Journal Homepage: - www.journalijar.com
INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)
Article DOI: 10.21474/IJAR01/17037
DOI URL: http://dx.doi.org/10.21474/IJAR01/17037
ISSN NO. 2320-5407

RESEARCH ARTICLE

AWARENESS OF CONTRACEPTION USE AMONG FEMALES IN RIYADH, SAUDI ARABIA

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Manuscript Info

Manuscript History
Received: 25 March 2023
Final Accepted: 30 April 2023
Published: May 2023

Abstract

Background: Over the past few decades, there has been a remarkable increase in the general population awareness regarding the usage of contraception. effective strategies should be implemented to raise awareness of the appropriate use of contraceptives among Saudi population.
Study aim: This study aims to assess the level of awareness of contraceptive use among females and male participation in Riyadh, Saudi Arabia.
Methods: A quantitative approach was utilized, with a cross-sectional design. The participants was selected through convenience sampling from Riyadh. The data was collected through an online self-administered questionnaire consisting of four sections: demographic characteristics, awareness and attitudes towards contraceptive methods, contraceptive use and male participation, and access to contraceptive services. The collected data was analyzed using descriptive and inferential statistics.
Results: The study included 503 participants, 39.6% of them were 31- 40 years old. 80.7% of participants used contraceptives before (75.6% of them used oral pills, 41.9% used IUD, and 32.3% used condoms). 46.6% used contraception always, 30.8% a lot, and 21.4% use it scarcely. 31% of study participants have good awareness score, 55.7% have moderate awareness, and 13.3% have poor awareness. Also, 17% of participants have weak perception score, 20.2% had moderate perception, and 62.8% had good perception scores.
Conclusion: The study illustrates low awareness and perception of contraceptives among studied females in Saudi Arabia. A significant association between awareness scores of participants regarding contraceptives with their age, educational level, marital status, job and monthly income. However, perception of contraceptives was not associated with any of the sociodemographic characters.

Introduction:-

Awareness and/or having awareness is a case of having sufficient information about a point and to recognize who to deal with [1]. Contraception (birth control) means preventing unwanted pregnancy by interfering with the normal

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process of ovulation, fertilization or implantation, to Improving quality of maternal health which is an important issue for researchers worldwide. According to WHO the practice rate of dissimilar tools for contraception is one of the causes of women's health and enablement [2, 3].

There are different types of birth control practices that halt the process at different stages [4]. Combination of two was the state of being aware of various methods, uses and side effect of Contraception.Family planning through oral contraceptives has been available as a highly effective method for couples to attain a desired number of children and determining the gap of pregnancies for more than half a century. In general, contraception is achieved through several mechanisms, including mechanical, chemical, hormonal, surgical, and natural [5].

There are many types of contraceptive options available. The most effective of modern methods are combined oral contraceptives (COCs) containing two hormones (estrogen and progestogen) available in form of pills, dermal patches and vaginal rings. It can prevent pregnancy in more than 99% of case with correct use. This is the most commonly used method [6]. The second frequently used method is Progesterone-only contraception which contains only progesterone in different forms, 99% effective with correct and consistent use. It is available in the form of pills, injections, intrauterine systems and sub dermal implants. Female condoms 90% effectiveness with correct use and 79% as commonly used.

Riyadh, the capital city of Saudi Arabia, is a diverse and rapidly growing urban center, with a population of over 7 million people. The city has undergone significant socio-economic changes over the past few decades, leading to changes in lifestyle and reproductive behavior. However, there is limited information about the awareness and use of contraception among females in Riyadh, as well as the extent of male participation in contraception decision-making and use.

One of the characteristic features of Saudi Arabian population is their desire to form large families. They have much higher birth rate and total fertility rate relative to those of developed countries, however certainly these rates are markedly decrease and Saudi families become smaller [6]. The rapid overall change in the socio-demographic pattern of the Saudi Arabian community, especially the changes concerned with women’s education and work is important factor in changing fertility beliefs and behaviors with more tendencies to birth spacing and, consequently, the use of the contraceptives [7]. Over the past few decades, a remarkable increase in the general population awareness regarding the usage of contraception which increases the use of contraceptives in the developing countries in general and in Saudi Arabia specially, has been associated with a reduced number of unintended pregnancies, and thus, a reduction in maternal mortality by approximately 40% [8].

Although Islam is not against contraception and some of Prophet's (PBUH) companions resorted to coitus interruptus, which was the only method of family planning known to them, and the Prophet was aware of what they did and he did not instruct them to stop, nor did he tell them that what they did was forbidden, variation in the use of contraception can be seen between nearby Islamic Arab countries which share the same culture and ethical values. The majority showed a higher user rate than Saudi Arabia but its low in UAE, 27.5% and in Yemen it is 23.1% [6].

In spite of the complications related to contraception use, specifically with the use of hormonal methods, health benefits are shown to outweigh the risks of their use [9, 10, 11].

Other benefits from family planning and contraceptive use include prevention of cancers, sexually transmitted diseases, and infection with the Human Immunodeficiency Virus (HIV) [12]. Furthermore, investing in family planning as a component of good reproductive health has benefits that go beyond the obvious prevention of pregnancy and reduction of disease burden, the social and economic benefits for global development goals should not be overlooked [13].

Male participation in contraception decision-making and use remains a challenge, with men often having limited awareness about contraception and low involvement in the reproductive health of their partners [7, 8].

Due to the limited awareness about contraceptives in Saudi Arabia, there is an urgent need to increase awareness of contraception methods and use. Studies of the understanding of family planning and contraceptive use conducted in Saudi Arabia and the Middle East are sparse. Therefore, this study investigated the patterns of contraception use and awareness of contraceptive methods among women living in Riyadh, Saudi Arabia.

Benefits of contraception are not only to limit number of children but proper birth spacing, the wellbeing and health of the women, preventing pregnancy related health risks in women and growth and development of their children to reducing infant mortality. There is a great need to create more awareness regarding different sort of contraception to regulate the population growth and thus growth and development of communities.

The findings of this study was beneficial to policymakers, healthcare providers, and individuals and couples seeking to make informed choices about their reproductive health. By identifying the gaps and challenges in contraceptive use and male participation in contraception decision-making and use, the study can inform the development of targeted interventions and policies to improve the uptake of contraception in Riyadh and Saudi Arabia as a whole. It will also contribute to the existing body of awareness on contraception use in Saudi Arabia, particularly in Riyadh, where there is limited information on the subject.

Contraception had been of great interest and need for Saudi women of reproductive age belonging to different socio demographic backgrounds. Contraceptive method choices show diversity with age, awareness, education, and social status and awareness providers. Adequate child spacing, child care, improvement of maternal health and decrease in overall maternal and child morbidity are all Contraception benefits [14]. The study aims to contribute to the efforts to promote reproductive health and family planning in Saudi Arabia and support the achievement of the United Nations Sustainable Development Goal 3, which aims to ensure universal access to sexual and reproductive healthcare services, including family planning, by 2030.

Methodology:-

Study Design

This study will use a cross-sectional survey design to assess the awareness of contraception use among females and male participation in Riyadh, Saudi Arabia.

Study period

The data was collected during a period of three months from May 1st 2023 to August 31st, 2023.

Sampling

The study will utilize online data collection methods to gather information from the Riyadh population. A convenience sampling technique was employed to select the participants who meet the following**inclusion criteria:**

(1) residing in Riyadh, Saudi Arabia,
(2) aged 18 years or above,
(3) able to read and write in Arabic or English, and
(4) willing to participate in the study.

Exclusion criteria:

(1) Residing outside Riyadh
(2) Aged below 18 years
(3) Unable to read and write
(4) Unwilling to participate in the study

The participants was recruited through social media platforms, online forums, and email invitations. To ensure the representativeness of the sample, efforts was made to include participants from different age groups, genders, educational levels, and income categories.

Sample size

The minimum sample size for this study was decided according to Swinscow as follows:

$n = Z^2 \times P \times Q/D^2$

Where:

n: Calculated sample size

Z: The z-value for the selected level of confidence $(1- \alpha) = 1.96$.

P: An estimated prevalence of having awareness, positive attitude and practice towards contraceptive methods as 50% since there is no specific figure for that

Q: $(1 – 0.50) = 50\%$, i.e., 0.50

D: The maximum acceptable error = 0.05.

So, the calculated minimum sample size was:
$n = (1.96)^2 \times 0.50 \times 0.50 / (0.05)^2 = 284$
The sample was increased to 320 by adding 10% to compensate the incomplete questionnaires and missing.

Data Collection
Data was collected using a self-administered questionnaire that was available in both Arabic and English. The questionnaire will consist of four sections:
Section 1: Demographic Characteristics This section will collect information on the demographic characteristics of the respondents, including age, gender, educational level, marital status, occupation, and income.
Section 2: Awareness and Attitudes towards Contraceptive Methods This section will assess the awareness and attitudes of females towards contraceptive methods and their proper use. The questions will cover the types of contraceptive methods, their effectiveness, and their side effects. The responses was scored on a Likert scale ranging from 1 to 5, with 1 indicating "strongly disagree" and 5 indicating "strongly agree."
Section 3: Contraceptive Use and Male Participation This section will collect information on the contraceptive methods used by females, the frequency of use, and the extent of male participation in contraception decision-making and use. The responses was scored on a dichotomous scale (yes or no).
Section 4: Access to Contraceptive Services This section will assess the availability and accessibility of contraceptive services in Riyadh, including the location and hours of operation of healthcare facilities that provide contraceptive services.

Scoring System
For Section 2, the awareness and attitudes scores was calculated by summing the scores of the individual items. The maximum possible score is 50, with higher scores indicating better awareness and more positive attitudes towards contraceptive methods. For Section 3, the male participation score was calculated by summing the number of items in which males were involved in contraception decision-making or use. The maximum possible score is 8, with higher scores indicating greater male participation.

Validation plan
The validation plan for the questionnaire is an important step in ensuring the accuracy and reliability of the data collected from the study. To validate the questionnaire, the following steps was taken:

1. **Content validation:** The questionnaire was reviewed by a panel of experts, including healthcare professionals, researchers, and academics, to assess the relevance and clarity of the questions. The panel will also evaluate the comprehensiveness of the questionnaire and suggest any additional items that may be required.
2. **Pre-testing:** The questionnaire was administered to a small sample of the target population to assess its comprehensibility, acceptability, and clarity. The feedback from the participants was used to refine the questionnaire and eliminate any potential misunderstandings or ambiguities.
3. **Reliability testing:** The reliability of the questionnaire was tested through a pilot study. A sub-sample of the target population was asked to complete the questionnaire twice with a two-week interval in between. The reliability of the questionnaire was assessed using statistical measures such as Cronbach's alpha and test-retest reliability.
4. **Validity testing:** The validity of the questionnaire was assessed through construct and criterion-related validity testing. Construct validity was assessed by examining the degree to which the questionnaire measures the intended constructs. Criterion-related validity was assessed by comparing the results of the questionnaire with established measures of contraceptive use and awareness.
5. **Data cleaning:** Once the questionnaire has been validated, the data collected was cleaned to remove any errors or inconsistencies.

By implementing a comprehensive validation plan for the questionnaire, the study can ensure that the data collected is accurate, reliable, and valid, which will improve the quality of the research findings.

Data Analysis
Data was analyzed using SPSS version 25. Descriptive statistics, such as frequencies, percentages, means, and standard deviations, was used to describe the demographic characteristics, contraceptive use, and male participation. Inferential statistics, such as chi-square tests and logistic regression, was used to explore the factors associated with contraceptive use and male participation. A p-value of less than 0.05 was considered statistically significant.

Ethical considerations

The research proposal was approved by the Regional Research and Ethics committee of the King Saud Medical City (KSMC), Riyadh, Saudi Arabia. Written permission was acquired from students to conduct the study after explaining and clarifying the aim of the study. Secrecy of information was assured that the data was confidential, and the participants have the right to leave the study whenever they need it. The data was kept safe in a password protected computer and will not be used in other purposes except this research.

Results:-

The study included 503 participants, 39.6% of them were 31- 40 years old, 26.4% were 41- 50 years old, and 19.5% were 20- 30 years old. 85.5% of participants were married. 57.9% of participants had bachelor's degrees and 18.5% had secondary school. 47.1% of sample were employees while 38.6% were housewives. 39.2% of participants had a good monthly income, as mentioned in table (1).

As illustrated in table (2), 94.4% of participants heard of any method of contraception (29.8% heard of IUD, 24.5% heard of pills and 12.9% heard of condoms). 27.4% of participants think that contraceptives are very effective in preventing pregnancy. 31.6% of participants think that contraceptives are very important. 40% think that it is very important that men should be involved in decision-making about contraception. 34.2% of participants think that it is very comfortable to discuss contraception with their partner.

Figure (1) shows number of participants using contraceptives. 80.7% of participants used contraceptives before.

Table (3) illustrates perception and attitude of participant who use contraceptives towards contraceptives. For those who used contraceptives, 75.6% of them used oral pills, 41.9% used IUD, and 32.3% used condoms. 46.6% used contraception always, 30.8% a lot, and 21.4% use it scarcely. 82.8% of participants reported that their partner involved in the decision to use contraception. 53.2% of participants reported that their partner shared contraceptive use while 14.8% reported that they refused to use contraceptives (50% of them for their side effects and 41.7% for their desire). 85.5% reported that contraceptive services are available at convenient times for them. Only 6.7% reported that they encountered any barriers to accessing contraceptive services (44.4% of them reported cost and 29.6% reported doctor appointment and delay).

Figure (2) illustrates awareness scores of contraceptives among study participants. 31% have good awareness, 55.7% have moderate awareness, and 13.3% have poor awareness.

Figure (3) shows perception scores of participants who use contraceptives towards contraceptives. 17% have weak perception, 20.2% had moderate perception, and 62.8% had good perception scores.

Table (4) shows a significant association between awareness scores of participants regarding contraceptives with their age, educational level, marital status, job and monthly income ($P < 0.01$). However, table (5) shows no significant association between perception score of participants using contraceptives with any of their sociodemographic characters ($P > 0.05$).

Table (1):- Sociodemographic characteristics of participants (n=503).

Parameter		**No.**	**%**
Age	less than 20	14	2.8
	20 -30	98	19.5
	31 - 40	199	39.6
	41 -50	133	26.4
	51 - 60	43	8.5
	more than 60	16	3.1
marital status	Single	45	8.9
	Married	430	85.5
	Divorced	19	3.8
	widow	9	1.8
Education level	primary	5	1.0
	Medium	7	1.4

	secondary	93	18.5
	Bachelor's	291	57.9
	diploma	49	9.7
	Master's	39	7.8
	Ph.D	19	3.8
Job	housewife	194	38.6
	employer	15	3.0
	student	23	4.6
	Unemployed	34	6.8
	employee	237	47.1
Monthly income	Less than 3000 Saudi riyals	151	30.0
	3000-5999 SAR	72	14.3
	6000-9999 SAR	83	16.5
	10,000 SAR or more	197	39.2

Table (2):- Awareness of participants of contraceptives (n=503).

Parameter		**No.**	**%**
Heard of any method of contraception	Yes	475	94.4
	no	28	5.6
If yes, name the method of contraception	IUD	150	29.8
	condom	65	12.9
	Pills	123	24.5
	Contraceptive patches	68	13.5
	vaginal ring	16	3.2
	insulation	12	2.4
	slice in the body	10	2.0
Effectivenessof contraceptives in preventing pregnancy in your opinion	very effective	138	27.4
	effective	297	59.0
	inactive	7	1.4
	Not active at all	3	.6
	neutral	58	11.5
Awareness of side effects of contraceptives	I know well	234	46.5
	I know little	197	39.2
	neutral	15	3.0
	I don't know enough	37	7.4
	I don't know anything at all	20	4.0
Importanceof contraception?	very important	159	31.6
	Important	204	40.6
	neutral	96	19.1
	not important	31	6.2
	Not important at all	13	2.6
Men should be involved in decision-making about contraception	very important	201	40.0
	Important	191	38.0
	neutral	57	11.3
	not important	40	8.0
	Not important at all	14	2.8
How comfortable discussing contraception with partner	very comfortable	172	34.2
	comfortable	212	42.1
	neutral	71	14.1
	uncomfortable	36	7.2
	Not comfortable at all	12	2.4

Figure (1):- Use of contraceptives among participants (n= 503).

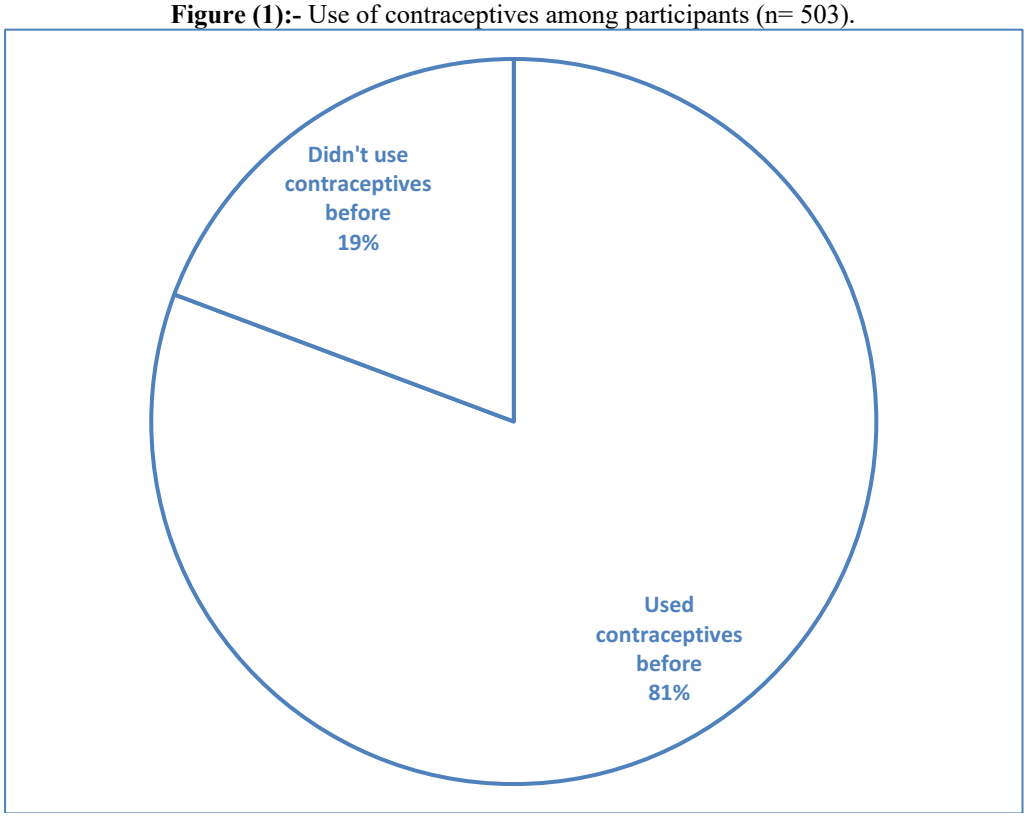

Table (3):- Perception of participants using contraceptives towards contraceptives (n=406).

Parameter		**No.**	**%**
What contraceptive method(s) did you use? (Bias risk)	Oral contraceptive pills	307	75.6
	IUD	170	41.9
	Injectable contraceptives	16	3.9
	condoms	131	32.3
	Injectable contraceptives	5	1.2
	plasters	2	0.5
	insulation	6	1.5
How often do you use your chosen contraceptive method?	Always	189	46.6
	a lot	125	30.8
	Scarcely	87	21.4
	never	5	1.2
Was your partner involved in the decision to use contraception?	Yes	336	82.8
	no	70	17.2
Has your partner shared contraceptive use?	Yes	216	53.2
	no	190	46.8
How often do you discuss contraception with your partner?	Always	112	27.6
	a lot	100	24.6
	Scarcely	167	41.1
	never	27	6.7
Did your husband refuse to use contraceptives?	Yes	60	14.8
	no	346	85.2
If the answer is yes, why did your partner refuse to use contraception?	For side effects	30	50.0
	for his desire to conceive	25	41.7
	I don't know	5	8.3
	Yes	43	10.6

Have you had any challenges obtaining contraceptives?	no	363	89.4
Do you know where you can access contraceptive services in Riyadh?	Yes	280	69.0
	no	126	31.0
How far is the nearest health care center that provides contraceptive services?	Less than 1 km	101	24.9
	1-5 km	129	31.8
	6-10 km	95	23.4
	more than 10 km	81	19.9
Are contraceptive services available at convenient times for you?	Yes	347	85.5
	no	59	14.5
Have you encountered any barriers to accessing contraceptive services?	Yes	27	6.7
	no	379	93.3
If yes, what are the barriers to accessing contraceptive services?	Material cost	12	44.4
	Doctor's appointments and delays	8	29.6
	The time is not right	7	25.9

Figure (2):- Awareness scores of participants of contraceptives (n= 503).

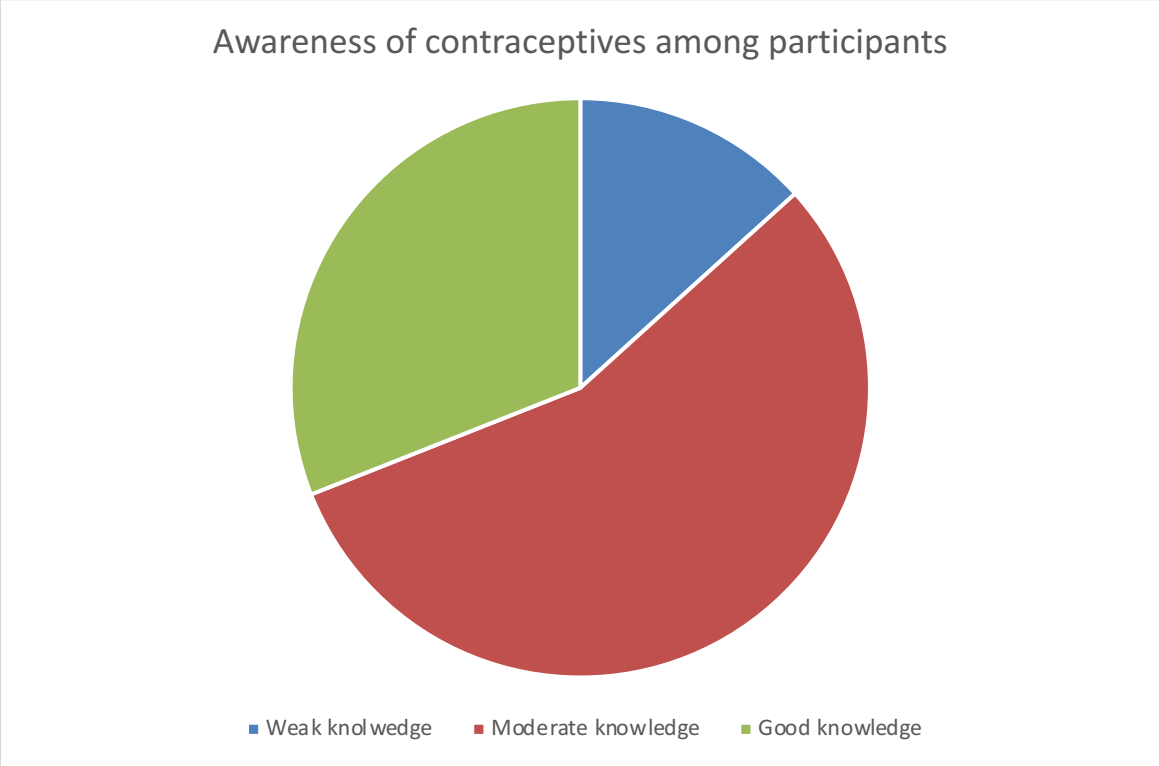

Figure (3):- Perception scores of participants using contraceptives towards contraceptives (n= 406).

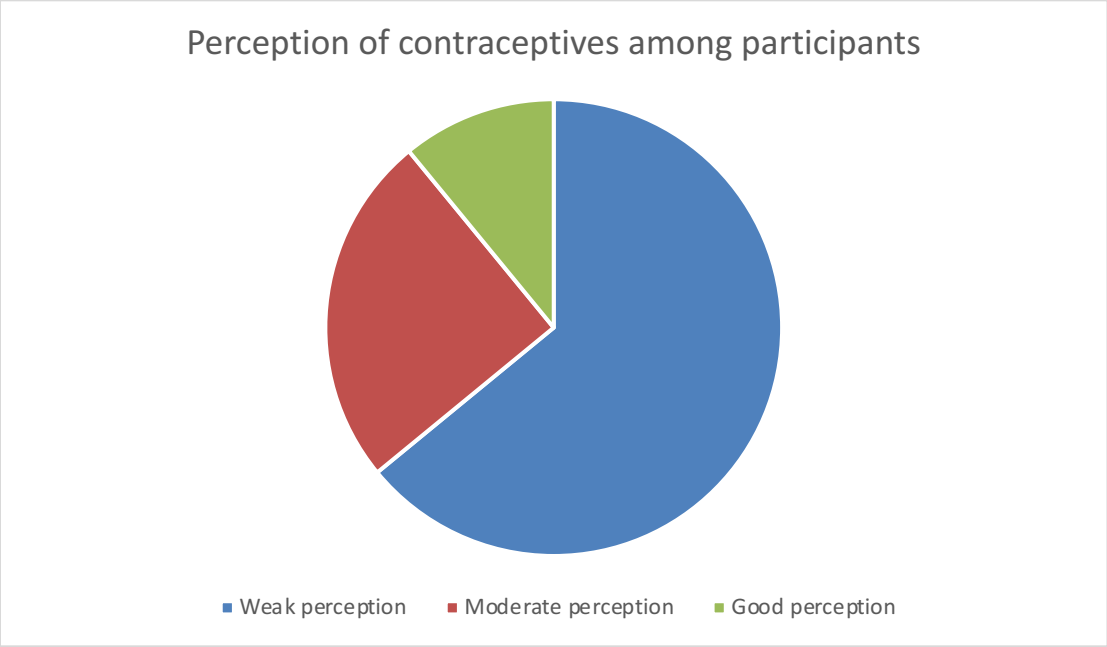

Table (4):- Association between awareness scores and sociodemographic characters of participants (n= 503).

		Awareness of contraceptives			Total (N=503)	P value
		Poor	Moderate	Good		
Age	less than 20	13	1	0	14	**0.001**
		2.6%	0.2%	0.0%	2.8%	
	20 30	15	46	37	98	
		3.0%	9.1%	7.4%	19.5%	
	31 40	14	114	71	199	
		2.8%	22.7%	14.1%	39.6%	
	41 50	15	91	27	133	
		3.0%	18.1%	5.4%	26.4%	
	51 60	4	22	17	43	
		0.8%	4.4%	3.4%	8.5%	
	more than 60	6	6	4	16	
		1.2%	1.2%	0.8%	3.2%	
marital status	Single	20	15	10	45	**0.001**
		4.0%	3.0%	2.0%	8.9%	
	Married	41	250	139	430	
		8.2%	49.7%	27.6%	85.5%	
	Divorced	4	13	2	19	
		0.8%	2.6%	0.4%	3.8%	
	widow	2	2	5	9	
		0.4%	0.4%	1.0%	1.8%	
Education level	primary	3	1	1	5	**0.001**
		0.6%	0.2%	0.2%	1.0%	
	middle	4	1	2	7	
		0.8%	0.2%	0.4%	1.4%	
	secondary	21	53	19	93	
		4.2%	10.5%	3.8%	18.5%	

	Bachelor's	27	171	93	291	
		5.4%	34.0%	18.5%	57.9%	
	diploma	9	27	13	49	
		1.8%	5.4%	2.6%	9.7%	
	Master's	2	15	22	39	
		0.4%	3.0%	4.4%	7.8%	
	PhD	1	12	6	19	
		0.2%	2.4%	1.2%	3.8%	
Job	employee	1	12	2	15	**0.001**
		0.2%	2.4%	0.4%	3.0%	
	Unemployed	8	20	6	34	
		1.6%	4.0%	1.2%	6.8%	
	employee	1	0	0	1	
		0.2%	0.0%	0.0%	0.2%	
	employee	19	125	92	236	
		3.8%	24.9%	18.3%	46.9%	
	student	15	4	4	23	
		3.0%	0.8%	0.8%	4.6%	
	housewife	23	119	52	194	
		4.6%	23.7%	10.3%	38.6%	
Monthly income	Less than 3000 Saudi riyals	33	79	39	151	**0.001**
		6.6%	15.7%	7.8%	30.0%	
	3000-5999 SAR	11	45	16	72	
		2.2%	8.9%	3.2%	14.3%	
	6000-9999 SAR	10	49	24	83	
		2.0%	9.7%	4.8%	16.5%	
	10,000 SAR or more	13	107	77	197	
		2.6%	21.3%	15.3%	39.2%	

Table (5):- Association between perception scores of participants using contraceptives with their sociodemographic characters (n= 406)

		Perception score			**Total (N=406)**	**P value**
		Poor	Moderate	Good		
Age	20 30	7	9	42	58	**0.119**
		1.7%	2.2%	10.3%	14.3%	
	31 40	27	41	112	180	
		6.7%	10.1%	27.6%	44.3%	
	41 50	23	26	65	114	
		5.7%	6.4%	16.0%	28.1%	
	51 60	6	6	26	38	
		1.5%	1.5%	6.4%	9.4%	
	more than 60	6	0	10	16	
		1.5%	0.0%	2.5%	3.9%	
marital status	Married	65	79	236	379	**0.772**
		16.0%	19.5%	58.1%	93.3%	
	Divorced	3	3	9	15	
		0.7%	0.7%	2.2%	3.7%	
	widow	1	0	8	9	
		0.2%	0.0%	2.0%	2.2%	
Education level	primary	0	0	4	4	**0.655**
		0.0%	0.0%	1.0%	1.0%	
	middle	0	0	4	4	
		0.0%	0.0%	1.0%	1.0%	

		14	20	41	75	
	secondary	3.4%	4.9%	10.1%	18.5%	
	Bachelor's	40	43	150	233	
		9.9%	10.6%	36.9%	57.4%	
		5	9	26	40	
	diploma	1.2%	2.2%	6.4%	9.9%	
	Master's	7	8	19	34	
		1.7%	2.0%	4.7%	8.4%	
	PhD	3	2	11	16	
		0.7%	0.5%	2.7%	3.9%	
Job	employer	1	3	9	13	**0.575**
		0.2%	0.7%	2.2%	3.2%	
	Unemployed	5	1	21	27	
		1.2%	0.2%	5.2%	6.7%	
	employee	0	0	1	1	
		0.0%	0.0%	0.2%	0.2%	
	employee	33	43	113	189	
		8.1%	10.6%	27.8%	46.6%	
	student	0	2	5	7	
		0.0%	0.5%	1.2%	1.7%	
	housewife	30	33	106	169	
		7.4%	8.1%	26.1%	41.6%	
Monthly income	Less than 3000 Saudi riyals	17	25	82	124	**0.2111**
		4.2%	6.2%	20.2%	30.5%	
	3000-5999 SAR	9	16	29	54	
		2.2%	3.9%	7.1%	13.3%	
	6000-9999 SAR	11	17	39	67	
		2.7%	4.2%	9.6%	16.5%	
	10,000 SAR or more	32	24	105	161	
		7.9%	5.9%	25.9%	39.7%	

Discussion:-

Over the past few decades, Saudi society has undergone a profound transformation. Changes in fertility attitudes and behaviours were brought about by socioeconomic development, urbanisation, and women's education and employment [9, 15]. The study aims to contribute to the efforts to promote reproductive health and family planning in Saudi Arabia

According to our study results, 94.4% of participants heard of any method of contraception (29.8% heard of IUD, 24.5% heard of pills and 12.9% heard of condoms) **.** Awareness score was reported as 31% have good awareness, 55.7% have moderate awareness, and 13.3% have poor awareness.This was comparable to results of previous studies. In Saudi Arabia, a study revealed that 6.2% of the participants had some awareness of EC, while 73.3% of the participants had some negative attitudes toward it[16]. In Al-Madinah Al-Munawarah, only one-third or less of the participants answered of the questions about contraceptives correctly [17].

In Jeddah, there was awareness gap in the use of different contraceptive methods and the most common contraceptive methods among Saudi women in Jeddah were pills and intrauterine device[18].In Riyadh, half of the participants were aware about contraceptive methods.

In this study, 80.7%of participants used contraceptives before**.**75.6% of them used oral pills, 41.9% used IUD, and 32.3% used condoms. A study in Riyadh reported the most commonly used contraceptive methods were oral contraceptive pills, male condom, and intrauterine device (69%, 34%, 22%, respectively) [21]. According to a survey conducted in Al-Hassa, 74.8% of couples there utilised contraceptive methods. Of these, 35.5% chose condoms, and 37.3% of women said this was because they had less adverse effects. According to a research in Hail, 93 percent of women had heard of contraception previously, but only 77.8 percent had ever used it. The most often used approach

was oral contraceptive tablets. The need for further information and education about contraceptive techniques was emphasised by 55.2% of respondents, who thought that their knowledge of various methods was insufficient [24].Even while only 25% of participants in a previous study reported consistently utilising contraceptives, the majority of sexually active participants reported doing so [25]. Only 21% of female respondents to a South African study were aware of irregular use, compared to 90.6% of female respondents [26]. The most popular method was the oral contraceptive pill (86.7%), followed by the condom (95.6%). Only 10% and 30.1% of women in Ethiopia and Nigeria, respectively, used contraception frequently, according to studies [27]. According to a recent South African survey, 67.8% of the sexually active students used contraception occasionally or infrequently [28].

According to our study results, 27.4% of participants think that contraceptives are very effective in preventing pregnancy. 31.6% of participants think that contraceptives are very important.This was lower than a study that found that more than half of the participants thought that some contraceptives are beneficial and some are not [29], which is comparable to a survey on female teachers that was conducted in Al-Medina City and found that more than half (55.7%) of female teachers believed that some forms of contraception were effective and others weren't [1]. While this was going on, research found that the majority of women in Pakistan (76%) and India (71%) had favourable attitudes towards contraception, in contrast to another Indian study that found that most men (55.5%) and women (51.5%) had negative attitudes towards contraceptive techniques [25].These two studies' discrepancies in sample size may be the cause of their discrepancy. First-year college students participated in the first study, whereas married women, largely in their 20s and 30s, were the subjects of the second. Only 10% of the married women in the second study had at least a graduate degree, and 31.5% had poor socioeconomic level. That suggests that demographic influences play a role in the various outcomes.

Our results indicate a significant association between awareness scores of participants regarding contraceptives with their age, educational level, marital status, job and monthly income. However, perception of contraceptives was not associated with any of the sociodemographic characters. A study in Al Qassim region of Saudi Arabia in 2015 discovered that use of contraceptives had increased among 30-year-old ladies, old working women with high level of education, and those who had a large number of children [19]. A study also revealed that media exposure significantly affects family planning and increase positive attitude on contraception [20]. Another Saudi study reported a significant difference was noted for the used and preferred contraceptive method, which was condom for male and oral contraceptive pills in female [21]. Another Saudi study also found that the education played a big role to use the different types of contraceptives, and effective strategies should be implemented to raise awareness of the appropriate use of contraceptives and dispel misconceptions [18]. In Riyadh, a study showed the factors that were associated with contraceptive use included age, number of marriages, age of the husband at marriage, continuing with the first marriage, type of job, and income, whereas age, continuing with first marriage, number of children, and house ownership were predictors of contraception [22].

According to a study, there is no correlation between age and contraception use; however, as people get older and their needs alter, they are more likely to utilise contraception [34]. Contrary to other studies' findings [35, 36], the same study found that the majority of participants had only completed elementary school, and more than 90% of the sample had less education than a university degree. This may account for the ambiguous relationship between age and contraception use. These variations could be attributed to sampling techniques used by public health care and family planning facilities, which are frequently consulted by low-income households. Clearly, this population needs health education, and primary care facilities can play a crucial role in providing it.

It is possible to raise the reproductive population's awareness and attitude through mass media initiatives. With the help of peer counselling, community and religious leaders' involvement, and health education, misconceptions about contraceptive techniques can be dispelled.

Conclusion:-

The study illustrates low awareness and perception of contraceptives among studied females in Saudi Arabia. A significant association between awareness scores of participants regarding contraceptives with their age, educational level, marital status, job and monthly income. However, perception of contraceptives was not associated with any of the sociodemographic characters.The participation of males in contraception awareness concerns is crucial since decisions about family planning and contraception are typically made by both spouses. Women with less education need ongoing instruction and frequent communication about the significance of contraception. The results of this study

will aid in the creation of programmes that will enhance awareness and services while lowering negative effects and unintended pregnancies.

The findings of this study provide insights into the awareness of contraception and male participation in contraceptive decision-making in Riyadh, which can help in the development of interventions to improve the uptake of contraception and promote gender equality in reproductive health.

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