identify gaps by exploring and assessing the knowledge in relation to contraceptive use and management practices among women within the reproductive age. To address these gaps, it is quintessential to enhance the overall life quality and health outcomes for women in India.

The targeted intervention development will be contributed by this comprehensive contraceptive use exploration within the Indian context which aimed at improving reproductive health services. More effective strategies can be implemented by healthcare providers and policymakers for promoting the contraceptive use and improving the women's health outcomes in India through a better understanding of the challenges faced by women and the factors influencing contraceptive use.

2. Materials and Methods

Study Place
This study aims to conduct in the Department of Obstetrics and Gynecology at A.C.S. Medical College and Hospital, Chennai, India.

Sample Size
A total of 100 women of reproductive age were included.

Study Design
A prospective study design was employed to investigate contraceptive usage and awareness among women in the reproductive age group.

Method
A pre-tested semi-structured questionnaire was utilized by the study for data collection. On the basis of a thorough literature review, the questionnaire had been developed and adapted from Hemanth et al. (2023) conducted previous study. It had been designed for mainly gathering the comprehensive information on many different contraceptive usage aspects, which including usage patterns, sociodemographic profile, factors influencing contraceptive use and knowledge on contraceptive usage.

Participants
For the study, the participants had been women in the reproductive age group of 18-49 years who had consented for participating in the research. In addition, the inclusion and exclusion criteria had been in the following:

Inclusion Criteria:
- Women between 18-49 years.
- Women as outpatients at department of Obstetrics and Gynecology.
- Women providing their informed consent for participating in the study.
- Women using contraceptives currently.

Exclusion Criteria:
- Women with medical conditions contraindicating contraceptive use.
- Women with sterilization history.
- Women who were pregnant or planning to conceive within the study period.

Data Collection
Data collection has been carried out for six months. The semi-structured questionnaire was administered individually to ensure privacy and confidentiality. In addition, participants had been explained about the objective of the study and intimated that participants should come voluntarily. Further, they had been assured that from the study, they could be withdrawat any time even without informing. Before conducting the research, written informed consent had been obtained from each participant before conducting the research.

Responses from the participants are checked for completeness upon completing the questionnaire. In addition, the data collected had been entered into an Excel spreadsheet as well as transferred subsequently to SPSS version 28 for statistical analysis.

Data Analysis
For describing the study population, descriptive statistics had been employed. For summarizing categorical variables, descriptive analysis had been used, whereas for continuous variables, standard deviation and means had been calibrated. Chi-square tests had been employed for testing the associations between independent variables (information sources, sociodemographic factors, reproductive history) and dependent variables (discontinuation, choice of contraceptive, usage patterns). In addition, the p-value had been set at ≤ 0.05, which has been considered statistically significant.

Ethical Considerations
The Institutional Review Board of A.C.S. Medical College and Hospital approves the research. According to the guidelines of human research ethics, privacy and confidentiality of participants had been guaranteed. For asking sure of anonymity, no identifying information had been collected. In addition, every participant had been informed that no physical or psychological harm had been posed by the study and also no drugs or placebos had been administered.

Questionnaire Design
The semi-structured questionnaire was designed to collect detailed information on various factors related to contraceptive use. The sociodemographic section gathered information on age, education, occupation, marital status, and nationality. The reproductive history section included questions about the number of children as well as their married life duration. Frequency and types of contraceptives such as traditional and non-tradition were focused by the utilization pattern section. The section on factors influencing contraceptive choice and discontinuation aimed to understand the reasons behind choosing certain methods and the reasons for discontinuation. This included questions on satisfaction with the method, perceived health risks, husband's influence, cultural reasons, and previous side effects. The sources of information section explored where participants obtained their information about contraception, such as media, family, community, healthcare providers, and magazines.

3. Results & Discussion

The cross-sectional study had involved 296 married women between 18 to 49 years in their reproductive age group. Only those who could understand the questions were prepared to provide informed consent in order to take part in the study. This study was carried out over a half-year period. Following a thorough study of the literature, a questionnaire including socio-demographic profile and consumption pattern was adopted. Table 1 presents a comprehensive overview of the replies given by participants to several factors that influence the use of contraceptives, health management, relationship dynamics, and personal experiences. 168 participants (56.8%) believe that effective techniques are available to reduce the likelihood of becoming pregnant, indicating great confidence in contraceptive measures among most respondents. On the other hand, 128 individuals (43.2%) do not hold this belief,

suggesting that a sizable portion may be skeptical or have reservations regarding the efficacy of the contraceptive techniques now in use.

A significant majority of 174 participants (58.8%) think that there are long-term techniques that work well for addressing chronic health concerns. This implies that people generally have faith in continuing health management procedures and their capacity to address persistent health problems. Nevertheless, 122 participants (41.2%) disagree, suggesting that there may be differences in how accessible or effective certain tactics are seen to be. It seems that there is less of an easy way to resolve the disruption of contentment during sexual activity; out of 159 participants, 53.7%, said that this issue is not adequately addressed. This majority indicates a need for improved strategies or networks of support to improve sexual satisfaction. Contrarily, 137 people (46.3%) think that these disturbances are sufficiently addressed, indicating a difference in experiences or viewpoints.

159 participants (53.7%) acknowledged that a partner's decision had an impact on the circumstance, highlighting the critical role that communication and shared decision-making play in relationships. However, 137 people (46.3%) disagree that their partner's decisions have a significant influence, indicating that various partnerships have variable levels of partner influence. Regarding the topic of limiting family size, the majority of 161 participants (54.4%) do not think that there are any practical ways to do so, suggesting that there may be difficulties or discontent with the family planning techniques that are currently in use. However, 135 participants (45.6%) believe that there are effective ways available, indicating a divergence in perspectives and personal experiences with family planning.

The respondents are virtually evenly split when it comes to the significance of work; 149 (50.3%) recognize its value, while 147 (49.7%) do not. Different viewpoints on the function and significance of work in participants' lives are suggested by this nearly equal split. Of those surveyed, 179 (60.5%) strongly believed that financial upbringing had a big influence on people's decisions and lives. This suggests that people's financial backgrounds have a significant impact on who they are and how they live. On the other hand, 117 individuals (39.5%) do not believe it to be significant, representing a minority opinion that other aspects might be more important. Finally, 157 participants (53.1%) reported having experienced difficulties during a prior pregnancy, indicating that pregnancy-related difficulties are not uncommon. Conversely, 139 individuals (47.0%) reported not facing any such issues, indicating that although obstacles are common, they are not shared by all.

Table 1: Participants' allocation based on variables impacting contraceptive use

For mitigating the likelihood of becoming impregnated?		
	Frequency	**Percent**
No	128	43.2
Yes	168	56.8
The long-term strategies to manage an enduring health issue?		
	Frequency	**Percent**
No	122	41.2
Yes	174	58.8
For addressing the disruption of contentment during sexual activity?		
	Frequency	**Percent**
No	159	53.7
Yes	137	46.3
Does the decision made by the partner affect the situation?		
	Frequency	**Percent**
No	137	46.3
Yes	159	53.7
How can one effectively restrict the size of their family?		
	Frequency	**Percent**
No	161	54.4
Yes	135	45.6
What significance is associated with work		
	Frequency	**Percent**
No	147	49.7
Yes	149	50.3
Does financial upbringing influence individuals?		
	Frequency	**Percent**
No	117	39.5
Yes	179	60.5
Were there any difficulties encountered during your previous pregnancy?		
	Frequency	**Percent**
No	139	47.0
Yes	157	53.0

Table 2: Participants' Categorization Based on Obstacles Encountered

How does the desire of an accomplice affect sexual activity?		
	Frequency	**Percent**
Not important	28	9.5
Important	101	34.1
Less important	34	11.5
Somewhat important	60	20.3
Very important	73	24.7
Are there any consequences upon relatives?		
	Frequency	**Percent**
No	186	62.8
Yes	110	37.2
Is there any implication of tradition?		
	Frequency	**Percent**
No	197	66.6
Yes	99	33.4
Does an historical analysis of adverse effects reveal something?		
	Frequency	**Percent**
No	201	67.9
Yes	95	32.1
Is contribution of journalism an important factor?		
	Frequency	**Percent**
No	186	62.8
Yes	110	37.2
Are there any positive and detrimental aspects of the press?		
	Frequency	**Percent**
Negative	123	41.6
Positive	173	58.4
Does the recognition between hormonal factors, health, and suppression connect each other?		
	Frequency	**Percent**
No	108	36.5
Yes	188	63.5
Have you contemplated that using contraception can prevent unintended pregnancies?		
	Frequency	**Percent**
No	112	37.8
Yes	184	62.2
Total	296	100.0

An interesting look at participant viewpoints on elements influencing sexual behavior, press influence, familial repercussions, tradition, journalism, hormonal considerations, and contraception use can be seen in Table 2. First off, a lot of respondents believe that an accomplice's desire has a big influence on sexual behavior. In particular, 73 individuals (24.7%) think it is extremely important, and 101 participants (34.1%) think it is significant. When taken as a whole, these numbers show that 58.8% of participants believe that their partner's desire plays a significant role in their sexual experiences. Conversely, a lesser percentage (23.3%) believes it to be somewhat significant, or less important (11.5%), while only 9.5% believes it to be unimportant. This demonstrates the widespread agreement that a key component of sexual fulfillment is mutual desire.

Regarding the effects on family members, 186 participants (62.8%), as opposed to 110 participants (37.2%), strongly disagree that there are any. This indicates that while a sizable minority of respondents do observe direct repercussions from their sexual or contraceptive habits on their family, the majority do not. 99 individuals (33.4%) believe tradition has an impact, while 197 participants (66.6%) do not think it does. This suggests that even if most people believe traditional values have less bearing on their decisions about contraception or sexual behavior, a sizable portion still acknowledges their importance. The majority of participants reject historical analysis of detrimental consequences; 95 persons (32.1%) find insightful information, while 201 participants (67.9%) do not. It's possible that the majority believes that knowledge from the past is less relevant than activities and experiences from the present.

Of the 186 participants, 186 (62.8%) think that the role of journalism is negligible, while 110 (37.2%) think that it is significant. This division indicates differing views on the extent to which journalism and media impact people's decisions on contraception or conceptions of sexual health. It's interesting to note that 123 individuals (41.6%) concentrate on negative aspects of the press's influence, while 173 people (58.4%) identify good aspects. This suggests a more positive perception of the press's overall function, yet a large percentage of respondents draw attention to potential negative effects. 188 individuals (63.5%) agree that there is a link between hormonal parameters, health, and repression; 108 persons (36.5%) disagree. This broad agreement indicates that most people are aware of how these factors interact and how important they are while using contraceptives or sexual health.

Finally, the majority of 184 participants (62.2%) believed that contraceptive can prevent unwanted births, whereas 112 participants (37.8%) disagreed. This majority supports widespread public health messages by highlighting the

acceptance of contraception's efficacy in reducing unwanted pregnancies. To conclude, Table 2's findings exhibit a wide range of viewpoints regarding the variables that influence sexual behavior, the significance of customs, the influence of media and journalism, and the acknowledgement of hormonal and health-related aspects in the utilization of contraception. Although there are sizable minorities with opposing viewpoints in a number of areas, the intricacy and diversity of participant attitudes on these subjects is highlighted.

Table 3: Relationship between sociodemographic characteristics and the use of contraceptives

Age group of the respondents * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		Pearson Chi-square value	p-value
			No	Yes		
Age group of the respondents	18 - 25 years	Count	38	47	8.034	0.018*
		% within Age group of the respondents	44.7%	55.3%		
	26 - 35 years	Count	55	35		
		% within Age group of the respondents	61.1%	38.9%		
	36 - 49 years	Count	77	44		
		% within Age group of the respondents	63.6%	36.4%		
Education level of respondents * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		5.444	0.020*
			No	Yes		
Education level of respondents	Below graduate level	Count	82	78		
		% within Education level of respondents	51.3%	48.8%		
	Graduate and above	Count	88	48		
		% within Education level of respondents	64.7%	35.3%		
Occupation of the respondents * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		18.351	0.000**
			No	Yes		
Occupation of the respondents	Private sector	Count	60	46		
		% within Occupation of the respondents	56.6%	43.4%		
	Government sector	Count	41	55		
		% within Occupation of the respondents	42.7%	57.3%		
	Others	Count	69	25		
		% within Occupation of the respondents	73.4%	26.6%		
Job Status * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		7.453	0.006*
			No	Yes		
Job Status	Employed	Count	78	78		
		% within Job Status	50.0%	50.0%		
	Unemployed	Count	92	48		
		% within Job Status	65.7%	34.3%		
Family Structure * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		5.623	0.018*
			No	Yes		
Family Structure	Nuclear Family	Count	83	79		
		% within Family Structure	51.2%	48.8%		
	Joint Family	Count	87	47		
		% within Family Structure	64.9%	35.1%		
Husband’s education * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		6.041	0.014*
			No	Yes		
Husband’s education	Below graduation	Count	78	76		
		% within Husband’s education	50.6%	49.4%		
	Graduation and above	Count	92	50		
		% within Husband’s education	64.8%	35.2%		
Husband's occupation * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		9.942	0.007*
			No	Yes		
Husband's occupation	Professional jobs	Count	73	34		
		% within Husband's occupation	68.2%	31.8%		
	Service jobs	Count	53	41		
		% within Husband's occupation	56.4%	43.6%		
	Skilled jobs	Count	44	51		
		% within Husband's occupation	46.3%	53.7%		
Income per month * Deployment of Contraceptive drugs Crosstabulation						
			Deployment of Contraceptive drugs		6.903	0.032*
			No	Yes		
Income per month	Less than Rs. 40,000	Count	68	46		
		% within Income per month	59.6%	40.4%		

	Rs. 40,001 – Rs. 80,000	Count	51	55		
		% within Income per month	48.1%	51.9%		
	More than Rs. 80,000	Count	51	25		
		% within Income per month	67.1%	32.9%		

Table 3 shows the correlation between respondents' use of contraceptives and other sociodemographic factors, with significant relationships found using Chi-square testing. According to the age group analysis, there is a significant Chi-square value (8.034, p=0.018) showing that younger respondents (18–25 years old) use contraception more frequently (55.3%) than older groups (26–35 years, 38.9%, and 36–49 years, 36.4%). Education level also matters; a significant Chi-square value (5.444, p=0.020) supports the finding that people with less education use contraceptives more frequently (48.8%) than do those with more education (35.3%).

Employment greatly affects the use of contraceptives; government employees report using them the most (57.3%), followed by those in the private sector (43.4%) and other sectors (26.6%) (Chi-square value 18.351, p=0.000). According to their employment status, respondents who are employed use contraceptives equally (50%) compared to those who are unemployed (34.3%) (Chi-square value: 7.453, p = 0.006). Contraceptive use is influenced by family structure; nuclear families use them more frequently (48.8%) than joint families (35.1%), as shown by a significant Chi-square value (5.623, p=0.018). The husband's educational background is particularly important; individuals with less education than graduation use contraception at a higher rate (49.4%) than do those with more education (35.2%) (Chi-square value 6.041, p=0.014).

Based on the husband's employment, it can be seen that people with skilled positions use contraception at the highest rate (53.7%), followed by people in service jobs (43.6%) and people in professional jobs (31.8%) (Chi-square value 9.942, p=0.007). Monthly income influences the use of contraceptives strongly in the Rs. 40,001 – Rs. 80,000 group, followed by less than Rs. 40,000 (40.4%) and more than Rs. 80,000 (32.9%) (Chi-square value 6.903, p=0.032) with the highest usage (51.9%). All things considered, these results show that respondents' usage of contraceptives is greatly impacted by sociodemographic characteristics including age, education, occupation, employment status, family structure, husband's salary, and occupation and level of education.

Table 4: Relationship estimation between influencing variables and the use of contraception

For mitigating the likelihood of becoming impregnated? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?		Pearson Chi-square value	p-value
			No	Yes		
For mitigating the likelihood of becoming impregnated?	No	Count	66	62	4.854	0.028*
		% within For mitigating the likelihood of becoming impregnated?	51.6%	48.4%		
	Yes	Count	108	60		
		% within For mitigating the likelihood of becoming impregnated?	64.3%	35.7%		
The long-term strategies to manage an enduring health issue? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?		7.328	0.007*
			No	Yes		
The long-term strategies to manage an enduring health issue?	No	Count	83	39		
		% within The long-term strategies to manage an enduring health issue?	68.0%	32.0%		
	Yes	Count	91	83		
		% within The long-term strategies to manage an enduring health issue?	52.3%	47.7%		
For addressing the disruption of contentment during sexual activity? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?		6.223	0.013*
			No	Yes		
For addressing the disruption of contentment during sexual activity?	No	Count	104	55		
		% within For addressing the disruption of contentment during sexual activity?	65.4%	34.6%		
	Yes	Count	70	67		
		% within For addressing the disruption of contentment during sexual activity?	51.1%	48.9%		
Does the decision made by the partner affect the situation? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?		5.026	0.025*
			No	Yes		
	No	Count	90	47		

Does the decision made by the partner affect the situation?		% within Does the decision made by the partner affect the situation?	65.7%	34.3%		
	Yes	Count	84	75		
		% within Does the decision made by the partner affect the situation?	52.8%	47.2%		
How can one effectively restrict the size of their family? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?			
			No	Yes		
How can one effectively restrict the size of their family?	No	Count	104	57	4.922	0.027*
		% within How can one effectively restrict the size of their family?	64.6%	35.4%		
	Yes	Count	70	65		
		% within How can one effectively restrict the size of their family?	51.9%	48.1%		
What significance is associated with work? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?			
			No	Yes		
What significance is associated with work?	No	Count	95	52	4.114	0.043*
		% within What significance is associated with work?	64.6%	35.4%		
	Yes	Count	79	70		
		% within What significance is associated with work?	53.0%	47.0%		
Does financial upbringing influence individuals? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?			
			No	Yes		
Does financial upbringing influence individuals?	No	Count	65	52	0.832	0.362
		% within Does financial upbringing influence individuals?	55.6%	44.4%		
	Yes	Count	109	70		
		% within Does financial upbringing influence individuals?	60.9%	39.1%		
Were there any difficulties encountered during your previous pregnancy? * Have contraceptive drugs been deployed in the past 30 days? Crosstabulation						
			Have contraceptive drugs been deployed in the past 30 days?			
			No	Yes		
Were there any difficulties encountered during your previous pregnancy?	No	Count	92	47	5.928	0.015*
		% within Were there any difficulties encountered during your previous pregnancy?	66.2%	33.8%		
	Yes	Count	82	75		
		% within Were there any difficulties encountered during your previous pregnancy?	52.2%	47.8%		

From Table 4, Pearson Chi-square test is employed for assessing the significance of the link between a number of influencing factors and the usage of contraceptives during the previous 30 days. The usage of contraceptives is significantly associated with reducing the chance of getting pregnant (Chi-square value 4.854, p=0.028). Those who pay attention to this factor are less likely than those who do not (48.4%) to have used contraception recently (35.7%). The usage of contraceptives is also substantially impacted by long-term health measures (Chi-square value 7.328, p=0.007). Respondents using these tactics report using contraceptives more recently (47.7%) than non-users (32.0%).

It is also important to address disruptions that occur during sexual activity (Chi-square value 6.223, p=0.013). Contraceptive use has increased recently among those addressing this issue (48.9%) compared to those who do not (34.6%). The usage of contraceptives is considerably impacted by the partner's choice (Chi-square value 5.026, p=0.025). Respondents who feel that their partner's decisions affect the circumstances report using contraception more frequently (47.2%) than do those whose partners have little effect over their choices (34.3%). Strategies for limiting family size that work well are also noteworthy (p=0.027, chi-square value of 4.922). Comparing individuals who use such techniques to those who do not, those who use contraception report a greater rate of use (48.1%).

Work has a significant impact, as evidenced by the Chi-square value of 4.114 and p = 0.043. Contraceptive use is higher among respondents who view their employment as significant (47.0%) than among those who do not (35.4%). However, there is no evidence of a significant correlation between financial upbringing and the usage of contraceptives recently (Chi-square value 0.832, p=0.362). Whether or whether one considers financial upbringing to be relevant, usage rates are

generally similar. Finally, prior pregnancy troubles influence the contraceptives use strongly (Chi-square value 5.928, p=0.015). Compared to those who did not use contraception (33.8%), those who encountered problems report using contraception more recently (47.8%).

4. Conclusion

Socio-demographic factors' complex interplay influencing contraceptive use among women are underscored by the study. From statistical analysis, it is revealed that younger women have been more likely to use contraceptives, suggested that younger generations may remain open to family planning and they would have better access to reproductive health services as well as information. Lower education levels among women also correlate with higher contraceptive use, which may reflect targeted efforts in public health campaigns or community programs aimed at increasing awareness and access to contraception among less-educated populations.

Employment, particularly within the government sector, is another significant factor associated with increased contraceptive use. This could be due to better healthcare benefits and access to family planning resources provided by government employment. Additionally, women living in nuclear families are more likely to use contraceptives compared to those in extended family structures. This might be because nuclear families often have more autonomy in making reproductive health decisions without external familial pressures. Women in middle-income brackets exhibit higher contraceptive use, highlighting economic stability as a crucial factor in accessing and utilizing family planning services. This finding suggests that economic empowerment enables women to make informed choices about their reproductive health.

Overall, these findings emphasize the necessity for targeted public health strategies that consider the diverse needs and perceptions of different demographic groups. Tailored interventions are essential to address the unique challenges faced by various segments of the population, ensuring equitable access to reproductive health services. By focusing on these key socio-demographic factors, public health policies can be more effective in promoting contraceptive use and improving reproductive health outcomes among married women.

References

[1] Festin MP. Overview of modern contraception. Best Practice & Research Clinical Obstetrics & Gynaecology. 2020 Jul 1; 66:4-14.
[2] Rehnström Loi U. Abortion, contraception and associated social stigma: consequences and solutions in a low-resource setting in western Kenya.
[3] Hemanth N, Saifa MU, Ashik A, Sherif M, Muttappallymyalil J. Utilization of Contraception Among Women of Reproductive Age in Ajman, UAE. International Scientific Invention Journals e-Library. 2023 Nov 1:486-92.
[4] Teal S, Edelman A. Contraception selection, effectiveness, and adverse effects: a review. Jama. 2021 Dec 28;326(24):2507-18.
[5] Garg PR, Uppal L, Mehra S. Family Planning and Young and Low Parity Couples: Learnings from Rural India.
[6] Sitruk-Ware R, Nath A, Mishell Jr DR. Contraception technology: past, present and future. Contraception. 2013 Mar 1;87(3):319-30.
[7] Burkman R, Schlesselman JJ, Zieman M. Safety concerns and health benefits associated with oral contraception. American journal of obstetrics and gynecology. 2004 Apr 1;190(4):S5-22.
[8] Cleland, J., Conde-Agudelo, A., Peterson, H., Ross, J., & Tsui, A. (2012). Contraception and health. *The Lancet*, *380*(9837), 149-156.
[9] Yaya S, Uthman OA, Ekholuenetale M, Bishwajit G. Women empowerment as an enabling factor of contraceptive use in sub-Saharan Africa: a multilevel analysis of cross-sectional surveys of 32 countries. Reproductive health. 2018 Dec;15:1-2.
[10] Birth control methods [Internet]. Womenshealth.gov. from https://www.womenshealth.gov/a-z-topics/birth-controlmethods
[11] Marnicio, A. (2015). Contraceptive choice among women in the Middle East. Available from: https://www.bakerinstitute.org/media/files/files/665188bf /BI-Brief-120315-WRME_Contraceptives.pdf
[12] Ghule M, Raj A, Palaye P, Dasgupta A, Nair S, Saggurti N, Battala M, Balaiah D. Barriers to use contraceptive methods among rural young married couples in Maharashtra, India: qualitative findings. Asian journal of research in social sciences and humanities. 2015;5(6):18.
[13] Faryniarz, K.C., 2024. *The Relationship Between Food Insecurity and Unmet Need for Modern Contraceptives: A Country-Level Analysis* (Doctoral dissertation, Georgetown University).
[14] Subramanian, L., Simon, C., & Daniel, E. E. (2018). Increasing contraceptive use among young married couples in Bihar, India: evidence from a decade of implementation of the PRACHAR project. *Global Health: Science and Practice*, *6*(2), 330-344.
[15] Shattuck, D., Kerner, B., Gilles, K., Hartmann, M., Ng'ombe, T., & Guest, G. (2011). Encouraging contraceptive uptake by motivating men to communicate about family planning: the Malawi Male Motivator project. *American journal of public health*, *101*(6), 1089-1095.
[16] Ochako R, Temmerman M, Mbondo M, Askew I. Determinants of modern contraceptive use among sexually active men in Kenya. Reproductive health. 2017 Dec;14:1-5.
[17] Ochako R, Temmerman M, Mbondo M, Askew I. Determinants of modern contraceptive use among sexually active men in Kenya. Reproductive health. 2017 Dec;14:1-5.