

Knowledge, Attitude and Practice of Women in Jeddah Towards the Use of Oral Contraceptive Pills

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ABSTRACT

Objective (Background): The use of oral contraceptive pill is considered an acceptable practice worldwide. Socio-demographic patterns in Saudi Arabia are rapidly changing with time. This study aims to evaluate the knowledge, attitude and practice among women in Jeddah towards the use of oral contraceptive pills.

Methodology: A cross sectional study was conducted using a self-administered questionnaire as a tool for data collection.

Results: The study was conducted in Jeddah city in the Western region of Saudi Arabia between 2014-2015, 913 women were approached and 40 refused to participate (4.378% refusal rate). Out of those 873 who agreed to participate, 713 responded correctly and were included (78.09% response rate). Participants were grouped into six categories based on their age. The majority of the women polled were Saudis (71.4%). There was a positive correlation between the attitude of women towards the use of oral contraceptive pill and age (P-value <0.001). Similar correlation was true also in the case of knowledge and the level of education towards the use of oral contraceptive pills. There was a significant correlation between marital status towards oral contraceptive pill use (P-value <0.001).

Conclusions: This study should be extended to other regions of the kingdom. The results emphasize the need for women in Jeddah city as well as the rest of Saudi Arabia to be better educated, aware and informed about the different contraceptive methods available in order for them to make the right decision regarding the method they like to choose for birth control.

Keywords

Attitudes; Contraception; Knowledge; Oral contraceptive pill; Women; Saudi Arabia.

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INTRODUCTION

The use of oral contraceptive pills (OCP) is considered an acceptable practice worldwide, with millions of women using OCPs globally since its debut in 1957. Among all prescribed medications, OCPs still remain in high demand within the US^[1]. In developing countries, OCPs are used mainly for the purpose of family planning. Family planning methods are expanding, yet the options available remain susceptible to different cultural backgrounds and settings. With new improvements and breakthrough innovations in health education facilities, Saudi women have been practicing a wider variety of contraception methods^[2]. Family planning protects women against unwanted and high-risk pregnancies.

The Saudi population has been characterized by a high rate of growth and a large percentage of youth within the overall population. Recent published estimates indicate that approximately 47% of the population is under the age of 26^[3].

According to the Mundi Index, there are 18.78 births/1,000 populations in Saudi Arabia. This figure is based on 2014 estimates, and it is markedly higher than what has been reported in industrialized countries. Determinants such as age, marital status, age at marriage, educational level, family monthly income and parity have been found to have a significant association with the use of OCPs.

The objectives of this study were to assess the current knowledge, attitude and behavior of Saudi women from Jeddah region towards the use of OCPs.

MATERIALS AND METHODS

A cross-sectional study was conducted using a standardized self-administered questionnaire as a tool for data collection. Data were analyzed using the latest version of IBM SPSS Statistics for Windows, Version 22.0. (IBM Corp, Armonk, NY USA). Two domains were scored by a simple additive method and converted to a 100% scale. Each of the domains was compared to demographics using one-way ANOVA. Normality was assumed using Levene's Test for Homogeneity of Variance. In the case of unequal variance a post-hoc analysis Fisher's Least Significant Difference (LSD) and Games-Howell was used as an alternative for one-way ANOVA. A P-value ≤ 0.05 was used as the threshold to reject the null hypothesis.

The two domains used were attitude and knowledge. The attitude-related items consisted of the following questions:

1. Have you ever used any type of birth control before, including condoms?
2. For how long have you been using this method?
3. Which of the following contraception method(s) do you prefer?

On the other hand, the questions related to knowledge were as follows:

1. Do you believe there is any risk associated with birth control pills?
2. In your opinion, what are the potential risks associated with birth control pills?
3. In your opinion what are the benefits associated with birth control pills?
4. Do you believe that birth control pills can protect you against HIV and sexually transmitted diseases (STDs)?
5. Have you heard about emergency contraception?
6. What is your source of information regarding birth control pills?

RESULTS

The study was conducted in Jeddah city in the Western region of Saudi Arabia between 2014-2015 and 913 were approached and forty of those refused to take part (4.378% refusal rate). Out of the 873 participants, 713 responded correctly (response rate 78.09%) and were grouped into six categories based on their age: those < 27 years (22.1%), 27-36 years (34.8%), 37-47 years (28.9%) and > 47 years (14.2%). The majority of the women polled were Saudis (71.4%); the remainders were Arabs (23.8%), Westerners (1.1%), and Asians (3.7%). Regarding their level of education, 42.6% of the participants reported having a college or university degree, 29.1% reported a high school level and 18.3% of respondents had a primary school-only education level. Approximately 9.9% of the respondents received a monthly salary < SR 3,000, 42.6% received monthly incomes ranging from SR3,000-10,000, 22.0% received SR10,001-15,000, 11.1% received SR15,001-20,000, and 8.5% had monthly incomes > SR20,000. A majority of the respondents were married (89.5%); 5.0% were single, 2.9% were widowed, and 2.5% divorced. About 35.6% of respondents married at age 20- 30; 15.9% married at 15-< 20 and 15.9% married at age <15. The maternal age of the married respondents was as follows: 20-30 (51.1%), 15-< 20 (26.4%), < 15 (16.8%) and > 30 (3.4%). The respondents marriages lasted for: >15 years (39.4%), 5-< 10 years (22.2%), 10-15 years (19.7%) and < 5 years (18.4%). Only 14.7% of the respondents were pregnant at the time of the survey, while 87.8% of them had previously been pregnant. For those who were pregnant before, 57.5% reported being pregnant > 1-4 times, 35.2% reported being pregnant > 4-8 times, and 7.3% reported having a pregnancy > 8 times. Combined with the previously pregnant respondents, 65.3% of the respondents had 1-4 children, 32.9% had > 4-8 children, and 0.9% had > 8 children.

Most of the respondents (79.2%) had used at least one method of birth control, including condoms. In most of the situations it was the respondent's decision to use birth control methods (84%), while other women chose to go with their families' and husbands' decisions (23.9% and 17.6%, respectively). On the other hand, a small proportion

of respondents chose to follow the advice of their doctors and friends (7.9% and 6.2%, respectively). When asked about the method of birth control currently used, 33.9% of respondents reported using OCPs most often. In contrast, another 22% of respondents reported use of intrauterine contraceptive device (IUCD), 5.9% reported using natural methods, while 6.0% preferred to use local barriers such as condom and diaphragm. Injections were used only by 1.3% of the participants. Moreover, 20.1% of women reported using other methods.

Most of the women interviewed used contraception for variable periods: 1-3 months (58.2%), 3-6 months (14%), 6-9 months (9.4%) and > 9 months (8.6%). Among those who used birth control, 44.3% reported experiencing problems (mainly recurrent vaginal infections and pelvic inflammatory disease), while most of these women (54.1%) had no specific complications. Furthermore, 69.6% of the women thought that there are risks associated with the use of OCP, whereas only 30.4% disagreed. However, 82.7% believed that OCPs could protect against HIV and STDs, in contrast to the 5.6% who responded "no". In addition, the majority of our participants (61.6%) believed that mood changes (depression, irritability) were the greatest possible risks associated with OCP use, followed by amenorrhea (27.9%), menstrual irregularity (23.3%), weight gain (26.4%), bleeding (12.5%) and breast tenderness (10.9%). 60.8% answered "yes" when asked if they believed OCPs could be used in any conditions other than to prevent pregnancy, while 39.2% said "no".

Most of the women reported receiving information regarding OCPs from family members and friends (53.7%), followed by social media (19.3%), and general physicians (17.6%), with 15.2% of the respondents finding their information from their own experience. With regards to participant opinion about the benefits of OCPs, its potential as a highly-effective, reversible contraception method scored highest (55.2%), followed by menstrual cycle regulation (23.2%), reducing ovarian cysts (7.8%), reducing cramps (7.5%) and improving acne (7.4%). The majority of our respondents (87.8%) had not heard about emergency contraception.

There was a significant correlation between age and respondents' attitudes towards contraceptives, with older women being more positive (Table 1). However, age had an inverse relationship with level of knowledge, with women aged > 47 demonstrating a lower level of knowledge (P-value = 0.004; Table 1). Respondents of different nationalities did not significantly differ in their attitude towards contraception. Educational level did not have a significant effect on attitude, but it was positively correlated with OCPs (P < 0.001). More educated participants had a higher level of knowledge towards contraception (Table 2). The same was true concerning income. Income did not affect women's attitude towards OCPs, but it significantly affected the level of knowledge, with the more educated being more knowledgeable (P < 0.001; Table 3). Married or divorced women were more knowledgeable than their

single or widowed peers (P < 0.001; Table 4). The age of menarche (age at first period), did not have a significant relationship towards contraceptives.

DISCUSSION

In most religions including Islam, abortion and sterilization are prohibited except in situations where the health of the woman is at risk^[4]. Family planning has become a major concern to many countries, especially the developing ones experiencing a high birth rate. The response rate was 81.67% and the rest were excluded due to insufficient data.

It is important to note that OCPs, when effectively used, provide around 99% protection against unwanted pregnancies. However, the efficacy of the OCPs will be compromised to around 9% if the user does not follow the exact prescribed regimens^[5-7]. Such non-compliance is directly associated with the correct level of knowledge of the user regarding the use of OCPs. For this reason, there is a significant correlation of the level of knowledge of OCPs and the outcome^[5-8]. The results revealed that OCPs are used by 62% of our women as a means for birth control in Saudi Arabia. This is because they are accessible, convenient to use and can be administered when needed. Those results are much higher than what was reported in Damam in Saudi Arabia and/or in the Arab (Jordan) and Middle Eastern countries (Iran)^[9-11]. In comparing our results with those published by others, it is worth keeping in mind the demographics of those surveyed as well as the cultural differences that occur among different regions of the Kingdom or countries. The results of this survey indicated a high level of knowledge and awareness towards OCP use. This level of knowledge and awareness was higher than those reported by others. For instance, the results of a study conducted in Al-Khobar City, in the eastern region of Saudi Arabia, showed that only 31.7% of Saudi women had good perception of different contraception methods and 36.6% had better knowledge regarding OCPs^[12]. This discrepancy may be attributed to the place of sample collection, which took place in a primary healthcare facility in Al-Khobar city. In contrast, this study was conducted on women attending King Abdulaziz University Hospital, which is one of the largest university hospitals in the western region of Saudi Arabia. It is likely that persons attending a primary healthcare facility are financially less affluent than those in Jeddah. In addition, cultural differences may also explain this discrepancy. Individuals living in Al-Khobar are more reserved and thus less exposed to newer methods of birth control.

In a study conducted in the Basrah city in Iraq, which is an adjacent country to Saudi Arabia, the results were consistent with our findings regarding the two most favorable methods for birth control: OCP, followed by IUCD^[13]. However, the rest of the results were much lower than the findings of this survey which may be due to the differences in the background between the two populations as well as the time the study was conducted. Studies conducted in developed countries, such as the

USA, reported similar preference concerning OCP usage by approximately 80% of 10.7 million women aged between 15-44 years^[14]. This is an expected result, because women in developed countries have a better knowledge and awareness about OCPs.

As discussed in the introduction, the proper use as well as the adherence to the regimens of the pill is essential to achieve a better outcome in order to avoid unwanted pregnancies. The results of a recent study conducted on the compliance and adherence of women in Jeddah to the use of OCPs showed a poor level of knowledge about OCP usage, especially after missing the intake of the second pill is missed where only 18.3% knew that they should use the emergency pill when such a thing happens^[5]. In our study, only around 12.5% had heard of emergency pills, which are lower than what has been indicated in the aforementioned study. Results from relevant studies conducted in other Arab countries (Ramsar, Iraq) reported that 43.6% of the women incorrectly used OCPs and 40.8% had poor knowledge about the pill. The reasons behind these findings may be attributed to a lack of knowledge regarding family planning and the fear of potential side effects of using the pill^[14-16]. It is worth noting that the source of knowledge about the use of OCPs should come from reliable and valid sources and the correct facts should be communicated to the potential users^[17]. As such, the potential users should get the correct information about OCPs and should be educated about the possible side effects of the different contraceptive methods used in order for them to make the correct decision about the method they like to choose. The World Health Organization (WHO) established criteria to be followed when deciding on choosing a contraceptive method^[18]. This criteria involves educating users about the associated potential side effects of different contraceptive methods versus the benefits involved in order for potential women to make a right and sound decision^[19]. For this reason, the use of contraceptives is more acceptable among educated women, living in urban communities and earning a relatively respectable income, as was the case with our participants where the majority were educated, with a good income and lived in Jeddah, the second biggest city in Saudi Arabia.

The findings in this study are similar to those reported by others^[4,20]. For instance, better education is likely to make people more aware and thus be able to make an educated, sound and wise decision regarding the use of contraceptives. Also, those living in urban communities and earning good incomes are likely to be more exposed to new ideas and more willing to try new things such as more modern birth control methods^[20-22]. Women living in rural areas are likely to have more children than those residing in urban areas. This is due to the fact that women in rural area usually have a lower educational level than their counterparts living in urban cities^[23]. It was interesting to note that education and income significantly affected knowledge, but not attitude. A possible explanation of such a finding could be due to the conservative structure of the Saudi society, which makes people reluctant to change.

Our study has several limitations. First, it was only conducted in Jeddah, the largest city in the western region of Saudi Arabia. Such a study should be extended to rural villages and remote areas as well. Second, several knowledge domains were not evaluated, including the type of OCP used, compliance, mechanism of action and assessment after missing more than two pills consecutively. This would provide a more objective and inclusive evaluation of women in Saudi Arabia towards the use of contraceptives. We therefore recommend conducting more inclusive nationwide studies with a larger sample size that would be more representative of the view of women from the rural areas of the kingdom towards contraception, including the use of OCPs. The findings of such surveys would provide a deeper understanding of women's attitudes towards contraceptives. More educational campaigns need to be organized by the interested ministries to better educate women about the various means of contraceptive measures to choose. Leaflets and websites with information for women in Saudi Arabia would help these individuals better prepare to choose the appropriate contraceptive care they need.

CONCLUSION

This study should be extended to other regions of the kingdom in order to have a better picture of the knowledge, attitude and behavior of women living in Saudi Arabia towards the use of OCPs. The results emphasize the need for women in Jeddah city as well as the rest of Saudi Arabia to be better educated, aware and informed about the different contraceptive methods available in order for them to make the right decision regarding the method they like to choose for birth control. This could be accomplished through educational campaigns to be organized by the interested ministries.

Conflict of Interest

The authors have no conflict of interest.

Disclosure

None of the authors received any type of commercial support either in forms of compensation or financial for this study. They have no financial interest in any of the products or devices, or drugs mentioned in this article.

Ethical Approval

Obtained.

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معرفة، موقف وممارسة المرأة في جدة نحو استخدام حبوب منع الحمل

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المستخلص.

المقدمة: يعتبر استخدام حبوب منع الحمل (OCP) ممارسة مقبولة في جميع أنحاء العالم، لكن الأنماط الاجتماعية والديموغرافية في المملكة العربية السعودية تتغير بسرعة ومع مرور الوقت، خصوصاً ما يتعلق بمهنة المرأة والمستوى التعليمي، اللذان يعتبران من العوامل الهامة في تحديد قناعتهم وموقفهم وممارستهم نحو استخدام وسائل منع الحمل، وتهدف هذه الدراسة إلى تقييم معرفة رؤية وممارسة المرأة حول استخدام حبوب منع الحمل في جدة.

الطريقة: تم استخدام الاستبيان كأداة لجمع البيانات، وتم تحليل البيانات باستخدام أحدث نسخة من برنامج SPSS.

النتائج: أجريت الدراسة في مدينة جدة بين ٢٠١٤-٢٠١٥، تم التواصل مع ٩١٣ امرأة و ٤٠ منهن رفضن المشاركة، من بين ٨٧٣ من المشاركات تم تلقي الرد من ٧١٣ امرأة بشكل صحيح (معدل الاستجابة ٧٨,٠٩٪) أظهرت هذه النتائج أن الغالبية العظمى من المشاركات سعوديات ٧١٣، وتتراوح أعمارهن بين ٢٧-٣٦ سنة، متزوجات (٨٩,٥٪)، حاصلات على الشهادة الجامعية (٤٢,٦٪) مع متوسط الدخل الشهري بين ٣,٠٠٠-١٠,٠٠٠ ريال سعودي، كان هناك علاقة إيجابية بين موقف المرأة نحو استخدام OCP والعمر، وكذلك بين مستوى المعرفة بطرق منع الحمل والمستوى التعليمي، وايضاً ارتباط كبير بين النظرة الاجتماعية حول استخدام حبوب منع الحمل.

الاستنتاج / توصية: ينبغي توسيع نطاق البحث ليشمل مناطق أخرى من المملكة العربية السعودية لأعطاء صورة أفضل عن معرفة وموقف وسلوك النساء نحو استخدام الطرق والوسائل المختلفة لمنع الحمل، وتشدد النتائج على ضرورة أن تكون المرأة في مدينة جدة وفي بقية مدن المملكة العربية السعودية أفضل تعليماً وإدراكاً وإطلاعاً على وسائل منع الحمل المختلفة المتاحة لها لكي تتخذ القرار الصحيح فيما يتعلق بالطريقة التي ترغب في اختيارها لمنع الحمل، ويمكن تحقيق ذلك من خلال حملات تثقيفية توعوية تنظمها الوزارات المعنية.