Prevalence, Awareness and Determinants of Contraceptive Use in Saudi Women

Maha Salem Albalawi*, Ashwag Ahmad Albalawi, Ahmad Mosalem Alatawi

Medical Intern, Prince Salman Armed Force Hospital, Tabuk, Saudi Arabia.

ABSTRACT

Context and Methods: We determined the knowledge of, attitude to and practice of contraception and the associated sociodemographic factors among a representative sample 1130 Saudi married women aged 18–49 years. Data were collected by questionnaire.

Results: The mean age of the women was 32.5 (SD 7.6) years. The vast majority (94.6%) knew about contraception but of these 1070, only 694 (64.9%) were in favour of contraception. Knowledge of contraception increased with increasing level of education (P < 0.001), but decreased the lower the household income (P = 0.002). Only 511 (47.8%) women were currently using contraceptives, which was significantly associated with age, husband's age, years of marriage, education level, income level and attitude to family planning.

Conclusion: The most commonly known and used contraceptives were intrauterine device and pills. Friends were

the most common source of knowledge about family planning method (80.0%).

Keywords: Knowledge, Attitude, Awareness, Contraceptives.

*Correspondence to:

Maha Salem Albalawi,

Medical Intern.

Prince Salman Armed Force Hospital.

Tabuk, Saudi Arabia,

Article History:

Received: 19-11-2017, Revised: 14-12-2017, Accepted: 10-01-2018

Access this article online				
Website: www.ijmrp.com	Quick Response code			
DOI: 10.21276/ijmrp.2018.4.1.047				

INTRODUCTION

During earlier human civilisations, an issue of high value to human societies was the ability to reproduce and to have as many children as possible. The larger the number of children a woman procreates, the greater the level of respect for the individual. In this modern era, many people look beyond subsistence living and prefer a more leisured, relaxed life and hence increasingly fewer societies are holding on to this perspective of life. This has led to an increased demand for scientific means for controlling birth rates. Many people in the modern era, dating from several centuries ago, have had the desire to decide when to have a child and when not to have one.¹

The United Nations Department of Economic and Social Affairs in 2011 indicate that the prevalence rate of contraceptive usage in the world increased from an average of 49.2% in 1980 to 62.7% in 2009. Sub-Saharan Africa which recorded an average prevalence rate of 11.2% in 1980 had its prevalence rate increased to 21.8% in 2009.² Modern contraceptive services are essential to women so that they can determine the size of their families, regulate childbirth and help to reduce maternal deaths and illnesses.³

A striking importance of birth control is the extent of pressure that large populations exert on economic and social facilities of a country. High levels of population create major limitations and constraints on economic progression and the ability of a country to make the necessary provision for the livelihood improvement of its

citizens and the achievement of its national development targets and visions.⁴

This policy reemphasised population control and a decrease in the total fertility rate with the belief that it would accelerate economic development based on the improved ability to take care of children and the young.⁵ The population policy developed in 1969 was revised in 1994. The revised policy aimed to decrease the proportion of women below 20 years and above 34 years having births to 50% by the year 2010, decreasing to 80 percent rate by 2020 and also to make family planning services available, accessible and affordable to at least half of all adults by the year 2020. The use of contraceptives and birth control methods was to be a cornerstone of family planning services.⁶

Family planning assists "families in achieving the number of children desired with appropriate spacing and timing, ensuring optimal growth and development of each family member". Failure to plan a pregnancy can adversely affect the health of the mother, the child and the families as a whole. Family planning can also protect women from high-risk pregnancies, unsafe abortion, reproductive tract infection (RTI) and sexually transmitted infections(STIs) in cluding HIV/AIDS. The International Conference on Population and Development (ICPD) defined voluntary family planning services as a fundamental human right as well as a couple's right.

Gaps in reproductive health/family planning and sexual health care account for nearly one-fifth of the worldwide burden of illness and premature death, and one-third of the illness and death among women of reproductive age. 10 Large number of pregnancies and short birth interval cause the health risk to rise. 11 The total fertility rate (15–49) years in Kingdom of Saudi Arabia for the last 2 years was 2.3, but it was 3.4 in 2001. 12 By reducing the number of pregnancies that women have in their lifetime, the risk of maternal mortality and morbidity is reduced considerably. 13

Education can bring about appropriate behavioural changes and improve participation in the use of family planning.¹⁴ Free choice and promotion of a wide range of effective contraceptives, including responsible counseling, will improve the quality of reproductive health/family planning services.¹⁵ This will avoid unplanned pregnancies, reduce complications, injury and of maternal mortality could fall by one- fourth. The United Nation Family Planning Association (UNFPA) have stated that 1 in 3 deaths related to pregnancy or childbirth could be avoided if all women had access to voluntary contraceptive services, that is, some 175 000 women each year could be saved.¹⁶

Family planning services are sensitive to cultural conditions and background. While these services are available in Saudi arabia, there is little information on their uptake and the use of family planning methods by Saudi arabia women. The aim of this study therefore was to determine the knowledge of and attitudes towards contraceptives, and the determinants of contraceptive use among Saudi women. Such information will be useful to maternal and child health policymakers for future planning and organization of family planning services.

METHODS

Study Design

This was a prospective cross-sectional study based in the clinics of kingdom of Saudi Arabia. The survey was conducted only among Saudi married women aged 18–49 years old who had not reached menopause.

Sampling Size and Sampling Procedure

In order to secure a representative sample of the study population, the sampling was stratified with proportional allocation according to stratum size. Stratification was based on geographical location. The sample size was determined with the a priori knowledge that the prevalence of family planning in kingdom of Saudi Arabia is similar to those previous reports (43%) about the married Saudi female population, and allowing an error of 2.5% and 95% confidence limits. Thus, the sample size needed to achieve the objectives of our study was estimated to be 1300 subjects. Twenty-one health centers in Saudi Arabia were selected and a random sample of Saudi women married was taken, aged 18-49 years registered and attending the PHCs for various medical conditions. Qualified nurses and health educators were trained to interview the women and complete a questionnaire. The interviewers explained the purpose of the study to the possible participants and assured the confidentiality of the data; those willing to participate gave verbal informed consent. The study was carried out from September to December 2017, Data collection was carried out according to a schedule for PHC centers.

Questionnaire and Interview

The instruments used for data collection was designed in English and later translated into Arabic by a professional translator and

reviewed for consistency by the investigators. The questionnaire included sociodemographic characteristics of the participant and her husband, followed by items related to socioeconomic status, pregnancy history, knowledge of contraception, attitude towards contraception and current use of contraception. The questionnaire also included some items to determine the causes for use and reasons for avoiding contraception.

Breastfeeding, withdrawal, safe period and isolation were defined as natural family planning methods. Intrauterine device (IUD) (the loop) is classified as medical methods. Vaginal cream/ supplement, pills, injectable contraceptives, tubal ligation, condoms and emergency contraceptive were defined as modern methods of family planning.

The questionnaire was pre-tested for validity and reliability. It was tested to check if it was easy for the interviewers to understand the instructions and flow of questions. Prior to pre-testing in the field, the interviewers underwent training and were provided with instructions about the survey.

Data Analysis

The Student t-test was used to ascertain the significance of differences between mean values of 2 continuous variables and the Mann–Whitney test was used for nonparametric distribution. The chi-squared analysis was performed to test for differences in proportions of categorical variables between 2 or more groups. Spearman's correlation coefficient was used to evaluate the strength of concordance between variables. P < 0.05 was considered as the cut-off value for statistical significance.

RESULTS

A total of 1300 Saudi women were approached and 1130 consented to participate in this study, giving a response rate of 86.9%. Of these, 170 women were excluded, either due to incomplete questionnaires or they excused themselves before completing the questionnaire due to lack of time.

The mean age of the participating women was 32.5 [standard deviation (SD) 7.6] years. Table shows the sociodemographic and baseline characteristics of the study sample by knowledge, attitude, and practice of family planning. The majority of the women (1070, 94.6%) reported that they had heard about contraceptives and mentioned one or more. Women under 25 years of age were more likely to lack knowledge of family planning 28.3% compared to 14.7% in the same age group who knew (P = 0.036). Knowledge of family planning was also associated with educational level; knowledge increased with increasing level of education (P < 0.001). Moreover, in the lowest income group, 40% of the women did not know about contraception compared with 19.8% who did (P = 0.002).

Of the 1070 women who knew about contraceptives, 376 (35.1%) expressed an unfavorable attitude towards them (Table 1). More women over 40 years were not in favor of contraception compared to those who viewed favorably in the same age group: 25.8% versus 17.3% respectively (P = 0.003). The husband's age also played a significant and similar role in the participant's attitude (P = 0.005). Longer duration of marriage was also associated with a negative attitude towards family planning (P <0.019). Education was also associated with attitude to contraception: more illiterate (12.0%) and primary-school educated (21.5%) women were not in favor of contraception compared to women with secondary school (5.6%) or college

(14.8%) education (P < 0.001). Women with a history of abortion were more likely to be against contraception than those with no such history (P < 0.001). Only 511 women out of the 1070 women who knew about family planning methods were currently using any family planning method (Table1). The practice of family planning

was strongly associated with women aged 30-39 years and husband's age group between 30-39 years (P = 0.001 and P = 0.017 respectively). The practice was more common among women who had been married for 5-14 years -44.8% using contraception compared to 38.3% not using (P < 0.001).

Table 1: Sociodemographic and baseline characteristics of the study sample by knowledge, attitude and practice of family planning (FP)

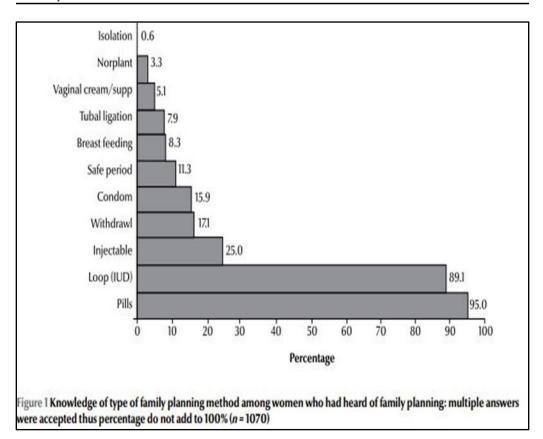
Variable	Know about FP	Don't know about FP	P- value	In favour of FP	Not in favour of FP	P - value	Practise FP	Don't practise FP	P – value
	No. (%) (n= 1070)	No. (%) n = 60))		No. (%) (n = 694)	No. (%) (n = 376)		No. (%) (n = 511)	No. (%) (n = 559)	
AGE (YEARS)	,	,,		,	, ,		, ,	,	
< 25	157 (14.7)	17 (28.3)		102 (14.7)	55 (14.6)		51 (10.0)	106 (19.0)	
25–29	273 (25.5)	13 (21.7)	0.036	195 (28.1)	78 (20.7)	0.003	138 (27.0)	135 (24.2)	0.001
30–39	423 (39.5)	18 (30.0)		277 (39.9)	146 (38.8)		216 (42.3)	207 (37.0)	
40-49	217 (20.3)	12 (20.0)		120 (17.3)	97 (25.8)		106 (20.7)	111 (19.9)	
HUSBAND'S AGE (YEARS)	` ,		` ,	, ,		, ,	, ,	
25–29	209 (19.5)	17 (28.3)		140 (20.1)	69 (18.4)		82 (16.0)	127 (22.8)	
30–39	452 (42.2)	19 (31.7)	0.075	315 (45.4)	137 (36.4)	0.005	234 (45.8)	218 (39.0)	0.017
40-49	409 (38.2)	24 (40.0)		239 (34.4)	170 (45.2)		195 (38.2)	214 (38.3)	
YEARS MARRIED	, ,	` ,		` ,	, ,		, ,	, ,	
< 5	270 (25.2)	21 (35.0)		185 (26.7)	85 (22.6)		101 (19.8)	169 (30.2)	
5–14	443 (41.4)	17 (28.3)	0.097	298 (42.9)	145 (38.6)	0.019	229 (44.8)	214 (38.3)	< 0.001
≥ 15	357 (33.4)	22 (36.7)		211 (30.4)	146 (38.8)		181 (35.4)	176 (31.5)	
EDUCATIONAL LEV		` ,		` ,	, ,		, ,	, ,	
Illiterate	84 (7.9)	18 (30.0)		39 (5.6)	† 45 (12.0)		24 (4.7)	60 (10.7)	
Primary	184 (17.2)	14 (23.3)	< 0.001	103 (14.8)	81 (21.5)	< 0.001	86 (16.8)	98 (17.5)	0.002
Secondary	351 (32.8)	16 (26.7)		239 (34.4)	112 (29.8)		172 (33.7)	179 (32.0)	
College/University	451 (42.1)	12 (20.0)		313 (45.1)	138 (36.7)		229 (44.8)	222 (39.7)	
EMPLOYMENT STA	ATUS								
Working	472 (44.1)	20 (33.3)	0.101	317 (45.7)	317 (45.7)	0.161	241 (47.2)	231 (41.3)	0.055
Not working	598 (55.9)	40 (66.7)		377 (54.3)	155 (41.2)		270 (52.8)	328 (58.7)	
AVERAGE MONTH	LY INCOME (QF	R) A							
< 12 000	192 (19.8)	20 (40.0)		113 (17.8)	79 (23.4)		76 (16.4)	116 (22.8)	
12 000-24 999	476 (49.0)	20 (40.0)	0.002	313 (49.3)	163 (48.4)	0.076	230 (49.6)	246 (48.4)	0.025
≥ 25 000	304 (31.3)	10 (20.0)		209 (32.9)	95 (28.2)		158 (34.1)	146 (28.7)	
INTERVAL BETWE	EN LAST 2 DEL	IVERIES (YEA	RS) A						
< 1	68 (8.0)	2 (4.8)	-	46 (8.0)	22 (8.0)		46 (10.0)	22 (5.6)	
1-< 2	287 (33.7)	18 (42.9)	0.417	205 (35.7)	82 (29.7)	0.213	148 (32.2)	139 (35.5)	0.055
≥2	496 (58.3)	22 (52.4)		324 (56.3)	172 (62.3)		266 (57.8)	230 (58.8)	
HISTORY OF ABOR	RTION	. ,		` ,	` ,		` '	, ,	
Yes	403 (37.7)	17 (28.3)	0.146	235 (33.9)	168 (44.7)	< 0.001	182 (35.6)	221 (39.5)	0.186
No	667(62.3)	43 (71.7)		459 (66.1)	208 (55.3)		329 (64.4)	338 (60.5)	

Table 2: Factors related to attitude and practise of family planning (FP)

VARIABLE	In favour of FP	Not in favour of FP	P-value	Practise FP	Do not practis e FP	P-value
	No. (%) (n = 694)	No. (%) (n = 376)	_	No. (%) (n = 511)	No. (%) (n = 559)	-
History of abortion	235 (33.9)	168 (44.7)	< 0.001	182 (35.6)	221 (39.5)	0.186
Have a child who died	21 (3.0)	15 (4.0)	0.404	19 (3.8)	17 (3.3)	0.667
Husband in favour of FP	598 (86.2)	141 (37.5)	< 0.001	453 (88.6)	286 (51.2)	< 0.001
THINK IT IS RIGHT FOR MARRIED COUPLE TO	DECIDE HOW N	MANY CHILDRE	N			
 To have according to their economic situation 	457 (65.9)	178 (47.3)	< 0.001	342 (66.9)	293 (52.4)	< 0.001
 Discuss the choice of contraceptive method with husband 	631 (90.9)	196 (52.1)	< 0.001	479 (93.7)	348 (62.3)	< 0.001
Think there is a need for more information on contraceptive methods	575 (82.9)	218 (58.0)	< 0.001	412 (80.6)	381 (68.2)	< 0.001

Table 3: Type of family planning (FP) method used, reasons for use, complications faced among women who practise FP (n = 511)

complications faced among women who practise FP (n = 511)				
Variable	%			
FP METHOD A				
Injectable	2.7			
Withdrawal	3.7			
Breastfeeding	4.5			
Condom	7.8			
Tubal ligation	10.4			
Pills	30.1			
Intrauterine device (loop)	32.9			
At least one natural method	35.4			
At least one modern method	67.7			
REASONS FOR USING CURRENT FP METHOD A				
Economic	0.6			
Physician's advice	10.8			
Do not want to have children	17.6			
For child spacing	71.0			
HISTORY OF SIDE-EFFECTS				
Reduced breast milk	0.2			
Back pain	0.2			
Irregular period/absence of period	0.2			
High blood pressure	0.2			
Anxiety	0.4			
Intrauterine device rejection	0.4			
Nervous/heart palpitation	1.0			
Got pregnant	1.2			
Nausea and vomiting	1.4			
Obesity	2.0			
Vaginal discharge	2.0			
Abdominal pain	2.3			
Severe headache	3.1			
Bleeding	4.1			
Any side-effect	15.9			



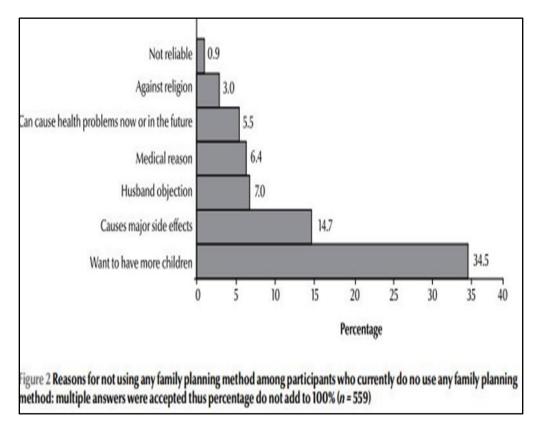


Table 2 gives the factors related to attitude towards and practice of family planning methods. Having a history of abortion was lower among women who were in favor of contraception compared with women who were not in favor (33.9% versus 44.7% respectively) (P < 0.001). Significantly more women in favor of and using contraception had husbands also in favor of contraception and discussed their choice with their husbands (P < 0.001). Over 80% of the women who were in favor of and using a contraceptive method thought they needed more information on the methods.

Modern methods of family planning (67.7%) were more commonly practiced among those who currently use family planning method (Table 3). The use of traditional or natural method was 35.4%. IUDs (32.9%) and pills (30.1%) were the most common specific methods identified while condoms (7.8%), breastfeeding (4.5%), withdrawal (4.5%) and injectable contraceptives (2.7%) were the least common in current practice with the studied women. Most of the women who currently use contraceptives (71.0%) mentioned child spacing as the most common reason for using them, while very few (17.6%) women did not want have more children. In addition, 10.8% of the women used contraception on a physician's advice while only 0.6% women use contraception for economic reasons. Only 15.9% of the women who currently, used contraceptives reported experiencing one or more side effects from the method. The most common complications identified by the women were bleeding (4.1%), severe headache (3.1%), abdominal pain (2.3%) and vaginal discharge (2.0%).

Figure 1 shows knowledge of the type of family planning method among women who had heard of family planning method. Women mostly knew about pills (90.0%) and IUDs (89.1%).

Only 25% knew about injectable contraceptives, 17.1% about withdrawal, 15.9% about condoms and 11.3% about the safe period. Friends were the most common source of knowledge about family planning methods among the women (80.0%), followed by physicians (35.8%) and relatives (34.8%). Health workers

(12.6%), teachers (2.7%) and husband (0.9%) were uncommon sources of knowledge about family planning.

On the other hand, women who were not currently using any family planning method either wanted to have more children (34.5%) or believed that contraceptives have major side-effects (14.7%). Some women did not use contraceptive methods because of their husband's objection (7.0%) or for medical reasons (6.4%). Few women who did not use contraceptives considered it to be against the religious beliefs (3.0%) (Figure 2).

DISCUSSION

Our study shows that the vast majority of women (1070, 94.6%) had heard about family planning methods and knew one or more method; intrauterine device and pills (30.1%) were the two methods most commonly known and used.

The knowledge of family planning was associated with education level, increasing with increasing level of education. This is consistent with previously reported studies in the Middle-East region among Arabs.¹⁷ Women with secondary education (32.8%) or those with college/education (42.1%) were more likely to know about family planning compared with women with lower educational levels. Furthermore, fewer women with lower monthly household income knew about contraceptives than those with higher income.

As regards the use of family planning, illiterate women were the least likely to practice any family planning method and women with university or college education constituted the majority of the sample that was currently using any family planning method. Family planning was more common among women with higher household income which is in agreement with studies reported in Jordan¹⁸, Oman¹⁹ and Turkey.²⁰

The number of clients with no children was very low. Considering the importance of contraception before a first pregnancy, the reasons why this group does not make use of the public family planning services needs to be determined. More emphasis on this area may be needed during premarital counseling. While premarital counselling is not mandatory. Premarital counseling is one of the important measures which can help reduce the incidence of genetic diseases and can contribute to a healthier and happier married life.

It has been shown that the rate of discontinuation is higher among women who have not been adequately counseled about side-effects. Similar observations have been reported from other developing countries such as Pakistan²¹, in the Islamic Republic of Iran²², in Botswana and Tanzania.²³ In a study among Pakistani rural women²⁴, a positive attitude towards contraception was found among (76%) of the women, while 41% stated their husbands 'had a positive attitude towards contraception; this is consistent within our study although higher.

Fertility transition in Arab countries occurred when the use of modern contraceptives was sanctioned by Islam.

Several legal opinions in Islamic jurisprudence on contraception indicate that Islam approves contraception use including the non-permanent modern methods²⁵. Previously reported studies have also explained the contraception practices among Arab women in the context of Islam. In brief, Arab women tended to avoid the use of contraception unless they had decided they had had a sufficient number of children, particularly at a certain age, and to let God decide on the ideal number of children, In addition, men play a significant role in determining childbearing²⁶. These sociocultural norms explain women's inconsistent behaviors (i.e. not wanting more children but not practicing contraception) and the low effectiveness of contraception (e.g. short duration and/or high discontinuation rate of contraception use).²⁷

The women who were in favor of family planning methods were likely also to be currently using contraception.

Moreover, most of the women in favor of contraception believed that it was right for married couples to decide on how many children to have according to their economic situation and almost half of those not in favor also held this belief; this is consistent with previously reported studies.²⁸

CONCLUSIONS

Our results show that the knowledge of contraception was high among the women interviewed (95%) although only a small majority had a positive attitude to it (61%) and only minority (albeit a large minority) used contraception. Our research suggests that educational programs are important to teach how family, individual, cultural and relationship environments influence decision-making about contraceptive use and child spacing.

REFERENCES

1. Planned Parenthood Federation of America (2012). A History of Birth Control Methods. Planned Parenthood Federation of America, New York.

www.plannedparenthood.org/files/2613/9611/6275/History_of_ BC_Methods.pdf)

2. United Nations Department of Economic and Social Affairs Population Division (2011) World Contraceptive Use 2010. United Nations, New York.

(http://www.un.org/esa/population/publications/contraceptive2011/wallc hart_front.pdf)

- 3. Darroch, J.E. (2013) Trends in Contraceptive Use. Contraception, 87, 259-263.
- http://dx.doi.org/10.1016/j.contraception.2012.08.029
- 4. Asante-Sarpong, H. (2007) From Their Own Perspective: Perceptions of Women about Modern and Natural/Traditional Methods of Contraception in Koforidua and Asokore in the Eastern Region of Ghana. Norwegian University of Science and Technology, Trondheim.
- 5. Hesse, S. (2007) Assessing Facility Readiness of Family Planning Services in Ghana. Emory University School of Public Health, Atlanta.
- 6. National Population Council (NPC) (2004) Fact Sheet Number
- 1: Population of Ghana—National Trends. NPC, Accra
- 7. Leke RJI. Family planning in Africa south of the Sahara. Geneva Foundation for Medical Education and Research (www.gfmer.ch/Books/Reproductive_health/Family_planning_Afric a. html, accessed 18 October 2010).
- 8. Moronkola OA, Ojediran MM, Amosu A. Reproductive health knowledge, beliefs and determinants of contraceptives use among women attending family planning clinics in Ibadan, Nigeria. African Health Sciences, 2006. 6:155–159.
- 9. Fertility and Contraceptive Use. UNICEF Statistics (http://unstats.un.org/unsd/demographic/products/Worldswomen/ Gender%20statistics%20sources.htm, accessed 11 November 2010).
- 10. UNFPA State of World Population 2004: Reproductive Health and Family Planning (www.unfpa.org/swp/2004/english/ch6/index.htm, accessed 18 October 2010).
- 11. Obuekwe IF, Marchie CL. Family planning: a possible intervention in maternal mortality. The regional Institute; 25th Congress of the Medical Women's Association (www.regional.org.au/au/mwia/papers/full/33_flossy1.htm, accessed 18 October 2010).
- 12. Annual Heatlh Report for the year 2009, Department of Epidemiology & Medical Statistics, Hamad Medical Corporatiojn, July 2010.
- 13. Ronsmans C, Campbell O. Short birth intervals don't kill women: evidence from Matlab, Bangladesh. Studies in Family Planning, 1998, 29:282–290.
- 14. Moronkola OA, Ojediran MM, Amosu A. Reproductive health knowledge, beliefs and determinants of contraceptives use among women attending family planning clinics in Ibadan, Nigeria. African Health Sciences, 2006. 6:155–159.
- 15. Atighetchi D. The position of Islamic tradition on contraception. Medicine and Law, 1994, 13(7–8):717–725.
- 16. Dharmalingam A, Morgan SP. Pervasive Muslim-Hindu fertility differences in India. Demography, 2004, 41:529–545.
- 17. Al-Jaber K, Farid SM. Qatar Family Health Survey, 1998. Doha, Qatar Ministry of Health.
- 18. Sueyoshi S, Al-Khozahe HO, Ohtsuka R. Effects of reproduction norms on contraception practice among Muslim women in Amman, Jordan. European Journal of Contraception & Reproductive Health Care, 2006, 2006, 11:138–145.
- 19. Al Riyami A, Afifi M, Mabry RM. Women's autonomy, education and employment in Oman and their influence on contraceptive use. Reproductive Health Matters, 2004, 12:144–54. 20. Cindoglu D, Sirkeci I, Sirkeci RF. Determinants of choosing withdrawal over modern contraceptive methods in Turkey.

European Journal of Contraception & Reproductive Health Care, 2008. 13:412–421.

- 21. Mustafa R, Afreen U, Hashmi HA. Contraceptive knowledge, attitude and practice among rural women. Journal of the College of Physicians and Surgeons--Pakistan, 2008, 18:542–545.
- 22. Simbar M et al. Quality assessment of family planning services in urban health centers of ShahidBeheshti Medical Science University, 2004. International Journal of Health Care Quality Assurance Incorporating Leadership in Health Services, 2006, 19:430–442.
- 23. Miller K et al., eds. Indicators of readiness and quality: basic findings. Clinic- based family planning and reproductive health services in Africa: Findings from situation analysis studies. New York, Population Council, 1998:31–85.
- 24. Sueyoshi S, Al-Khozahe HO, Ohtsuka R. Effects of reproduction norms on contraception practice among Muslim women in Amman, Jordan. European Journal of Contraception & Reproductive Health Care, 2006, 2006, 11:138–145.
- 25. Petro-Nustas W. Men's knowledge of and attitudes toward birth spacing and contraceptive use in Jordan. International Family Planning Perspectives, 1999, 25:181–185.

26. Sueyoshi S, Ohtsuka R. Effects of polygyny and consanguinity on high fertility in the rural Arab population in South Jordan. Journal of Biosocial Science, 2003, 35:513–526.

Source of Support: Nil.

Conflict of Interest: None Declared.

Copyright: © the author(s) and publisher. IJMRP is an official publication of Ibn Sina Academy of Medieval Medicine & Sciences, registered in 2001 under Indian Trusts Act, 1882.

This is an open access article distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Cite this article as: Maha Salem Albalawi, Ashwag Ahmad Albalawi, Ahmad Mosalem Alatawi. Prevalence, Awareness and Determinants of Contraceptive Use in Saudi Women. Int J Med Res Prof. 2018 Jan; 4(1):240-46.

DOI:10.21276/ijmrp.2018.4.1.047